WE BUILD™

Miller®

The Power of Blue®

with you

International Catalog
MillerWelds.com

2016

Millermatic® 141 and 190

See Literature No. DC/12.42 (141) and DC/12.44 (190)

Millermatic 190

Millermatic 141

Mild Steel Welding Capability

	Model 141	Model 190
Max.	4.8 mm (3/16 in.)	7.9 mm (5/16 in.)
Min.	0.6 mm (24 ga)	0.6 mm (24 ga)

Aluminum Welding Capability

	Model 141	Model 190
Max.	1.9 mm (14 ga)	6.4 mm (1/4 in.)
Min.	1.2 mm (18 ga)	1.2 mm (18 ga)

Aluminum welding uses optional Spoolmate 100 spool gun and 4043 series aluminum wire.

Recommended aluminum solution: Spoolmate 100 (#300 371).

Auto-Set™ automatically provides the right settings to weld mild steel while **infinite voltage control** allows the flexibility to manually set your own parameters.

- Set the wire diameter (0.6- or 0.8-mm [.024- or .030-in.] diameter solid steel wire), a blue light shows Auto-Set is activated
- Dial in the thickness of what you're welding
- Start welding with the exact parameters you need!

Angled cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup with included 3-m (10-foot) MIG gun or optional 4.6-m (15-foot) MIG gun.

Quick Select™ drive roll makes setup quicker by offering three grooves — two for different size solid wire and a third for flux-cored wire.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

Smooth-Start™ provides a smooth, spatter-free start. It's the best-starting machine in the small MIG machine category.

Thermal overload protection shuts down unit and activates the **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when unit cools.

Uses 102- or 203-mm (4- or 8-inch) spools.

Millermatic 190 model additional features

Miller inverter technology combines best-in-class arc characteristics with the portability of a 15.9-kg (35-pound) machine. The arc is extremely forgiving to variations in arc length and travel speeds.

Fan-On-Demand™ power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled though the machine.

Light Industrial

CV DC 1 Phase

Processes

- MIG (GMAW)
- Flux-cored (FCAW)

Comes Complete With

- 3-m (10-ft) M-100 MIG gun and cable assembly #248 282
- 3-m (10-ft) work cable with clamp
- 2-m (6.5-ft.) power cord with plug
- Quick Select™ drive roll for 0.6-mm (.024-in.) or 0.8/0.9-mm (.030/.035-in.) solid wire, and 0.8/0.9-mm (.030/.035-in.) flux-cored wire

- Flow gauge regulator and gas hose for argon or AR/CO_2 mix, two 0.8-mm (.030-in.) contact tips, Hobart® spool of 0.8-mm (.030-in.) solid wire, hook-and-loop cord wraps and material thickness gauge #229 895

Most Popular Accessories

- Spoolmate™ 100 #300 371

- Running gear/Cylinder rack #301 239
- Protective cover #301 262

Scan this tag to see videos on Millermatic features.

Model/ Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 120 V	240 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter	Machine Only Dimensions	Machine Only Net Weight
Millermatic 141 (#907 612)	120 V	30-140	90 A at 18.5 VDC, 20% Duty Cycle	20	–	3.0	2.45	0.4 - 9.1 m/min (15 - 360 IPM)	**Solid Steel:** 0.6-0.8 mm (.023-.030 in.) **Stainless:** 0.6-0.8 mm (.023-.030 in.) **Flux-cored:** 0.8-0.9 mm (.030-.035 in.)	H: 318 mm (12.5 in.) W: 286 mm (11.25 in.) D: 521 mm (20.5 in.)	23.1 kg (51 lb)
Millermatic 190 (#907 613)	240 V	30-190	140 A at 21 VDC, 40% Duty Cycle	–	21	5.0	3.8	1.5 - 15.2 m/min (60 - 600 IPM)	**Solid Steel:** 0.6-0.9 mm (.023-.035 in.) **Stainless:** 0.6-0.9 mm (.023-.035 in.) **Flux-cored:** 0.8-0.9 mm (.030-.035 in.)		15.9 kg (35 lb)

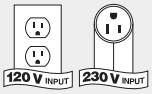
Millermatic® 211

See Literature No. DC/12.58

Welding Capability

Max. 9.5 mm (3/8 in.)	Max. 9.5 mm (3/8 in.)
Mild Steel	Aluminum
Min. 0.6 mm (24 ga)	Min. 1.2 mm (18 ga)

Aluminum welding uses optional Spoolmate 100 or Spoolmate 150 spool guns.



Multi-voltage plug (MVP™) allows connection to common 120- and 240-volt power receptacles without the use of any tools — simply choose the plug that fits the receptacle and connect to the power cord.

Recommended aluminum solutions: Spoolmate 100 (#300 371) or 150 (#301 272).

Advanced Auto-Set™ now includes five different wire/gas combinations and 0.6, 0.8 and 0.9 mm (.024-, .030- and .035-in.) wires. The easiest welder to use just became more versatile. Manual mode allows you to set your own parameters while welding.

Inverter technology combines best-in-class arc characteristics with the portability of a 17.2 kg (38-lb.) machine. The arc is extremely forgiving to variations in arc length and travel speeds.

Angled cast-aluminum drive system with calibrated tension knob for consistent feeding and easy setup for up to 4.6 m (15-ft.) MIG guns.

Quick Select™ drive roll makes setup quicker by offering three grooves — two for different size solid wire and a third for flux-cored wire.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

Fan-On-Demand™ and **thermal overload protection** protect your investment.

Smooth-Start™ provides a smooth, spatter-free start. It's the best-starting machine in the small MIG machine category.

Uses 102 or 203 mm (4- or 8-in.) spools.

Light Industrial

CV DC 1 Phase

Processes
- MIG (GMAW)
- Flux-cored (FCAW)

Comes Complete With
- 3 m (10 ft) M-100 MIG gun and cable assembly (#248 282)
- 3 m (10 ft) work cable with clamp
- 2 m (6.5 ft.) power cord with MVP plugs for 120 V and 240 V
- Quick Select™ drive roll for 0.6 mm (.024 in.) or 0.8/0.9 mm (.030/.035 in.) solid wire, and 0.8/0.9 mm (.030/.035 in.) flux-cored wire
- Flow gauge regulator and gas hose for argon or AR/CO2mix, two 0.8 mm (.030 in.) contact tips, Hobart® spool of 0.8 mm (.030 in.) solid wire, hook-and-loop cord wraps and material thickness gauge (#229 895)

Most Popular Accessories
- Spoolmate™ 100 #300 371
- Spoolmate™ 150 #301 272
- Running Gear/Cylinder Rack #301 239
- Protective Cover #301 262
- V-Knurled Drive Roll #202 926

Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 120 V	240 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter	Machine Only Dimensions	Machine Only Net Weight
(#907 614)	120 V	30-130	115 A at 19.8 VDC, 20% Duty Cycle	24.3	–	2.9	2.9	1.5 - 15.2 m/min (60-600 IPM)	**Solid Steel:** 0.6-0.9 mm (.023-.035 in.) **Stainless:** 0.6-0.9 mm (.023-.035 in.) **Flux-cored:** 0.8-1.2 mm (.030-.045 in.)	H: 318 mm (12.5 in.) W: 286 mm (11.25 in.) D: 521 mm (20.5 in.)	17.2 kg (38 lb.)
	240 V	30-230	150 A at 21.5 VDC, 40% Duty Cycle	–	16.6	4.0	4.0				

Miller recommends BERNARD™

Bernard semi-automatic MIG guns and consumables have been used and trusted for decades by top companies in agriculture, shipbuilding and fabrication. This is why Miller not only recommends Bernard MIG guns but also pairs these guns with many of their industrial wire feeders and power sources.

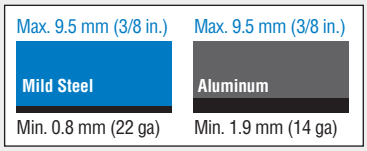
For information on Bernard MIG gun options and for detailed technical support information, please visit **BernardWelds.com** or your local distributor to learn more.

Millermatic® 212 Auto-Set™

See Literature No. DC/12.46

Recommended aluminum solution: Spoolmate 200 (#300 497).

Welding Capability



Aluminum welding uses optional Spoolmate 200 spool gun.

Auto-Set™ makes setup quick and easy. On the Millermatic 212, it works with 0.8 and 0.9 mm (.030- and .035-inch) wire.

Infinite voltage control. When used in manual mode provides broader operating range with finer control than a tap machine.

Gun-On-Demand.™ Simply pull the trigger for either gun and you're ready to weld. No wasted time installing modules and using gas valve kits.

Heavy-duty aluminum, two-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Aluminum MIG welding with optional Spoolmate™ 200 spool gun. Wire feed speed control on the gun saves time by reducing trips back to the machine. Also compatible with the more industrial Spoolmatic® spool guns.

Light Industrial

CV DC 1 Phase

Processes
- MIG (GMAW)
- Flux-cored (FCAW)

Comes Complete With
- 4.5 m (15 ft), 250 amp M-25 gun
- 3 m (10 ft) work cable with clamp
- 2.1 m (7 ft) power cord and plug
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed lowered running gear/cylinder rack
- 0.8/0.9 mm (.030/.035 in.) reversible dual-groove drive rolls
- Extra contact tips and material thickness gauge #229 895

Most Popular Accessories
- Spoolmate™ 200 #300 497
- Dual EZ-Change™ Low Cylinder Rack #300 337
- Elevated Gun and Cable Rack #300 335
- Protective Cover #195 142
- Full KVA Adapter Cord #300 517

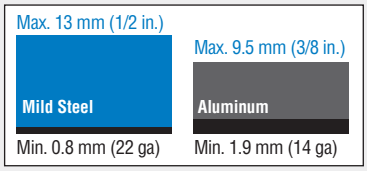
Stock Number	Rated Output	Amperage Range	Wire Feed Speed	Wire Type and Diameter	Net Weight
(#907 405) 200(208)/230 V, 60 Hz	160 A at 24.5 VDC, 60% Duty Cycle	30-210	1.3-17.8 m/min (50-700 IPM)	**Solid Steel:** 0.6-0.9 mm (.023-.035 in.) **Stainless:** 0.6-0.9 mm (.023-.035 in.) **Flux-cored:** 0.8-1.2 mm (.030-.045 in.)	83 kg (183 lb)

Millermatic® 252

See Literature No. DC/12.49

Recommended aluminum solution: Spoolmatic 15A (#195 156) or 30A (#130 831).

Welding Capability



Aluminum welding uses optional Spoolmatic 15A or 30A spool gun.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow, burnback, spot and delay (Stitch) timers. Independent timers for MIG and spool gun.

Superior aluminum MIG welding with direct connection of optional XR push-pull guns, Spoolmatic 15A/30A and Spoolmate 200 Series spool guns. No extra module to buy or install.

EXCLUSIVE! **Auto-Gun Detect**™ automatically adjusts voltage, wire speed and timers for faster, easier switching between MIG, push-pull and spool guns.

Heavy duty aluminum, two-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption.

Light Industrial

CV DC 1 Phase

Processes
- MIG (GMAW)
- Flux-cored (FCAW)

Comes Complete With
- 4.5 m (15 ft), 250 amp M-25 MIG gun
- 3 m (10 ft) work cable with clamp
- Factory-installed gas solenoid
- Smith-Argon mix regulator/flow gauge with hose
- 3 m (10 ft) industrial power cord and plug (plug on 200/230 V model only)
- Factory-installed running gear/cylinder rack
- 0.8 mm/0.9 mm (.030/.035 in.) reversible dual groove drive rolls
- Extra contact tips, Setup/operation CD

Most Popular Accessories
- Millermatic® Reach Wire Feeder #907 438
- XR™-A Push-Pull Guns
- Spoolmate™ 200 Series and Spoolmatic® 15A/30A Spool Guns for aluminum welding
- Dual EZ-Change™ Low Cylinder Rack #300 337
- Protective cover #195 142

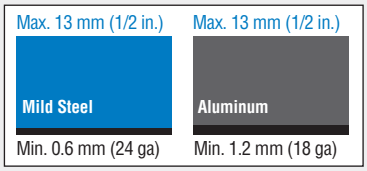
Stock Number	Rated Output	Amperage Range	Wire Feed Speed	Wire Type and Diameter	Shipping Weight
(#907 321) 200 (208)/230 V, 60 Hz **(#907 322)** 230/460/575 V, 60 Hz	200 A at 28 VDC, 60% Duty Cycle 250 A at 28 VDC, 40% Duty Cycle	30-300	1.3-17.8 m/min (50-700 IPM)	**Solid Steel:** 0.6-1.2 mm (.023-.045 in.) **Stainless:** 0.6-0.9 mm (.023-.035 in.) **Flux-cored:** 0.8-1.2 mm (.030-.045 in.)	114 kg (250 lb) machine only

Millermatic® 350P

See Literature No. DC/12.51

Recommended aluminum solution: XR-Aluma-Pro push-pull gun.

Welding Capability



Aluminum welding uses optional Aluma-Pro push-pull gun.

Built-in Pulsed MIG programs. All programmed information is restored after each power up — aluminum/steel/stainless steel/metal-cored.

EXCLUSIVE! **Auto-Gun Detect**™ automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow and spot timers. Independent timers for MIG and push-pull guns.

Heavy-duty aluminum, four-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed, reducing power consumption and keeping internal components cleaner.

Industrial

CV DC 3 Phase 1 Phase

Processes

- MIG (GMAW) • Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)

Comes Complete With

- 4.5 m (15 ft) Bernard™ Q300 MIG gun with Centerfire™ consumables
- 3 m (10 ft) work cable with clamp
- 3 m (10 ft) industrial power cord (without plug) for 1- or 3-phase
- Factory-installed gas solenoid
- Smith® argon mix regulator/flow gauge with hose
- Factory installed, low mounted running gear/cylinder rack
- 0.8/1.2 mm (.035/.045 in.) reversible V-groove drive rolls (order U-groove drive rolls for aluminum welding)
- Extra contact tips, setup/operation CD

Most Popular Accessories

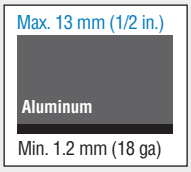
- Spoolmatic® 15A/30A Guns for Al. welding • XR™-A Push-Pull Guns
- Dual Cylinder Rack #195 299
- Protective Cover #195 142

Model/ Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight
Millermatic 350P (#907 300) 200/230/460 V	25-400	Three-Phase 300 A at 32 VDC, 60% Duty Cycle	34	30	15	11.6	11.5	**MIG Gun** 1.3-17.8 m/min (50-700 IPM) **Optional Spool Gun/ Push-Pull Gun** 1.3-20 m/min (50-800 IPM)	**Solid Steel:** 0.6-1.2 mm (.023-.045 in.) **Stainless:** 0.6-1.2 mm (.035-.045 in.) **Aluminum:** 0.9-1.2 mm (.035-.047 in.) **Metal Core:** 0.9-1.3 mm (.035-.052 in.) **Flux-cored:** 0.8-1.3 mm (.030-.052 in.)	H: 863 mm (34 in.) W: 483 mm (19 in.) D: 1041 mm (41 in.)	82 kg (181 lb)
		Single-Phase 300 A at 32 VDC, 60% Duty Cycle	69	61	30	13.1	11.2				

Millermatic® 350P Aluminum

See Literature No. DC/12.56

Welding Capability



Aluminum welding uses optional Aluma-Pro push-pull gun. Not compatible with standard MIG gun.

True torque feed motor push-pull design provides continuous push force to the wire while the gun motor controls the speed at the gun. The motors work together to provide accurate and positive wire feed speed without wire shaving or deformation.

Electronic wire spool brake allows wire spool to free spool while welding resulting in smooth wire delivery.

Built-in aluminum Pulsed MIG programs for simplicity and improved puddle control. Pulsed welding virtually eliminates burnthrough and warping issues on thinner materials.

Synergic MIG and Synergic Pulsed MIG provide communication between power source, feeder and gun. As wire speed increases/decreases, the pulse or MIG parameters also increase/decrease to match the right amount of power needed.

Trigger schedule select allows operator to change between two sets of weld parameters.

Trigger hold for making long weldments without hand fatigue.

Standard jog and purge.

Industrial

CV DC 3 Phase 1 Phase

Processes

- Aluminum MIG (GMAW)
- Aluminum Pulsed MIG (GMAW-P)

Comes Complete With

- 3 m (10 ft) work cable with clamp
- 3 m (10 ft) industrial power cord (without plug) for single- or three-phase
- Factory installed gas solenoid
- Smith® argon mix regulator/flow gauge with hose
- Factory installed, low mounted running gear/cylinder rack
- 0.9, 1.0 and 1.2 mm (.035, .040 and .047 in.) U-groove drive rolls for aluminum welding
- Setup and operation CD

Push-Pull Gun System includes above plus

- XR™ air-cooled push-pull gun (see chart below)

Model/Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight
Millermatic 350P Aluminum (gun NOT included) **(#907 474)** 200/230/460 V, standard unit **Aluminum Push-Pull Gun** **(#300 000)** w/4.5m (15-ft) XR-Aluma-Pro™ air-cooled **(#300 001)** w/7.6m (25-ft) XR-Aluma-Pro™ air-cooled **(#300 783)** w/7.6m (25-ft) XR™-Pistol Pro air-cooled **(#300 948)** w/7.6m (25-ft) XR-Aluma-Pro™ Lite air-cooled gun	25-400	Three-Phase 300 A at 32 VDC, 60% Duty Cycle	34	30	15	11.6	11.5	**Optional Spool Gun/ Push-Pull Gun** 1.3-20 m/min (50-800 IPM)	**Aluminum:** 0.9-1.2 mm (.035-.047 in.)	H: 863 mm (34 in.) W: 483 mm (19 in.) D: 1041 mm (41 in.)	82 kg (181 lb)
		Single-Phase 300 A at 32 VDC, 60% Duty Cycle	69	61	30	13.1	11.2				

AlumaFeed™ Synergic Aluminum Welding System

See Literature No. DC/34

The XR-AlumaFeed™ and AlumaPower™ 350 MPa or 450 MPa combine for a synergic system that simplifies and improves MIG and Pulsed MIG aluminum welding applications.

AlumaFeed Synergic Aluminum Welding System with 7.6 m (25 ft) XR-Aluma-Pro gun and AlumaPower 450 MPa shown. Also available with XR-Pistol Grip gun.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Synergic "one-knob" control makes adjustments easy. Set the wire feed speed control on the gun and the system handles the rest.

Synergic Pulsed MIG provides communication between the power source, feeder and gun. As wire speed increases/decreases, the pulse parameters also increase/decrease to match the right amount of power needed.

Built-in aluminum Pulsed MIG programs for simplicity and improved puddle control. Pulsed welding virtually eliminates burnthrough and warping issues on thinner materials.

Weld Cross Section

Hot Start™ allows operator to begin and end welds with ease and confidence. Eliminates incomplete fusion at the beginning of a weld, a common issue with aluminum welding. **Crater** gradually decreases weld current at the end of a weld to eliminate crater defects. Adjustable pre- and post-flow rates ensure that the puddle always has adequate gas coverage.

Synchronized, true push-pull wire feed system for precise wire feeding and arc performance.

Parameter and system locks enhance quality assurance and protect weld consistency.

Trigger schedule select allows operator to change between two sets of weld parameters.

AUTOLINE Power Management Technology

AlumaPower 350 model allows for **any** input voltage hookup (208–575 V) with no manual linking. 450 model is 230/460 V manual link.

AlumaFeed MIGRunner

Heavy Industrial

CV DC 3 Phase 1 Phase

AlumaPower 450 is 3-phase only.

Processes

- Aluminum MIG (GMAW)
- Aluminum Pulsed MIG (GMAW-P)

Comes Complete With

- XR-AlumaFeed push-pull feeder
- AlumaPower 350 MPa **or** 450 MPa power source
- XR-Aluma-Pro™ **or** XR™-Pistol Grip push-pull welding guns (air- or water-cooled)
- 0.9 and 1.2 mm (.035 and 3/64 in.) contact tips, drive roll and liners for guns
- 0.9 and 1.2 mm (.035 and 3/64 in.) drive rolls for wire feeder

Note: All AlumaFeed systems come set up out of the box to run 1.2 mm (3/64 in.) wire.

Most Popular Accessories

- MIGRunner Cart #195 445
- Industrial MIG 4/0 Kit with Dinse Connectors (350 MPa only) #300 405
  Includes Smith® regulator/flowmeter with 3 m (10-ft.) gas hose, 3 m (10-ft.) 4/0 feeder weld cable with Dinse connector on one end and a lug on the other, and 4.6 m (15-ft.) work cable with Dinse connector on one end and 600-amp C-clamp.
- Industrial MIG 4/0 Kit (450 MPa only) #300 390
  Includes the same as the kit above except weld and work cables have lugs instead of Dinse connectors.
- Extension Cables
  7.6 m (25 ft.) #247 831 025
  15 m (50 ft.) #247 831 050
  24.4 m (80 ft.) #247 831 080
- 1.6 mm (1/16 in.) Liner and Wire Kit #230 708
- 1.6 mm (1/16 in.) Drive Roll Kit for control box #195 591

Model	Stock Number	Input Power	Amperage/Voltage Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208V	230V	400V	460V	575V	KVA	KW	Dimensions	Net Weight
AlumaPower 350 MPa Machine only	**(#907 420) (#907 420-003) CE (#907 420-001)** w/ Auxiliary Power	Three-Phase	CC Mode: 5 - 425 A CV Mode: 10 - 38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	H: 432 mm (17 in.) W: 318 mm (12-1/2 in.) D: 610 mm (24 in.)	36.3 kg (80 lb)
		Single-Phase	CC Mode: 5 - 425 A CV Mode: 10 - 38 V	300 A at 32 VDC, 60% Duty Cycle	60.8	54.6	29.7	24.5	19.9	11.7	11.2		
AlumaPower 450 MPa Machine only	**(#907 483)** w/ Auxiliary Power **(#907 526)** 400 V, **CE**	Three-Phase	CC Mode: 15 - 600 A CV Mode: 10 - 38 V	450 A at 38 VDC, 100% Duty Cycle	–	51	–	27.6	–	22	18.9	H: 438 mm (17.25 in.) W: 368 mm (14-1/2 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb)

Model	Stock Number	Input Power	Input Welding Circuit Rating	Wire Speed	Wire Diameter Capacity	Max Spool Size Capacity	Dimensions	Net Weight
XR-AlumaFeed Wire Feeder Feeder only *Feeder is 14-pin compliant, but only operates synergicly with an MPa power source.*	**(#300 509) CE**	24 VAC, 5 A, 50/60 Hz	400 A at 100% Duty Cycle System duty cycle is limited to gun rating.	1.3 - 22.9 m/min (50 - 900 IPM)	0.9 - 1.6 mm (.035 - .062 in.) Requires Wire Kit #230 708 for gun, and Drive Roll Kit #195 591 for control box to run 1.6 mm (1/16 in.) wire.	305 mm (12 in.)	H: 406 mm (16 in.) W: 241 mm (9-1/2 in.) D: 540 mm (21-1/4 in.)	19.2 kg (42.5 lb)

Migmatic® Series

Must be purchased from ITW Italy

Ask for Literature No. MN/55.0, DCM/9.0, DCM/10.0, DCM/13.0, MN/69.0, MN/64.0, MN/65.0, MN/66.0, MN/67.0

Migmatic 175

Migmatic 220/250 Migmatic 220DX/250DX

Migmatic 300/380 Migmatic 300DX/380DX

DX model features easy-to-use **Synergic user interface** with digital display to simplify set up and offer precise settings for welding a variety of materials.

Manual Mode allows for simple manual setting of parameters for welding on a broad range of applications.

Thermal overload protection shuts down the power source output if the main transformer or rectifier overheats.

Industrial dual-gear-driven system features no-tool, quick-change reversible drive rolls (0.8/1.0 mm) and an easy-to-set tension adjustment knob.

Professional wire drive motor withstands even the most demanding applications!

Superior arc control technology provides the operator with state-of-the-art welding performance on a wide variety of materials.

Traditional tapped design and laminated inductor provide a stable, smooth arc for consistent weld quality.

Consumable compartment provides convenient storage for contact tips, drive rolls and more.

Adjustable run-in control allows the operator to optimize arc starting with a variety of different wires.

Spot weld timer provides consistent spot welds every time. (Base models only.)

Adjustable burnback control reduces wire stubbing, arc flaring and prevents wire burnback to protect contact tips.

Industrial

CV DC 3 Phase 1 Phase

Comes Complete With

- Heavy duty power source
- Voltage step adjustments
- Heavy duty wire feed system
- 0.8/1.0 mm drive rolls (220/250 models)
- 1.0/1.2 mm drive rolls (300/380 models)
- Ground cable and clamp
- Running gear/Bottle rack
- Digital meters (250 DX, 300, and 380 models)

Model	Stock Number	Rated Output	Max. Open-Circuit Voltage	Wire Feed Speed	Wire Type and Diameter	Shipping Weight
175	**(#029015550)** 230 VAC, Single-Phase, 50/60 Hz, **CE**	150 A, 21 VDC 30% Duty Cycle	34 VDC	1.8-18 MPM (70-708 IPM)	**Solid Steel:** 0.6-0.8 mm **Aluminum:** 0.8-1.0 mm **Flux Core:** 0.6-0.8 mm	45.4 kg
220 **220DX**	**(#029015520)** 220/240 V, Single-Phase, 50/60 Hz, **CE** **(#029015521)** 220/240 V, Single-Phase, 50/60 Hz, **CE**	220 A, 28 VDC 25% Duty Cycle	40 VDC	1.0-20 MPM (39-787 IPM)	**Solid Steel:** 0.6-1.2 mm **Aluminum:** 0.8-1.2 mm **Flux Core:** 0.9-1.2 mm **Stainless Steel:** 0.8-1.0 mm	84 kg
250 **250DX**	**(#029015524)** 230/380-400 V, Three-Phase, **CE** **(#029015525)** 230/380-400 V, Three-Phase, **CE**	240 A, 26 VDC 35% Duty Cycle	43 VDC			
300	**(#029015540) Base** 400 VAC, Three-Phase, 50 Hz, **CE** **(#029015541) DX** 400 VAC, Three-Phase, 50 Hz, **CE** **(#029015545) Base** 230/400 VAC, Three-Phase, 50 Hz, **CE**	300 A, 28 VDC 35% Duty Cycle	43 VDC	1.3-26 MPM (51-1024 IPM)	**Solid Steel:** 0.6-1.2 mm **Aluminum:** 0.8-1.2 mm **Flux Core:** 0.9-1.4 mm **Stainless Steel:** 0.8-1.0 mm	100-103 kg
380	**(#029015542) Base** 400 VAC, Three-Phase, 50 Hz, **CE** **(#029015543) DX** 400 VAC, Three-Phase, 50 Hz, **CE** **(#029015547) Base** 380-400 VAC, Three-Phase, 50 Hz, **CE** **(#029015548) DX** 230/380-400 VAC, Three-Phase, 50 Hz, **CE**	350 A, 29 VDC 35% Duty Cycle	43 VDC			111-114 kg

XPS Series

Must be purchased from ITW Italy

XPS 350 &
XPS 450 Family

Traditional Tapped Transformer Power Source
Simple and precise with 30 (XPS 350) and 40 (XPS 450) voltage steps, provides the operator with a superior range and arc performance for even the most demanding applications.

Two inductance terminals and laminated inductor provides a stable, smooth arc operators appreciate.

Dual digital meters with hold function* display clear, precise readings of arc voltage and amperage.

Fan-On-Demand™ — Electronic control of fan cooling saves both energy and maintenance by only running the fan when required. Also reduces the ingress of dust particles into the power source.

Standard 14 pin connection to Miller wire feed units connects to a variety of Miller wire feeders.

Thermal overload protection shuts down the power source output, if overheating of either the main transformer or rectifier occurs.

115 VAC Auxiliary Power Receptacles (XPS 450)
Auxiliary power for water-cooling unit

Undercarriage and Bottle Carrier
Single or double bottle/cooler racks available.

Industrial

CV DC 3 Phase

Comes Complete With
- Industrial power cord
- Work cable and clamp
- Factory-installed running gear/twin bottle rack

Model	Stock Number	Rated Output	Max. Open-Circuit Voltage	Shipping Weight
XPS 350	**(#029 015 531)** 400 V, 50/60 Hz, **CE** **(#029 015 528)** w/Digital Meter, 400 V, 50/60 Hz, **CE**	350 A, 32 VDC, 45% Duty Cycle	38 VDC	140 kg
XPS 450	**(#029 015 532)** 400 V, 50/60 Hz, **CE** **(#029 015 529)** w/Digital Meter, 400 V, 50/60 Hz, **CE** **(#029 015 535)** w/Digital Meter, 230/400 V, 50/60 Hz, **CE**	450 A, 37 VDC, 45% Duty Cycle	47 VDC	170 kg

Deltaweld® Series

See Literature No. DC/16.2

Rock solid reliability, exceptional value and power efficient operation make this the "Better!" MIG solution for the most demanding industrial manufacturing applications. Combined with the 70 Series wire feeder, this system is the workhorse of the industrial market.

452/602

Deltaweld models are available in 300, 450 and 650 amps.

Line voltage compensation keeps welding parameters constant even when input voltages change ±10%. Eliminates need to change welding parameters throughout the day.

Material specific output studs provide the flexibility to produce the optimal arc characteristics for aluminum, stainless steel and all other materials.

Unique **Fan-On-Demand**™ cooling system operates only when needed. Reduces excess noise and contaminants drawn into the machine.

Thermal overload protection automatically shuts down the system to prevent high repair costs.

Remote control capability allows operators fine tuning capability at an extended distance.

15 amp 115 VAC duplex receptacle for operating auxiliary tools.

Power efficient for exceptional value and return on your investment.

Digital meters for presetting or monitoring welding voltage or amperage for more precise control.

Deltaweld Stationary

Stationary display without running gear/cylinder rack.

- Deltaweld power source
- S-74D wire feeder with drive rolls
- Bernard™ Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)

Deltaweld MIGRunner™

Everything in the Stationary plus:

- Running Gear/Cylinder Rack

**Dimensions and weight are for power source only – includes lift eye and strain relief.*

Industrial
Heavy Industrial

CV DC 3 Phase

Processes

- MIG (GMAW)
- Flux-cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)
  (452: 6.4 mm [1/4 in.] carbons)
  (652: 9.5 mm [3/8 in.] carbons)

Most Popular Accessories

- 70 Series Wire Feeders
- Standard Running Gear #042 886
- Standard Cylinder Rack #042 887
- Extension Cords
- Remote On/Off Control #042 869
- Air Filter kit #042 939
- Bernard™ Q-Gun™
- Industrial MIG 4/0 Kit #300 390

Model	Stock Number	Rated Output	Voltage Range	Recommended Welding Range	Open-Circuit Voltage	Dimensions*	Net Weight*
Deltaweld 302/402	**(#903 376)** 200-208/230/460 V, Machine only **(#903 392)** 230/460/575 V, Machine only **(#907 357)** 380/400/440 V, 50/60 Hz, **CE**	300 A at 32 VDC, 100% Duty Cycle	10-32	15-32 V	42 VDC	H: 762 mm (30 in.) W: 585 mm (23 in.) D: 775 mm (30-1/2 in.)	165 kg (363 lb)
Deltaweld 452/602	**(#903 377)** 200-208/230/460 V, Machine only **(#903 394)** 230/460/575 V, Machine only **(#903 358)** 380/400/440 V, 50/60 Hz, **CE**	450 A at 38 VDC, 100% Duty Cycle	10-38	15-38 V	48 VDC	H: 762 mm (30 in.) W: 585 mm (23 in.) D: 966 mm (38 in.)	201 kg (442 lb)
Deltaweld 652/852	**(#903 396)** 230/460/575 V, Machine only **(#907 359)** 380/400/440 V, 50/60 Hz, **CE**	650 A at 44 VDC, 100% Duty Cycle	10-44	15-44 V	54 VDC	H: 762 mm (30 in.) W: 585 mm (23 in.) D: 966 mm (38 in.)	240.4 kg (530 lb)

Invision™ MPa Plus System

See Literature No. DC/23.6

Features Alumination™ to provide the versatility of extended reach push-pull aluminum and includes Pulsed MIG programs for other wires, providing the "Best!" solution for all your MIG welding needs.

Invision 352 MPa or 450 MPa
Machine only.

Invision 450 MPa shown.

Invision 350 MPa air-cooled package shown with single feeder.

Invision 350 MPa water-cooled package shown with dual feeder (wire not included).

Invision MPa Plus Stationary
Stationary display without running gear/cylinder rack.

- Invision 352 MPa **or** 450 MPa with **or** without auxiliary power
- Single or dual 74 MPa Plus wire feeder with drive rolls
- 7.6 m (25 ft) XR-Aluma-Pro™ Plus push-pull gun for aluminum
- 4.6 m (15 ft) Bernard™ Q400 Gun (two included w/dual feeders)
- Industrial MIG 4/0 Kit with Dinse Connector
- Coolmate™ 3 for single feeders **or** Coolmate™ V3 for dual feeders (water-cooled packages only)

Invision MPa Plus MIGRunner™
MIGRunner system with running gear/cylinder rack.

Everything in the Stationary plus:

- Running gear/cylinder rack (MIGRunner Cart for single feeders **or** Running Gear Cylinder Rack for dual feeders)

ALSO AVAILABLE! **Push-only** with Q400 gun. Provides the same great Invision arc characteristics and synergic MIG capabilities on a variety of alloys.

Built-in MIG and Pulsed MIG programs automatically set the optimal parameters for a wide variety of wires providing immediate productivity.

Alumination™ allows use of extended reach push-pull gun for consistent, dependable aluminum wire feeding.

AUTOLINE Power Management Technology — Invision 352 model allows for **any** input voltage hookup (208–575 V) with no manual linking. 450 model is 230/460 V manual link.

Synergic Pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity.

Optimized arc control from start to finish is achieved using communication between Invision MPa power source and 74 MPa Plus feeder.

Robust and stable arc, even at short lengths, provides improved control with reduced heat input and the ability to weld a wider range of material thicknesses.

Easy to set up. Select wire diameter, wire type and gas being used, set your wire speed and strike an arc.

**Duty cycle rating below achieved with 6 gauge input power cord (8 gauge cord supplied with unit).*
***Dimensions and weight are for power source only.*

Heavy Industrial

CC CV | DC | 3 Phase | 1 Phase

Invision 450 is 3-phase only.

Processes

- MIG (GMAW)
- Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)
- Air Carbon Arc Cutting and Gouging (CAC-A)
  (Invision 352: 6.4 mm [1/4 in.] carbons)
- (Invision 450: 7.9 mm [5/16-in.] carbons)

Push-Pull Guns Designed for the 74 MPa Plus Wire Feeders

Dedicated guns work with MPa Plus feeders using tachometer feedback to coordinate wire feed speed of the gun and feeder.

XR-Aluma-Pro™ Plus

4.6 m (15 ft) air-cooled	#300 000 001
7.6 m (25 ft) air-cooled	#300 001 001
10.7 m (35 ft) air-cooled	#300 264 001
4.6 m (15 ft) water-cooled	#300 003 001
7.6 m (25 ft) water-cooled	#300 004 001
10.7 m (35 ft) water-cooled	#300 265 001

Most Popular Accessories

- MIGRunner™ Cart (Single Feeders only) #195 445
- Running Gear Cylinder Rack #300 408
- Industrial MIG 4/0 Kit with Dinse Connector #300 405
- Extension Cables
  7.6 m (25 ft.) #247 831 025
  15 m (50 ft.) #247 831 050
  24.4 m (80 ft.) #247 831 080

Model (Machine Only)	Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208V	230V	400V	460V	575V	KVA	KW	Max. Open-Circuit Voltage	Dimensions**	Net Weight **
Invision 352 MPa	**(#907 431)** **(#907 431 001)** w/Auxiliary Power **(#907 431 002)** w/Auxiliary Power, **CE**	Three-Phase	CC Mode: 5 - 425 A CV Mode: 10 - 38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 432 mm (17 in.) W: 318 mm (12-1/2 in.) D: 610 mm (24 in.)	36.3 kg (80 lb)
		Single-Phase	CC Mode: 5 - 425 A CV Mode: 10 - 38 V	300 A at 32 VDC 60% Duty Cycle*	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
Invision 450 MPa	**(#907 485)** 230/460 V w/Auxiliary Power **(#907 524)** 400 V w/Auxiliary Power	Three-Phase	CC Mode: 15 - 600 A CV Mode: 10 - 38 V	450 A at 38 VDC, 100% Duty Cycle*	–	51	–	27.6	–	22	18.9	90 VDC	H: 438 mm (17.25 in.) W: 368 mm (14-1/2 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb)

Axcess® Systems

See Literature No. DC/8.0

Optimize your industrial MIG welding system with digital control capability and exceptional MultiMIG® performance. A dedicated, menu-driven wire feeder provides a true synergic solution.

Axcess 300, 450 or 675
Machine only.

AUTO-LINE™ Power Management Technology — Allows for **any** input voltage hookup (190-630 V) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

RS-232 serial port provides access to data transfer and optional program downloads from Web at MillerWelds.com/advanced.

Axcess four-drive-roll wire drive feeder is combined with operator interface leaving no controls back at the power source.

MIG welding programs include patented **Accu-Pulse®**, **Accu-Curve™** standard or adaptive pulse, conventional MIG and metal core programs.

Note: Look for high-speed video clips of Accu-Pulse®, Accu-Curve™, Accu-Speed™ and Front Panel Simulator at MillerWelds.com/advanced.

Accu-Pulse® MIG process delivers precise control of the arc even over tack welds and in tight corners.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.

Axcess MIG Runner™

Everything in the Stationary plus:

- Running Gear/ Cylinder Rack

Axcess Stationary

Stationary display without running gear/cylinder rack.

- Axcess power source
- Axcess wire feeder with drive rolls
- Bernard™ Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)

Industrial – 300
Heavy Industrial – 450/675

CV DC 3 Phase

Processes

Multi-MIG

- Accu-Pulse™ MIG (GMAW-P)
  - Accu-Curve™ MIG (GMAW-P)
  - Accu-Speed™ (optional)
- Pulsed MIG (GMAW-P)
- MIG (GMAW)
- Metal Cored
- RMD® - Regulated Metal Deposition (GMAW-SCT) (optional)
- Carbon Arc Gouging (CAC-A) can also be activated

Most Popular Axcess-ories

- Accu-Speed™
  For Palm #300 719
  For PC #300 720
- RMD® (Regulated Metal Deposition)
  For Palm #195 252
  For PC #300 721
- Axcess® File Management Software for PC #300 529
- WaveWriter™ File Management Software (consult factory)
- Feeder Cart #142 382
- Running Gear Cylinder Rack (Axcess 300 and 450 only) #300 408
- Industrial MIG 4/0 Kit #300 390
  Includes Smith® regulator/flowmeter with 3 m (10 ft) gas hose, 3 m (10 ft) 4/0 feeder weld cable with lugs and 4.6 m (15 ft) work cable with 600-amp C-clamp
- Aluminum Gun Kits – for pushing aluminum wire
  0.035, 3 m (10 ft) #300 541
  0.047, 3.7 m (12 ft) #300 542
  1/16, 3.7 m (12 ft) #300 543
- Axcess feeder #195 182

Model	Stock Number	Amp/Volt Ranges	Three-Phase Rated Output	Amps Input at Rated Output, 50/60 Hz 208 V	230V	400V	460V	575V	KVA	KW	Max. Open Circuit Voltage	Net Weight *(Power source only)*
Axcess 300	**(#907 150)** Machine only **(#907 348) CE**	5 - 400 A 10 - 44 V	300 A at 32 VDC, 60% Duty Cycle	33	29.7	16.9	14.6	11.6	11.7	11.2	80 VDC	52.6 kg (116 lb.)
Axcess 450	**(#907 152)** Machine only **(#907 275) CE** **(#907 275-01-1) CE**, with RMD	5 - 600 A 10 - 44 V	450 A at 44 VDC, 100% Duty Cycle	–	60	33.7	28.8	22.8	22.2	23.1		73.9 kg (163 lb.)
Axcess 675	**(#907 154)** Machine only	5 - 900 A 10 - 44 V	675 A at 44 VDC, 100% Duty Cycle	–	89.7	–	43.7	34.8	35.7	34.4		94.3 kg (208 lb.)

Auto-Axcess® Systems

See Literature No. AU/8.0

For robotic automation **— seamless integration of digital control technology combines inverter welding power source and robotic interface.**

Features Auto-Cal. . .

A patented automatic calibration feature that uses the Auto-Axcess internal digital technology to allow simple, automatic scaling and synchronization to analog robot controllers. This assures consistent and repeatable results with minimal downtime when installing Auto-Axcess power sources into existing robot cells. It also saves time and additional hardware costs while minimizing complexity in new cells on most robot systems.

AA-40GB Wire Drive Motor Assembly with OCP (Over Current Protection) to protect against current surges. The design utilizes an improved sheet metal enclosure including printed circuit board. It features a threaded gas connection and a direct-panel-mounted, quarter-turn motor control cable connection that eliminates motion stress on the motor's power and tachometer feedback wires.

72-pin Harting connector for quick, easy connection to common analog robot controllers.

AUTOLINE Power Management Technology — Miller's patented technology allows for **any** input voltage hookup (190-630 V) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

MIG welding programs include patented **Accu-Pulse®**, **Accu-Curve™**, **Accu-Speed™**, standard or adaptive pulse, conventional MIG and metal core programs.

Accu-Pulse® MIG process delivers precise control of the arc even over tack welds and in tight corners.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.

Optional Axcess-able software:
Accu-Pulse™ tandem (factory-installed only), Accu-Speed™ for Palm or PC, RMD® (Regulated Metal Deposition) for Palm or PC, Axcess® File Management for PC, and WaveWriter™ File Management with Wave Shaping.

Axcess® Multi-MIG® Welding Process Capabilities

Process	Standard Spray	Pulsed Spray	Accu-Pulse® Accu-Curve™ *Accu-Speed™ (Optional)*	Standard Short Circuit	*RMD® Regulated Metal Deposition (Optional)*
Weld Puddle Control	Flat/Horizontal		All Position Performance		Thin Materials/Gap Filling

Note: Look for high-speed video clips of Accu-Pulse, Accu-Curve, Accu-Speed and Front Panel Simulator at MillerWelds.com/advanced.

CV DC 3 Phase

Processes

Multi-MIG®

- Accu-Pulse® MIG (GMAW-P)
  - Accu-Curve™ MIG (GMAW-P)
  - Accu-Speed™ MIG (GMAW-P)
- Pulsed MIG (GMAW-P)
- Metal Core
- MIG (GMAW)
- RMD™ Regulated Metal Deposition (GMAW-SCT) (optional)

Required Wire Drive Motor Assembly/Motor Control Cable

- AA-40GB Wire Drive Motor (includes 15.2 m [50 ft] volt-sense lead)
  Left-hand Drive #195 426
  Right-Hand Drive #195 515
  (Order required Motor Control Cable separately)
- Motor Control Cable
  6.1 m (20 ft) #300 097
  9 m (30 ft) #300 096
  15.2 (50 ft) #300 098

Most Popular Axcess-ories

- RMD (Regulated Metal Deposition) #195 252
- Palm Convenience Package #195 517
- Axcess File Management Software #195 249
- WaveWriter File Management Software #195 250
- Coolant Flow Switch #195 461
- Receptacle/Adapter Kits (One required per machine)
  ABB #194 793
  Fanuc #194 791
  Motoman #194 790
  Universal #195 002
  Panasonic #300 056
- Smart Adapter #300 012
  allows automatic to be configured to function as semi-automatic
- Fanuc/Motorman Motor Bracket #300 013

Miller recommends

Tregaskiss™

Model	Stock Number	Amperage/ Voltage Ranges	Three-Phase Rated Output	Amps Input at Rated Output, 50/60 Hz 208 V	230V	400V	460V	575V	KVA	KW	Max. OCV	Net Weight
Auto-Axcess 300	**(#907 151)** Base Power Source **(#907 151-01-1)** w/RMD Process Software **(#907 349) CE**	5 - 400 A 10 - 44 V	300 A at 32 VDC, 60% Duty Cycle	33	29.7	16.9	14.6	11.6	11.7	11.2	80 VDC	52.6 kg (116 lb)
Auto-Axcess 450	**(#907 153)** Base Power Source **(#907 153-01-1)** w/RMD Process Software **(#907 274) CE** **(#907 274-01-1) CE**, with RMD	5 - 600 A 10 - 44 V	450 A at 44 VDC, 100% Duty Cycle	–	60	33.7	28.8	22.8	22.2	23.1		73.9 kg (163 lb)
Auto-Axcess 675	**(#907 155)** Base Power Source	5 - 900 A 10 - 44 V	675 A at 44 VDC, 100% Duty Cycle	–	89.7	–	43.7	34.8	35.7	34.4		94.3 kg (208 lb)

Continuum™ Systems

See Literature No. DC/36.0

New generation of advanced industrial welding solutions improves productivity through weld quality, ease of use and system flexibility.

Continuum 350 model shown with MIGRunner. Filler metal sold separately.

Improved processes

New Versa-Pulse™ and improvements to Accu-Pulse,® RMD® and MIG processes allow you to take the performance of each process to the highest level.

All-new power source design

Smart and powerful digital design has the fast response needed to deliver the most stable welding performance for better welding results.

Flexible to meet current and future needs with integrated expansion capabilities.

Welding Intelligence.™ Increase productivity, improve quality and manage costs with Insight Core™ (standard) and Insight Centerpoint™ (optional) welding information management systems.

All-new feeder design

Tru-Feed™ technology provides precise feeding operation for stable arc performance.

- **New low-inertia motor** provides faster response for the best arc starts with the least amount of spatter
- **Balanced-pressure drive-roll design and tensioners** feed wire in its truest and straightest form for consistent feedability, resulting in better welding performance

New user interface makes the system easy to set up and adjust with minimal training.

Continuum Processes

Best For	Standard Spray	High-Deposition MIG	Accu-Pulse	Versa-Pulse	Short Circuit	RMD
Deposition	A	A	A	B	D	D
Gap Filing	D	D	B	B	A	A
Low Heat Input	D	C	B	A	A	A
Out-of-Position Welds			A	B	B	B
Low Spatter	A	A	A	B	C	B
Thick Metals	A	A	A	C	D	D
Thin Metals			B	A	A	A
Increased Travel Speed	A	A	A	A	B	C
	HOT ←					→ COLD

Ratings A, B, C, and D *are relative values. An "A" rating indicates a best fit between your performance needs and process. A "blank" rating indicates that the process is not recommended for that application.*

Accu-Pulse *is the most popular process for majority of industrial welding applications.*

Versa-Pulse *is a fast, low-heat, low-spatter process designed for thin-material applications.*

RMD *is a low-heat modified short-circuit process designed to fill gaps with thin-material applications.*

High-deposition MIG *provides increased deposition rates over standard spray on thicker materials.*

Note: As the technological advances offered by Continuum extend beyond the capability of Axcess systems, the two systems are not compatible. Continuum systems are designed to allow future upgradability, to expand with your operation's needs.

**While idling.*

Heavy Industrial

CC/CV DC 3 Phase

Processes

- Accu-Pulse MIG (GMAW-P)
- Versa-Pulse • RMD • MIG (GMAW)
- High-deposition MIG (GMAW)
- Air carbon arc gouging (CAC-A)

MIGRunner™ package includes

- Continuum power source
- Continuum single feeder with Bernard™ BTB Gun 400 A and 0.8/1.2 mm (.035/.045 in.) V-groove drive rolls
- Continuum running gear/cylinder rack
- 0.9 m (3 ft.) control/motor cable
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 3 m (10 ft.) gas hose, 3 m (10 ft.) 4/0 feeder weld cable with lugs, and 4.6 m (15 ft.) work cable with 600-amp C-clamp.

Wire feeding options

- Continuum Feeders
  Single-wire, Dual-wire
  Includes Bernard BTB Gun 400 A (two with dual-wire models) and 0.8/1.2 mm (.035/.045 in.) V-groove drive rolls.
- Continuum Swingarc™
  Boom-Mounted Feeders
  2.4 m (8 ft.) single-wire
  3.7 m (12 ft.) single-wire
  4.9 m (16 ft.) single-wire
  Includes Bernard BTB Gun 400 A and 0.8/1.2 mm (.035/.045 in.) V-groove drive rolls.

Most Popular Accessories

- Insight Centerpoint™ Software
- Bernard™ MIG Guns
- Continuum Running Gear/Cylinder Rack #301 264
- Coolmate™ Coolant Systems
- Industrial MIG 4/0 Kit (with lug connectors) #300 390
- Continuum Control/Motor Cables
  0.9 m (3 ft.) #263 368 003
  4.6 m (15 ft.) #263 368 015
  6.1 m (20 ft.) #263 368 020
  7.6 m (25 ft.) #263 368 025
  15 m (50 ft.) #263 368 050
  24.4 m (80 ft.) #263 368 080

Model	Stock Number	Amp/Volt Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz, 3-Phase 230V	380V	400V	460V	575V	KVA	KW	Max. Open Circuit Voltage	Machine Only Net Weight
Continuum 350	**(#907 636)** 230-575 V Machine only **(#907 636 001)** 230-575 V w/running gear **(#907 645)** 400 V, **CE**	20-400 A, 10-44 V	300 A at 34 VDC, 100% Duty Cycle	36.7 0-1*	21.8 0-1*	20.8 0-1*	18.8 0-1*	14.6 0-1*	14.4 0.8*	13.8 0.17*	75 VDC	57.6 kg (127 lb.)
Continuum 500	**(#907 640)** 230-575 V Machine only **(#907 640 001)** 230-575 V w/running gear **(#907 648)** 400 V, **CE**	20-600 A, 10-44 V	500 A at 40 VDC, 100% Duty Cycle	34.9 0-1*	– –	33.2 0-1*	28.9 0-1*	23.3 0-1*	23.1 0.8*	21.9 0.17*		67.1 kg (148 lb.)

Model	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Max Spool Size Capacity	Dimensions	Net Weight
Continuum Feeder only **(#301 195)** Single-wire model **(#301 195 010)** Single-wire model, **CE** **(#301 199)** Dual-wire model **(#301 199 010)** Dual-wire model, **CE**	50 VDC	500 A at 100% Duty Cycle	Standard: 1.3-25.4 m/min (50-1000 IPM)	0.9-2.0 mm (.035-5/64 in.)	457 mm (18 in.), 27 kg (60 lb.)	H: 351 mm (13.812 in.) Single W: 414 mm (16.312 in.) Dual W: 432 mm (17 in.) D: 754 mm (29.687 in.)	**Single** 19.5 kg (43 lb.) **Dual** 27.9 kg (61.5 lb.)

Knowledge to Drive Your Business Forward

Insight Welding Intelligence helps your operation be more competitive and profitable by delivering accurate, decision-ready information about your welding processes.

MORE on the WEB For more detailed information, visit **MillerWelds.com/insight**

Increase Productivity
Evaluate key indicators of operator productivity

Improve Weld Quality
Measure important indicators of weld quality

Manage Costs
Monitor and analyze welding costs

Insight Core™

A simplified, Internet-based weld data solution that collects, transmits and presents actionable information to any Web-connected device in the world.

Basic monitoring
- 14-pin provides arc-on time and weld parameters (volts/amps) and deposition (MPa feeder required)
- Axcess®/Auto-Axcess™ and Continuum™ provide arc-on time, deposition, wire feed speed, process, wire type/diameter, gas type and machine error codes

Wi-Fi and wired Ethernet connectivity are built into Insight Core for flexible integration with your company's information network.

No special software or applications required, for easier installation and more accessible reports.

Factory installed on Axcess®/Auto-Axcess,™ Continuum™ and Dynasty® 280 DX with Insight power sources.

Compatible with 14-pin compliant Miller® power sources. See MillerWelds.com/insight for a list of 14-pin compatible power sources.

Factory-installed Insight Core Power Sources

#907 150 002 Axcess 300 with Insight Core
#907 348 002 Axcess 300 with Insight Core, **CE**
#907 152 002 Axcess 450 with Insight Core
#907 275 003 Axcess 450 with Insight Core, **CE**
#907 154 002 Axcess 675 with Insight Core
#907 151 004 Auto-Axcess 300 with Insight Core
#907 349 006 Auto-Axcess 300 with Insight Core, **CE**
#907 153 004 Auto-Axcess 450 with Insight Core
#907 274 006 Auto-Axcess 450 with Insight Core, **CE**
#907 155 006 Auto-Axcess 675 with Insight Core
#907 151 005 Auto-Axcess 300 DeviceNet with Insight Core
#907 349 005 Auto-Axcess 300 DeviceNet with Insight Core, **CE**
#907 153 005 Auto-Axcess 450 DeviceNet with Insight Core
#907 274 007 Auto-Axcess 450 DeviceNet with Insight Core, **CE**
#907 155 005 Auto-Axcess 675 DeviceNet with Insight Core
#907 636 Continuum 350
#907 640 Continuum 500
#907 514 003 Dynasty 280 DX with Insight

For more information regarding Axcess/Auto-Axcess power sources and DeviceNet see literature no. DC/8.0 or AU/8.0 respectively.

Field-installed Insight Core Upgrade Modules

#301 072* 14-pin compliant Miller power source module
#301 081 Axcess/Auto-Axcess module

**SubArc Digital Series requires Insight Core to SubArc Digital Series Adapter Kit (#301 295).*

Visit our online Insight Core simulator at **Insight-simulator.MillerWelds.com**

Insight Core™

Focused on monitoring welding outputs

14-pin products (Deltaweld,® Dimension,™ Invision,™ XMT® and SubArc Digital)

Axcess®/Auto-Axcess,™ Continuum™ and Dynasty® 280 DX with Insight

Insight Centerpoint™

Brings advanced process control into weld cell

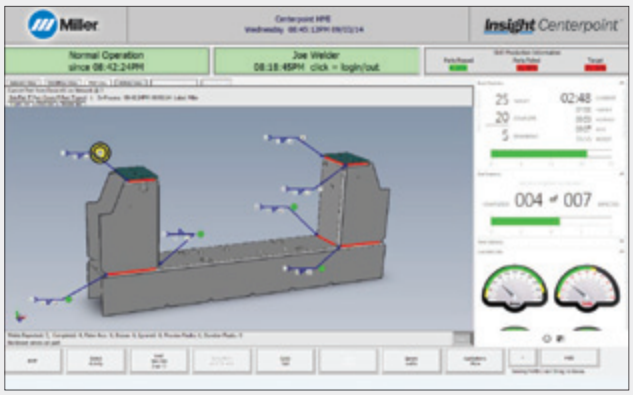
Axcess® E/Auto-Axcess™ E, Continuum™ and Dynasty® 280 DX with Insight

SOPHISTICATION OF INFORMATION AVAILABLE

For more information regarding Insight Core, Insight Centerpoint and software options visit ***MillerWelds.com/insight***

Insight Centerpoint™

Advanced, real-time operator feedback to provide process control — to maximize quality and efficiency in welding and fabrication.



Advanced MIG Factory-installed Insight Centerpoint Power Sources

#907 440 Axcess E 300
#907 440 002 Axcess E 300, **CE**
#907 439 Axcess E 450
#907 439 002 Axcess E 450, **CE**
#907 441 Axcess E 675
#907 442 Auto-Axcess E 300 Analog
#907 442 002 Auto-Axcess E 300 Analog, **CE**
#907 443 Auto-Axcess E 450 Analog
#907 443 002 Auto-Axcess E 450 Analog, **CE**
#907 444 Auto-Axcess E 675 Analog
#907 497 Auto-Axcess E 300 Digital
#907 497 002 Auto-Axcess E 300 Digital, **CE**
#907 496 Auto-Axcess E 450 Digital
#907 496 002 Auto-Axcess E 450 Digital, **CE**
#907 495 Auto-Axcess E 675 Digital
#301 255 Insight Centerpoint single seat license
#301 256 Insight Centerpoint site license
#301 257 Advanced capability software (standard capability included)
#300 709 Insight Reporter single license (1 required per PC)
#300 710 Insight Reporter SQL database (1 required per facility)

For more information regarding Axcess E/Auto-Axcess E power sources see literature no. DC/8.05 or AU/9.5 respectively.

#907 636 Continuum 350
#907 645 Continuum 350, **CE**
#907 640 Continuum 500
#907 648 Continuum 500, **CE**
#301 255 Insight Centerpoint single seat license
#301 256 Insight Centerpoint site license
#301 297 Standard capability software
#301 257 Advanced capability upgrade (requires standard capability to use)
#301 322 Standard and advanced capability software
#300 709 Insight Reporter single license (1 required per PC)
#300 710 Insight Reporter SQL database (1 required per facility)

Monitor and control

- Part Tracking™ — human machine interface (HMI) in the cell for real-time feedback; sequence and weld quality control; reports by part, arc time, welds, deposition, cell downtime and more
- Work Flow™ — welding and non-welding work instructions to govern the entire fabrication process
- Codes and Standards — captures required information relating actual welding parameters to the specific operator, contract, joint and weld pass to ensure productivity and quality requirements are met
- Optional Insight Reporter™ — Preconfigured management charts and reports that provide a wide range of information about weld process, productivity, and business metrics, stored in an SQL server database

Axcess® E/Auto-Axcess™ E, Continuum™ and Dynasty® 280 DX with Insight deliver complete software functionality.

Insight Pipe and Vessel
Tailored to the unique needs of pipe and vessel fabricators. PipeWorx 400 requires Insight Module (#301 304).

TIG Factory-installed Insight Centerpoint Power Sources

#907 514 003 Dynasty 280 DX with Insight
#301 316 Insight Centerpoint single seat license
#301 256 Insight Centerpoint site license
#301 314 Standard capability software
#301 323 Advanced capability upgrade (requires standard capability to use)
#301 315 Standard and advanced capability software
#300 709 Insight Reporter single license (1 required per PC)
#300 710 Insight Reporter SQL database (1 required per facility)

Field-installed Insight Centerpoint Upgrade Modules

#300 641 Axcess E module
#300 852 Auto-Axcess E Analog module
#300 648 Auto-Axcess E Digital module
#301 304 PipeWorx 400 module (only provides codes and standards)

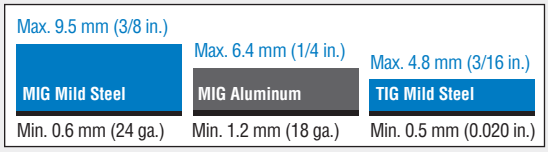
Accessories

#3DM4015-45Q Insight LTD gun for Axcess E or Continuum
#300 677 Axcess E semi-automatic wire feeder
#300 726 Axcess E remote operator interface (ROI)
#300 734 3 m (9.8 ft.) M12/RJ45 ethernet cable
#300 735 5 m (16.4 ft.) M12/RJ45 ethernet cable
#300 736 10 m (32.8 ft.) M12/RJ45 ethernet cable
#195 480 Field application support

Multimatic™ 200

See Literature No. DC/12.57

Welding Capability



Aluminum welding uses optional Spoolmate 100 Series spool gun and 4043 Series aluminum wire. TIG welding uses optional TIG Contractor Kit.

The only all-in-one, portable, multiprocess power source from Miller® is our most versatile machine to date. Weighing only 13.2 kg (29 lb) and running on either 120 or 230 V, the Multimatic 200 can go anywhere you need to MIG, TIG or Stick weld.

Multi-voltage plug (MVP™) allows connection to 120 or 230 V receptacles without tools.

Auto-Set™ Elite can be used on multiple materials and multiple processes with the ability to fine-tune your settings. Simple to set up and use!

Excellent arc characteristics! Unit offers positive arc starts and an extremely stable arc with minimal spatter on both mixed gases and straight CO_2.

Impact-resistant case provides strength and durability while protecting the internal components and welding wire.

Recommended aluminum solution

Spoolmate 100 Series (#300 371)

Light Industrial

CC/CV DC 1 Phase

Processes

- MIG (GMAW) • Flux-cored (FCAW)
- DC Stick (SMAW) • DC TIG (DC GTAW)

Comes Complete With

- 3 m (10-ft.) Bernard™ Q150 MIG gun
- 4 m (13-ft.) cable with electrode holder and 25-mm Dinse connector
- 3 m (10-ft.) work cable with clamp and 25-mm Dinse connector
- Power cord and MVP™ plugs for 120 V and 230 V
- Miller | Smith® argon and AR/CO_2 mix regulator/flow gauge with gas hose
- Dual groove quick-change drive rolls for 0.6-mm (.024-in.) or 0.8/0.9-mm (.030/.035-in.) wire
- Extra contact tips, information/settings chart, setup/operation DVD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmate™ 100 Series #300 371
- TIG Contractor Kit #301 130
- 14-Pin to 6-Pin Adapter Cord #300 507
- RCCS-6M Remote Fingertip Control #195 184

Stock Number	Welding Mode/Process	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz 120 V	230 V	KVA	KW	Wire Feed Speed	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 518) 120/230 V	CV: MIG/ Flux-cored	120 VAC	30 –140	90 A at 18.5 V, 60% Duty Cycle	18	—	2.2	2	1.8–10.8 m/min. (70– 425 IPM)	90 VDC	H: 368 mm (14.5 in.) W: 248 mm (9.75 in.) D: 432 mm (17 in.)	13.2 kg (29 lb)
				110 A at 19.5 V, 20% Duty Cycle	20	—	2.7	2.6				
		230 VAC	30 – 200	150 A at 21.5 V, 20% Duty Cycle	—	17.5	4.0	3.8				
	CC: TIG	120 VAC	5 –150	150 A at 16 V, 30% Duty Cycle	27	—	3.3	3.2	—	90 VDC (22 – 25 VDC, sense voltage for Stick and Lift-Arc™ TIG)		
		230 VAC	5 –150	150 A at 16 V, 30% Duty Cycle	—	13.8	3.2	3.0				
	CC: Stick	120 VAC	20 –150	100 A at 24 V, 35% Duty Cycle	24	—	2.9	2.8				
		230 VAC	20 –150	150 A at 26 V, 30% Duty Cycle	—	20.8	4.8	4.5				

Shopmate™ 300 DX

See Literature No. DC/12.7

An economical single-phase DC multiprocess power source that provides versatility and outstanding arc performance in CV mode (MIG) and CC mode (Stick and TIG).

Shopmate 300 DX MIG package shown

Process selector switch is an "operator-friendly" single process switch that eliminates the confusion of several switch combinations.

Digital meters for presetting or monitoring voltage and amperage.

Built-in 10-pin connector for direct hookup of Spoolmatic® spool guns.

Built-in 14-pin connector provides direct connection for 14-pin, 24 VAC Miller wire feeders and accessories.

Fan-On-Demand™ cooling system operates only when needed.

Line voltage compensation keeps welding parameters constant.

Arc control adjusts inductance in MIG mode and DIG in Stick mode to optimize weld performance.

Lift-Arc™ start provides DC TIG arc starting without the use of high frequency. Starts the arc without contaminating the weld with tungsten.

Light Industrial

CC/CV DC 1 Phase

Process
- MIG (GMAW)
- Flux-cored (FCAW)
- DC Stick (SMAW)
- DC TIG (DC GTAW)

MIG Pkg Comes Complete With
- Power source
- 22A wire feeder with Bernard™ gun
- MIG kit

Most Popular Accessories
- Shopmate Running Gear/Dual Cylinder Rack #300 145
- Shopmate 300 Kit #300 150

Stock Number	Amperage Range	Voltage Range	Rated Output	Amps Input at Rated Load Output, 60 Hz 208V	230V	460V	575V	KVA	KW	Max. Open-Circuit Voltage	Dimensions *(includes lift eye)*	Net Weight
(#907 315) 200(208)/230 V **(#907 316)** 230/460/575 V	5–400	10–35	250 A at 30 VDC, 60% Duty Cycle	66	57	29	23	13	11.2	80 VDC	H: 622 mm (24.5 in.) W: 483 mm (19 in.) D: 648 mm (25.5 in.)	80.3 kg (177 lb)

MPi 220P

See Literature No. DCM/9.5 UK

Must be purchased from ITW Italy

Includes Work Clamp.

Thermal overload protection shuts down unit and activates **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when fault is corrected and unit cools.

Synergic welding mode offers the simplicity of single knob control. The machine will select the correct voltage and amperage based on the wire feed speed (WFS) set by the operator. Complete material library to select from for the targeted market segment.

Adjustable Hot Start™ for Stick arc starts. Adjust the optimal start current for the application. The current automatically increases the output amperage at the start of a weld.

Built-in upslope/downslope function for TIG helps provide better arc starts and reduces craters.

Built-in run-in/crater/burnback function for MIG helps provide better arc starts and reduces craters.

Adjustable preflow and postflow gives operator better control of the gas parameters affecting weld zone.

Selectable trigger configuration allows the operator to choose standard or 2T trigger method.

Industrial

CC/CV DC 1 Phase

Processes
- MIG (GMAW)
- Pulsed MIG (GMAW-P)
- Flux-cored (FCAW)
- Stick (SMAW)
- TIG (GTAW)

Most Popular Accessories
- TIG Torch
  125 Amps DC, 100 Amps AC, 60% duty cycle WTC9AA4AG
  130 Amps DC, 100 Amps AC, 60% duty cycle CS130AGA4CG-I
- MIG/MAG Torch
  200 Amp Q-Gun with 3 m (10 ft) cable Q2010AO8DE

Stock Number	Input Power	Welding Mode	Rated Output (Duty Cycle) 100%	60%	35%	Max. Open-Circuit Voltage	Amperage/Voltage Range DC	IP Rating	Dimensions	Weight
#059 016 014	230 VAC, 50/60 Hz, Single-Phase, **CE**	MIG	110 A 17.5 V	140 A 21.0 V	180 A 23.0 V	35 V	2 – 200 A 15 – 24 V	IP22S	L: 548 mm (21.6 in.) W: 237 mm (9.3 in.) H: 365 mm (14.4 in.)	16 kg (35 lb.)
		Stick	100 A 24.0 V	130 A 25.2 V	170 A 26.8 V	65 V	5 – 200 A 20.2 – 28 V			
		TIG	100 A 14.0 V	130 A 15.2 V	180 A 17.2 V	65 V	5 – 200 A 10 – 18 V			

Dimension™ Series and NT 450

See Literature No. DC/19.2 and DC/19.5

100% duty cycle industrial power sources deliver time-tested, reliable performance in demanding multiprocess applications for a variety of industries.

Dimension Stationary

Dimension NT 450 MIGRunner

All models feature:

- **DC multiprocess** versatility with excellent arc performance.
- **Digital meters** for presetting or monitoring voltage or amperage (Dimension Series allows preset voltage only).
- **Line voltage compensation** for input voltage variations.
- **Power efficiency** for exceptional return on your investment.
- **15-amp, 115-VAC duplex receptacle** for auxiliary tools.

Dimension Series adds the following features:

- **Hot Start**™ makes it easier to start difficult stick electrodes.
- **Arc control** for added flexibility in tight stick locations.

Dimension NT 450 adds the following features:

- **Electronic arc and inductance controls with digital display** for added flexibility and control on a large variety of stick electrodes and welding wires.
- **Lift-Arc**™ start for TIG arc starting without high frequency.

Heavy Industrial

CC CV DC 3 Phase

Processes

- MIG (GMAW)
- Flux-cored (FCAW)
- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)
  (Dimension 302: 6.4 mm [1/4 in.] carbons)
  (Dimension 452: 7.5 mm [5/16 in.] carbons)
  (Dimension NT 450: 7.5 mm [5/16 in.] carbons)
  (Dimension 652: 9.5 mm [3/8 in.] carbons)

Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders
- 70 Series Wire Feeders
- Standard Running Gear #042 886
- Standard Cylinder Rack #042 887
- Industrial MIG 4/0 Kit #300 390
  Includes Smith® regulator/flowmeter with 3-m (10-ft.) gas hose, 3-m (10-ft.) 4/0 feeder weld cable with lugs, and 4.6-m (15-ft.) work cable with 600-amp C-clamp.
- Extension Cables
- Bernard™ and Tregaskiss™ MIG Guns

Model	Stock Number	Welding Mode	Amperage/ Voltage Range	Rated Output	Max. Open-Circuit Voltage	Net Weight *(power source only)*
Dimension 302	**(#903 216)** 230/460/575 V, Machine only	CC	15-375 A	300 A at 32 VDC, 100% Duty Cycle	60 VDC	164 kg (361 lb.)
		CV	10-32 V		36 VDC	
Dimension 452/562	**452 (#903 255)** 230/460/575 V, Machine only **562 (#907 360)** 380/400/440 V, 50/60 Hz, **CE**	CC	20-565 A	450 A at 38 VDC, 100% Duty Cycle	65 VDC	192 kg (424 lb.)
		CV	10-38 V		43 VDC	
Dimension 652/812	**652 (#903 379)** 230/460/575 V, Machine only **812 (#907 361)** 380/400/440 V, 50/60 Hz, **CE**	CC	50-815 A	650 A at 44 VDC, 100% Duty Cycle	72 VDC	247 kg (545 lb.)
		CV	10-65 V		67 VDC	
Dimension NT 450/500	**NT 450 (#907 256)** 230/460/575 V, 60 Hz, Machine only **NT 500 (#907 391)** 380/400/440 V, 50 Hz	CC	5-500 A	450 A at 38 VDC, 100% Duty Cycle	80 VDC	171 kg (376 lb.)
		CV	10-38 V			

Dimension™ 650

See Literature No. DC/19.3

Developed for harsh environmental conditions and output requirements that range from power-intensive to precise.

BUILT TO LAST

All aluminum construction helps the machine resist corrosion for long life.

Exclusive protection input inductor protects machine's performance and reliability from "dirty" input power.

Wind Tunnel Technology™ protects internal components, greatly improving reliability.

Fan-On-Demand™ reduces power consumption and improves reliability.

POWER FOR THICK METALS
PRECISION FOR THIN METALS

High-quality performance in all welding processes, from thick to thin metals.

Arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

48% SMALLER OVER 200 lb. LIGHTER

Reduced size and weight results in an easier-to-handle package that exceeds the welding performance of larger, heavier machines. Dimension 650 is 3.5 times lighter than the Dimension 652 and also uses 40 percent less floor space.

93% EFFICIENT

High electrical efficiency and excellent power factor mean that you can get more welding done using less power. Dimension 650 uses 32 percent fewer amps than the Dimension 652.

Dimension 650 ArcReach™

Recomended Option!

Remote control of the power source without a cord. An ArcReach system allows you to change weld settings from your SuitCase wire feeder or Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money.

** For Machine Only*

Heavy Industrial

CC CV | DC | 3 Phase

Processes

- MIG (GMAW)
- Flux-cored (FCAW)
- Stick (SMAW)
- TIG (GTAW)
- Submerged Arc (SAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 9.5 mm [3/8 in.] carbons)

Stationary package includes

- Power source
- S-74 MPa Plus feeder with Bernard™ BTB Gun 400 A and 0.8/102 mm (.035/.045 in.) drive rolls
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 3 m (10 ft.) gas hose, 3 m (10 ft.) 4/0 feeder weld cable with lugs, and 4.6 m (15 ft.) work cable with 600-amp C-clamp.

MIGRunner™ package includes above plus

- Running gear cylinder rack

Most Popular Accessories

4-pack rack shown

- Dimension 650 Rack
  2-pack rack #907 687
  4-pack rack #907 688
  Rack comes assembled with two or four Dimension 650 power sources fused for 460 V.
- **Dimension 650 ArcReach Rack**
  2-pack rack #907 702
  4-pack rack #907 701
  Rack comes assembled with two or four Dimension 650 ArcReach power sources fused for 460 V.
- SuitCase® X-TREME™ Feeders
- 70 Series Feeders
- Bernard™ MIG Guns
- Running Gear Cylinder Rack #300 408
- Dimension 650 Running Gear #301 307
- Industrial MIG 4/0 Kit (with lug connectors) #300 390
- Extension Cables
  7.6 m (25 ft.) #247 831 025
  15 m (50 ft.) #247 831 050
  24.4 m (80 ft.) #247 831 080

Model/Stock Number	Amperage/Voltage Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz 380V	460V	KVA	KW	Max. Open-Circuit Voltage	Dimensions* *(includes lift eye)*	Net Weight*
Dimension 650 **(#907 617)** 380/460 V, Machine only **(#907 618)** 380/400 V, 50/60 Hz, **CE** **Dimension 650 ArcReach** **(#907 617 001)** 380/460 V, Machine only	CC mode: 10 – 815 A CV mode: 10 – 44 V SAW mode: 10 – 65 V	650 A at 44 VDC, 100% Duty Cycle	53.2	42.8	34	30.7	87 VDC	H: 716 mm (28.187 in.) W: 424 mm (16.687 in.) D: 803 mm (31.625 in.)	71.7 kg (158 lb)

XMT® Series

Portability and excellent multiprocess arc performance make the XMT family the most popular in the industry. With many models to choose from the XMT family has the right solution for your business.

XMT 350 XMT 450

Input power choices

AUTOLINE Power Management Technology (350 models) allows for any input voltage hookup (208–575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Standard hookup (450 models). Available as 230/460 V manual link or 575 V models, three-phase only.

Advanced features for the professional welder

Adaptive Hot Start™ makes starting stick electrodes easy without creating an inclusion.

Infinite arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

Lift-Arc™ provides arc starting that minimizes contamination of the electrode and without the use of high frequency.

Insight Core™ **Welding Intelligence**™ **system.** XMT 14-pin models are Insight Core capable to monitor weld voltage, amperage, and arc-time and percentage.

Reliability

Wind Tunnel Technology.™ Air flow that protects internal components, greatly improving reliability.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and amount of contaminants pulled through machine.

Welder friendly control panel

Process selector switch reduces the number of control setup combinations without reducing any features.

Ultra-tough, polycarbonate-blended cover protects front controls from damage.

Large, dual digital meters are easy to view and presettable to ease setting weld output.

Output connector choices

Dinse- or Tweco®-style weld disconnects (350 models) provide high-quality weld cable connections.

Note: Two Dinse connectors are supplied with Dinse machines. Tweco connectors must be ordered separately.

Weld Studs (450 models).

14-pin receptacle provides a quick, direct connection to Miller® wire feeders. Capable of remote voltage control.

Choose the Right XMT

	350 Amp			450 Amp	
	XMT 350 VS	XMT 350 CC/CV	XMT 350 MPa	XMT 450 CC/CV	XMT 450 MPa
Input Power	3- or 1-phase power			3-phase	
Primary Operating Range	Auto-Line (208–575 V)			Manual link (230/460 V) or 575 V	
Weld Output	350 A at 34 VDC (3-phase input power at 60% duty cycle)			UPGRADE 450 A at 38 VDC (3-phase input power at 100% duty cycle)	
Carbon Arc Gouging	Rated: 1/4 in. (6.4 mm)			UPGRADE Rated: 5/16 in. (7.9 mm)	
Net Weight	80 lb. (36.3 kg)			122 lb. (55.3 kg)	
Output Connector	Tweco	Dinse or Tweco	Dinse or Tweco	1/2 in. stud	
Pulsed MIG	–	–	UPGRADE Yes	–	UPGRADE Yes
14-pin Compliant	–	Yes	Yes	Yes	Yes
Insight Core Capable (requires Insight Core 14-pin module)	–	Yes (pg 24)	Yes (pg 24)	Yes (pg 24)	Yes (pg 24)
ArcReach™	Factory option (pg 36)	Factory option (pg 36)	–	Factory option (pg 36)	–

XMT® 350 VS

See Literature No. DC/18.93

For applications in which 14-pin receptacle is not needed for remote control or 14-pin feeders.

Most Popular! XMT® 350 CC/CV and 450 CC/CV

See Literature No. DC/18.93 (350) and DC/18.94 (450)

Flexibility and simplicity make this the most popular model. It has the core multiprocess capabilities along with the flexibility of a 14-pin for spool guns, feeders, and remote controls.

Stronger weld output for increased capabilities. XMT 350 provides 24 percent more output than the 304 model for larger wires and stick electrodes. XMT 450 provides 43 percent more output for carbon arc gouging.

XMT® 350 MPa and 450 MPa

See Literature No. DC/18.93 (350) and DC/18.94 (450)

Built-in pulse programs for manufacturing and fabrication applications that have benefits for standard steels, high-strength steels and aluminum.

Pulse programs provide reduced heat affected zone, weld in all positions, great for thick-to-thin metal, good gap filling ability and faster travel speeds and deposition.

SharpArc® controls the arc in pulsed MIG mode and gives total control over the arc cone shape, puddle fluidity and bead profile.

Additional features when using a 70 Series MPa Plus feeder or XR-AlumaFeed® feeder.

Synergic Pulsed MIG. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to match the wire speed, eliminating the need to make additional adjustments.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Added capabilities with Insight Core™. When using an MPa Plus feeder, wire deposition is added to the Insight Core capabilities.

Heavy Industrial

CC/CV DC 3 Phase 1 Phase

XMT 450 is 3-phase only.

Processes

- MIG (GMAW)
- Pulsed MIG (GMAW-P)*
- Stick (SMAW) • TIG (GTAW
- Flux-cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (carbons – 304: 6.4 mm [1/4 in.], 350: 6.4 mm [1/4 in.], 450: 7.5 mm [5/16 in.])

** Only XMT MPa models.*

Most Popular Accessories for non-VS Models

- XR-AlumaFeed®
- Spoolmatic®/WC-24
- XR™ Controls
- 20 and 70 Series Feeders

Most Popular Accessories for All Models

- **XMT Rack**
  Available in four- or six-pack models for XMT 350, or four-pack models for XMT 450. See literature no. DC/18.81 for more information and stock numbers.

- SuitCase® X-TREME™ Feeders
- Cylinder Cart #042 537
- MIGRunner™ Cart #195 445
- Running Gear Cylinder Rack #300 408
- Coolmate™ Coolant System
- Industrial MIG 4/0 Kits
  XMT 350 #300 405
  XMT 450 #300 390
- Protective Cover (XMT 304/350 only) #195 478
- Gas Valve Kit
  XMT 350 #195 286
  XMT 450 #300 928

Model/ Stock Number	Input Power	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208V	230V	400V	460V	575V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
XMT 350 VS (no remote control) (Tweco®) **(#907 224)** 208-575 V	3-Phase	5-425 A 10-38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 432 mm (17 in.) W: 318 mm (12.5 in.) D: 610 mm (24 in.)	36.3 kg (80 lb.)
XMT 350 CC/CV (Dinse) **(#907 161)** 208-575 V **(#907 161 011)** 208-575 V, with Aux. Power **(#907 161 012)** Auto-Line with Aux. Power, **CE** **XMT 350 MPa** (Dinse except where noted) **(#907 366)** 208-575 V **(#907 366 011)** 208-575 V, with Aux. Power **(#907 366 014)** 208-575 V, with Tweco® **(#907 366 002)** with Aux. Power, **CE**	1-Phase	5-425 A 10-38 V	300 A at 32 VDC, 60% Duty Cycle *Duty cycle rating achieved with 6-gauge input power cord (8-gauge cord supplied with unit).*	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
XMT 450 CC/CV (12.7 mm [1/2 in.] stud) **(#907 481)** 230/460 V **(#907 525)** 400 V, with Aux. Power, **CE**	3-Phase	15-600 A 10-38 V	450 A at 38 VDC, 100% Duty Cycle	—	51	—	27.6	24.4	22	18.9	90 VDC	H: 438 mm (17.25 in.) W: 368 mm (14.5 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb.)
XMT 450 MPa (12.7 mm [1/2 in.] stud) **(#907 479)** 230/460 V **(#907 479 001)** 230/460 V, with Aux. Power **(#907 468)** 400 V, with Aux. Power, **CE** **(#907 480 001)** 575 V, with Aux. Power				—	51	— (KVA is 23.5 on 575 V)	27.6	23.6	21.6	18.3			

Must be purchased from ITW Italy

XMT 350 CC/CV	**(#907 371)** with Aux. Power, **CE**	Three-Phase	350 A at 34 VDC, 60% Duty Cycle	CC Mode: 5-425 A CV Mode: 10-38 V	75 VDC	43 kg (94.8 lb.)
		Single-Phase	300 A at 32 VDC, 60% Duty Cycle			
XMT 350 CC/CV	**(#907 556 002) CE**	Three-Phase	350 A at 34 VDC, 60% Duty Cycle	CC Mode: 5-425 A CV Mode: 10-38 V	75 VDC	36.3 kg (80 lb.)
		Single-Phase	300 A at 32 VDC, 60% Duty Cycle			

XMT® 350 and 450 ArcReach™ Systems

See Literature No. DC/18.93 (350) and DC/18.94 (450)

Recomended Option! **Remote control of the power source without a cord.** An ArcReach system allows you to change weld settings from your SuitCase wire feeder or Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring — saving time and money.

XMT 350 CC/CV ArcReach shown with SuitCase X-TREME 12VS ArcReach feeder (sold separately).

More arc-on time and reduced exposure to workplace hazards for operators can be realized using ArcReach because less time is spent going back to the XMT to set process and arc voltage.

Auto-Process Select.™ System automatically changes to MIG/FCAW (with gas) if electrode positive polarity is detected or FCAW (no gas) if electrode negative polarity is detected, when ArcReach communication is established between the feeder and the XMT — reducing the need to access the power supply.

Automatic return to panel settings on XMT when ArcReach communication is terminated. For example, if the XMT is set to gouging at 350 amps and an ArcReach feeder is connected, the XMT will go to a MIG/FCAW process. If the feeder is disconnected, the XMT will go back to its previous setting (gouging at 350 amps).

Auto-Bind™ automatically establishes exclusive communication between the power source and the wire feeder, using the existing weld cables upon system power up.

Operator can precisely set arc voltage at the feeder and monitor the actual arc voltage and current delivered to the weld using the digital meters on the feeder. This removes guesswork when it comes to adhering to weld procedures.

Less operator fatigue by not needing to move or reposition both heavy secondary weld leads bundled with control cords on the worksite. Control cables are not used.

Save time by no longer needing to troubleshoot welding system problems that result from damaged control cords.

Eliminate costly control cord repairs because control cords are not used.

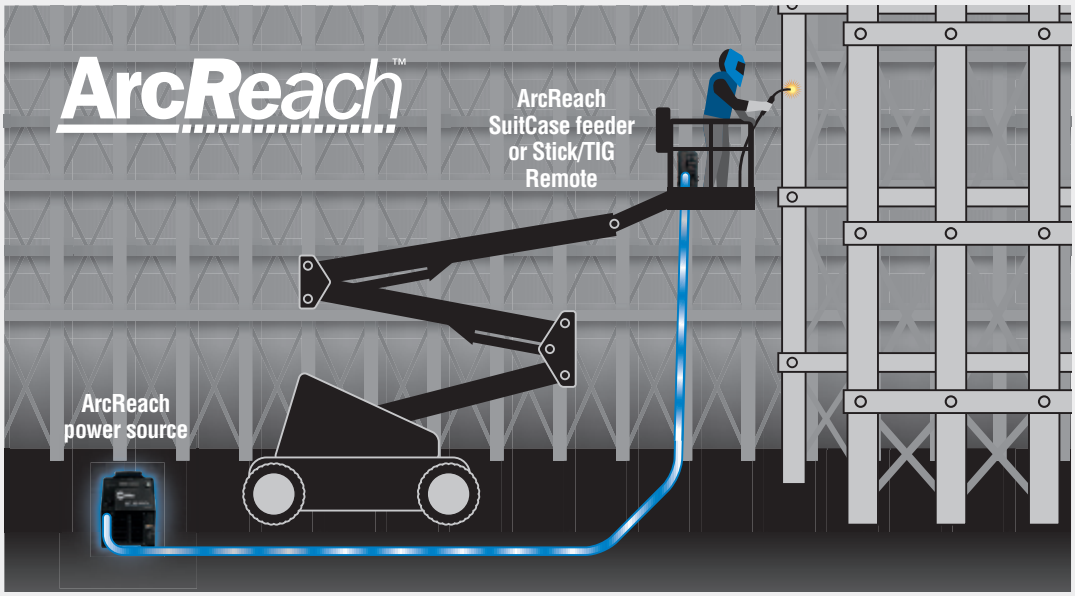
Remote override of XMT. When an ArcReach feeder is connected to an XMT the feeder has full control and the XMT controls are disabled. While under ArcReach control, process and voltage/amperage adjustments are locked out, preventing accidental changes by personnel other than the welding operator.

Remote in use indicator provides convenient feedback indicating an ArcReach wire feeder is controlling the power source.

LED process indicator. Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source. Includes new carbon arc gouging mode for enhanced arc stability and control, and two new stick modes (EXX10 and EXX18) designed to reduce spatter and enhance arc starts.

Fleet compatibility. ArcReach-equipped power sources and wire feeders work with non-ArcReach equipment; however the complete ArcReach benefit is only realized with the ArcReach system. This allows you to start investing in ArcReach one power source, one wire feeder at a time.

How ArcReach Works



ArcReach technology uses the existing weld cable to communicate welding control information between the feeder and power source. This technology eliminates the need for control cords, and their associated problems and costs.

ArcReach™ Accessories

For MIG or flux-cored welding — SuitCase X-TREME 8VS/12VS ArcReach feeders
- Remote voltage control
- Polarity indication
- Auto-Process Select™

For stick or TIG welding — ArcReach Stick/TIG Remote
- Remote amperage control
- Arc control for stick
- Polarity indication
- Auto-Process Select™

**Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).*

Heavy Industrial

CC/CV DC 3 Phase 1 Phase

XMT 450 is 3-phase only.

Processes
- MIG (GMAW)
- Stick (SMAW) • TIG (GTAW
- Flux-cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (carbons – 304: 6.4 mm [1/4 in.], 350: 6.4 mm [1/4 in.], 450: 7.5 mm [5/16 in.])

Most Popular Accessories for non-VS Models
- XR-AlumaFeed® #300 509
- Spoolmatic®/WC-24
- XR™ Controls
- 20 and 70 Series Feeders

Most Popular Accessories for All Models

- **XMT 350 CC/CV ArcReach Rack**
  4-pack rack #907 699
  6-pack rack #907 698
  Rack comes assembled with four or six XMT 350 CC/CV ArcReach power sources fused for 460/575 V. See literature no. DC/18.81 for more information.
- **XMT 450 CC/CV ArcReach Rack**
  4-pack rack #907 700
  Rack comes assembled with four XMT 450 CC/CV ArcReach power sources fused for 460 V. See literature no. DC/18.81 for more information.
- ArcReach™ Stick/TIG Remote #301 325
- SuitCase® X-TREME™ 8VS ArcReach™ Feeders
  w/Bernard™ S-Gun™ #951 588
  w/Bernard BTB Gun 300 A #951 584
- SuitCase® X-TREME™ 12VS ArcReach™ Feeders
  w/Bernard™ S-Gun™ #951 589
  w/Bernard BTB Gun 300 A #951 581

Model/ Stock Number	Input Power	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208V	230V	400V	460V	575V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
XMT 350 VS ArcReach (Tweco®) **(#907 224 002)** 208-575 V	3-Phase	5-425 A 10-38 V	350 A at 34 VDC, 60% Duty Cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 432 mm (17 in.) W: 318 mm (12.5 in.) D: 610 mm (24 in.)	36.3 kg (80 lb.)
XMT 350 CC/CV ArcReach (Tweco®) **(#907 161 032)** 208-575 V **(#907 161 033)** 208-575 V w/aux power	1-Phase	5-425 A 10-38 V	300 A at 32 VDC, 60% Duty Cycle*	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
XMT 450 CC/CV ArcReach (12.7 mm [1/2 in.] stud) **(#907 481 003)** 230/460 V **(#907 481 004)** 230/460 V w/aux power	3-Phase	15-600 A 10-38 V	450 A at 38 VDC, 100% Duty Cycle	—	51	—	27.6	24.4	22	18.9	90 VDC	H: 438 mm (17.25 in.) W: 368 mm (14.5 in.) D: 689 mm (27.125 in.)	55.3 kg (122 lb.)

XMT® 425 Series

See Literature No. EX/18

XMT 425 CC/CV

XMT 425 VS

Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Lightweight, aerospace-grade aluminum case offers protection with the benefit of reduced weight.

Auto-Line™ Power Management technology allows for any input voltage hook-up (208-460 V) with no manual linking required, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance and outstanding MIG weld performance.

Process selector switch reduces the number of control setup combinations without reducing any features.

Line voltage compensation keeps welding output constant even if power input power varies by ±10%. XMT 425 models further expand line voltage compensation on 460 VAC to an amazing +37% and -59%.

Large, dual digital meters are easy to view and presettable to ease setting weld output.

350 A of welding output at 60% duty cycle with superior low-end performance.

Power factor of .95 enables smaller fuses/breakers and primary wiring. Primary amperage draw at rated output is 25% less than the competition.

Ultra-tough, polycarbonate-blended cover for control panel protects front controls from damage.

Low OCV Stick — A built-in, selectable feature , that reduces the Stick mode open-Circuit voltage (OCV) to nearly 15 volts when the welding power source is not in use. Eliminates the need for add-on voltage reducers.

Dinse International-style weld disconnects provide high-quality weld connections.

Additional Features for XMT 425 CC/CV

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle.

115 VAC auxiliary power provides 10 amps of circuit breaker protected power for water circulates. Available on CE models.

Pulsed MIG (GMAW-P) capabilities with optional Optima control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emissions.

Auto-Line™ — Allows for any input voltage hook-up (208-575 V) with not manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Reduced OCV operation — an internal dip switch enables reduced open-circuit voltage Stick welding capability. OCV is typically below 15 volts.

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle (CC/CV and MPa models only).

Optional gas solenoid kit (#195 286) for TIG welding. Works with VS and non-VS models.

Heavy Industrial

CC/CV DC 3 Phase 1 Phase

Processes

- MIG (GMAW)
- Pulsed MIG (GMAW-P)*
- Stick (SMAW)
- TIG (GTAW
- Flux-cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) 7.5 mm (5/16 in.) carbons

** XMT 425 CC/CV requires optional control: not available with XMT 425 VS model.*

Most Popular Accessories for non-VS Models

- XR-AlumaFeed™ Feeder for aluminum #300 509
- SuitCase® RC Feeders
- Spoolmatic® 30A/WC-24
- XR™-Controls
- 22A and 24A Feeders
- 70 Series Feeders
- Optima™ MIG Pulse Control #043 389

Most Popular Accessories for VS Model

- Spoolmatic® 30A/WC-115A (with contactor)

Most Popular Accessories for all Models

- SuitCase® X-TREME™ VS Feeders
- XMT® Rack
- Cylinder Cart #042 537
- Universal Cart and Cylinder Rack #042 934
- MIGRunner™ Cart #195 445
- Running Gear Cylinder Rack #300 408
- Coolmate™ Coolant System
- Protective Cover #195 478
- Bernard™ Q-Gun™

Model	Stock Number	Input Power, 50/60 Hz	Rated Output at 60% Duty Cycle	Voltage Range in CV Mode	Voltage Range in CC Mode	Max. Open Circuit Voltage	Weight
XMT 425 CC/CV	**(#907 386)**	Three-Phase Single-Phase	350 A at 34 VDC 300 A at 32 VDC	10-38 V	5-425 A	75 VDC	42.6 kg (94 lb)
XMT 425 VS	**(#907 387)**						
Must be purchased from ITW Italy							
XMT 425 CC/CV	**(#907 557)** with Aux. Power, **CE**	Three-Phase	350 A at 34 VDC	10-38 V	5-425 A	75 VDC	43 kg (94.8 lb)
XMT 425 CC/CV	**(#907 557 002) CE**	Three-Phase	350 A at 34 VDC	10-38 V	5-425 A	75 VDC	36.3 kg (80 lb)

XMT® 350/SuitCase® X-TREME™ 8 OFFSHORE

See Literature No. DC/18

The XMT 350 OS and SuitCase 8 OS are designed specifically for the construction of jackets and other structures used in offshore oil production. The small, lightweight feeder handles large-diameter flux- and metal-cored wires commonly used in these structures, ensuring smooth and reliable wire feeding.

SuitCase X-TREME 8 OS Features

Trigger hold, wire jog, and gas purge are all located on front panel.

High-torque motor is specifically designed for feeding 2 mm (5/64 in.) flux cored wire. The motor and gear train were optimized to push large-diameter core wire without significant increasing the weight of the feeder.

Digital meters with SunVision™ technology can display voltage and wire speed, and also amperage if desired. Meters can be seen clearly even in direct sunlight.

Wider voltage range for small and large wires with no contactor chatter and reduction of arc outages.

Double-filtered gas valve helps keep dirt from clogging and affecting gas flow.

Excellent starts and improved superior arc performance for all types and sizes of wires whether using CV or CC power supply.

Potted and trayed main printed circuit board for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.

XMT 350 OS Features

Versi-Shield™ self-shielded Flux-cored process control technology offers superior material transfer and operator appeal. Spatter is reduced and narrow flat beads are possible over a wide range of wire feed speeds, and welding positions.

Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without the use of high frequency. Starts the arc without contaminating the weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Auto-Line™ power management technology allows for any input voltage hook-up (208–575 V) with no manual linking required, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance, and outstanding MIG weld performance.

Line voltage compensation keeps welding output constant even if input power varies by +/-10%. This model further expands line voltage compensation on 460 VAC to an amazing +37%, -59%.

Process selector switch reduces the number of control setup combinations without reducing any features.

Industrial

CC/CV · DC · 3 Phase · 1 Phase

Use with CC/CV, DC Power Sources.

Processes

- Stick (SMAW)
- TIG (GTAW)
- MIG (GMAW)
- Self-Shielded Flux-cored (SS-FCAW)

Most Popular Accessories

- Shoulder Strap #246 250
- Gas Solenoid Kit #195 286
- Protective Cover #195 478
- Inverter Racks
- XMT Cylinder Cart #042 537
- Universal Carrying Cart and Cylinder Rack #042 934
- Bernard Dura-Flux™ (FCAW) Gun #FLX3515OSM-1

Model/ Stock Number	Input Power	Input Welding Circuit Rating	Electrode Wire Diameter Capacity	Wire Speed	Max. Spool Size Capacity	Dimensions	Net Weight
Feeders: SuitCase X-TREME 8 VS (#300 877) SuitCase X-TREME 12 VS (#300 876)	Operates on open-circuit voltage and arc voltage: 14–48 VDC/ 110 Max OCV	330 A at 60% Duty Cycle	**Solid Wire:** 0.6-1.6 mm (.023–.062 in.) **Flux-cored:** 0.8-2 mm (.030–.078 in.)	**Low Range** .65-5.2 m/min (25-200 IPM) **High Range** 4.5-19.8 m/min (175-780 IPM) dependent on arc voltage	203 mm (8 in.) 4.5 kg (10 lb)	H: 324 mm (12-3/4 in.) W: 184 mm (7-1/4 in.) D: 457 mm (18 in.)	14 kg (30 lb)

Model/ Stock Number	Input Power	Amperage/Voltage Ranges	Rated Output at 60% Duty Cycle	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz 208V	230V	400V	460V	575V	KVA	KW	Dimensions	Net Weight
XMT 350 OS (#907 224-001)	Three-Phase	CC Mode: 5–425 A CV Mode: 10–38 V	350 A at 34 VDC	75 VDC	40.4	36.1	20.6	17.8	14.1	14.2	13.6	H: 432 mm (17 in.) W: 318 mm (12-1/2 in.) D: 610 mm (24 in.)	36.3 kg (80 lb)
	Single-Phase	CC Mode: 5–425 A CV Mode: 10–38 V	300 A at 32 VDC	75 VDC	60.8	54.6	29.7	24.5	19.9	11.7	11.2		

PipeWorx 350 FieldPro™ System

See Literature No. PWS/6.0

Simplicity-driven performance for your pipe construction site.

PipeWorx 350 FieldPro shown with optional FieldPro Remote, FieldPro Smart Feeder, and FieldPro Feeder

Stick/TIG system includes
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Remote with work sense lead and clamp (#300 934)

MIG/flux-cored system includes
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Feeder with drive rolls, work sense lead and clamp (#301 228)
- 4.6 m (15 ft.) PipeWorx 300 MIG gun (#195 400)

RMD/pulse system includes
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Smart Feeder with drive rolls (#300 935)
- 4.6 m (15 ft.) PipeWorx 300 MIG gun (#195 400)

Simplified cable management
- Save time by eliminating the need to trace cables back to change welding parameters and processes
- No control cables to string and manage on the jobsite

Complete control at the weld joint
- FieldPro Remote reduces weld defects by automatically setting correct polarity for each welding process — without the need to manually swap cables
- Eliminates the need to "get by" with less than optimal settings without control cables, and allows for easy setup of a new weld process with the touch of a button
- Total remote control of welding processes and parameters improves safety by limiting jobsite movement and reducing slip, trip and fall hazards

Arc performance optimized for critical pipe welding
- Industry-leading arc performance like the PipeWorx 400 Welding System, but in a field-ready package
- True multiprocess system provides conventional stick, TIG, flux-cored and MIG welding, as well as the advanced technologies of RMD® and pulsed MIG
- Smart Feeder delivers excellent RMD and pulsed MIG welding 61 m (200 ft.) from the power source with no control cables. RMD and pulse processes help reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications

New durability standard for field construction
- Designed and built to withstand the harshest field environments

PipeWorx 400 Welding System

See Literature No. PWS/2.0

Optimized for pipe fabrication shops.

PipeWorx welding system comes complete with
- PipeWorx 400 power source with cable hangers (#907 382) or (#907 384)
- Dual feeder with drive rolls (#300 366)
- Two 4.6 m (15 ft.) PipeWorx 300 guns (#195 400)
- Running gear with gas cylinder rack and handles (#300 368)
- Cable kit with 7.6 m (25 ft.) work sense lead (#300 367)

PipeWorx 400 welding system shown with accessory kit. Filler metal and shielding gas sold separately.

Simple process setup
- The front panel was designed by welders for welders
- Requires just a few basic steps to set up a new weld process, resulting in less training time and minimizing errors from incorrect setups
- Memory feature stores four programs for each selection: stick, DC TIG, and MIG (left and right side of feeder) Eliminates the need to remember parameters

True multiprocess machine
- Weld processes are optimized to deliver superior arc performance and stability specifically for root, fill, and cap passes on pipe
- RMD® and pulsed MIG increase quality and productivity

Quick process changeover
- Simply push a process selection button to choose a welding process
- Eliminates set-up time and reduces the risk of weld reworks due to incorrect cable connections
- PipeWorx "Quick Select" technology automatically selects the welding process, the correct polarity, cable outputs, gas solenoid, and user-programmed welding parameters

Single-system design
- One machine designed to perform all of your pipe welding needs
- Simplified and optimized specifically for pipe welding

Advanced Technologies of PipeWorx Systems

RMD® (regulated metal deposition)

RMD Carbon Steel

- Higher quality root pass
- Calm stable arc
- Less spatter
- More tolerant of hi-lo conditions
- Reduced training requirements
- Less chance of cold lap or lack of fusion reducing rework
- Can eliminate the need for a hot pass
- Can eliminate backing/purge gas in some stainless applications

PipeWorx Memory Card, Accu-Power #300 667
Displays instantaneous power during welding to meet the new ASME Requirement for calculating heat input on complex waveform processes (RMD and pulsed MIG).

Pulsed MIG

Pulsed MIG Stainless

- Less heat input than traditional spray pulse transfer
- Shorter arc length
- Narrower arc cone
- Improved fusion and fill at the toes of the weld resulting in:
  - Faster travel speeds
  - Higher deposition rates
- Less training time required because Pulsed MIG:
  - Virtually eliminates arc wander
  - Is easier to control the puddle
  - Compensates for tip to work variations automatically
- When used with RMD, it is possible to use one wire and one gas for all passes

PipeWorx 350 FieldPro Racks

All the benefits of the individual PipeWorx 350 FieldPro in an easy to transport package for multiple arcs in the field.

Flexible solution. The flexibility of the PipeWorx 350 FieldPro makes it ideal for multiple system racks. Every system in a rack can be used for different tasks on-site, increasing fleet utilization and making the best use of equipment budgets.

Easy installation. The power distribution system on the rack allows the entire rack to be wired into a single power drop, isolating high-voltage power in the field.

Model/Stock Number	Rack Capacity	Input Power to Rack	Dimensions	Net Weight
4-Pack Rack (#907 588)	4 units	230–575 V, three-phase, 50/60 Hz. *(Fuses included for 460 or 575 V operation. Only empty racks require ordering appropriate fuse kit.)*	H: 1,500 mm (59 in.) W: 1,092 mm (43 in.) D: 873 mm (34.375 in.)	308 kg (679 lb.)
6-Pack Rack (#907 589)	6 units			399 kg (879 lb.)
Empty Rack (#195 466)	6 units			127 kg (279 lb.)

**Welding with the smart feeder requires the PipeWorx 350 FieldPro to be hooked up to three-phase power. **Dimensions and weight are for power source only.*

Heavy Industrial

CC/CV · DC · 3 Phase · 1 Phase

PipeWorx 400 is 3-phase only.

Processes

- Stick (SMAW) • DC TIG (GTAW)
- MIG (GMAW) • Flux-cored (FCAW)
- RMD • Pulsed MIG (GMAW-P)
- Air carbon arc cutting and gouging (CAC-A)

Most popular accessories for both PipeWorx Systems

- Bernard™ PipeWorx™ Guns
  4.6 m (15 ft.) 250-15 #195 399
  4.6 m (15 ft.) 300-15 #195 400

Most popular accessories for PipeWorx 400 Welding System

- ***NEW!*** **PipeWorx 400 Insight Module** #301 304
- PipeWorx Accessories Kit for Dual Feeder #300 568
  Includes 7.6 m (25 ft.) work cable, EG500 work clamp, two flowmeter regulators and two 1.2 m (4 ft.) gas hoses.
- Composite Cable Kit
  7.6 m (25 ft.) #300 454
  15.2 m (50 ft.) #300 456
- PipeWorx Cooler #300 370
- Foot Control Bracket #300 676
- DSS-9 Dual Schedule Switch #071 833
- RFCS-14 HD #194 744
- RPBS-14 #300 666

Model/Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output at 60% Duty Cycle	Amps Input at Rated Output, 60 Hz 230V 460V 575V	KVA	KW	Max. Open-Circuit Voltage	Dimensions**	Net Weight**
PipeWorx 350 FieldPro Power Source only **(#907 533)** Tweco® 230-575 V **(#907 633)** Dinse, **CE**	Three-Phase	CC Mode: 10-350 A CV Mode: 10-44 V	350 A at 34 VDC	36.1 17.8 14.1	15.0	14.4	75 VDC	H: 432 mm (17 in.) W: 305 mm (12 in.) D: 559 mm (22 in.)	43.1 kg (95 lb.)
	Single-Phase*	CC Mode: 10-350 A CV Mode: 10-44 V	300 A at 32 VDC	54.6 25.4 19.9	11.7	11.2			

Feeder only Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Type and Capacity	Max. Spool Size Capacity	Dimensions	Net Weight
FieldPro Feeder **(#301 288)** For use w/CC or CV, DC power sources	Operates on open-circuit voltage and arc voltage: 14-110 VDC	425 A at 60% Duty Cycle	1.3-20.3 m/min. (50-800 IPM) dependent on arc voltage	**Solid Wire** 0.6-2.0 mm (.023-5/64 in.) **Flux-cored** 0.8-2.0 mm (.030-5/64 in.)	305 mm (12 in.), 20 kg (45 lb.)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	15.9 kg (35 lb.)
FieldPro Smart Feeder **(#300 935)** For use with PipeWorx 350 FieldPro or Big Blue 800 Duo Pro SF only **(#301 177)** Dinse, **CE**	Operates on open-circuit voltage and arc voltage: 14-110 VDC*	275 A at 60% Duty Cycle	1.3-12.7 m/min. (50-500 IPM) dependent on arc voltage	0.9-1.1 mm (.035-.045 in.)	305 mm (12 in.), 15 kg (33 lb.)	H: 330 mm (13 in.) W: 457 mm (18 in.) D: 546 mm (21.5 in.)	23 kg (50 lb.)

Model/Stock Number	Welding Mode/Process	Amp/Volt Range	Rated Output at 100% Duty Cycle	Amps Input at Rated Output, 60 Hz, 3-Phase 230V 460V 575V KVA 230V 460V 575V KW 230V 460V 575V	Max. Open-Circuit Voltage	Dimensions**	Net Weight**
PipeWorx 400 Power Source only **(#907 382)** 230/460 V **(#907 475)** 400 V **(#907 534)** 400 V, **CE**	CC: Stick	40-400 A	400 A at 36 VDC	43.9 26.6 22.4 17.5 21.2 22.3 16.1 16.3 16.4	90 VDC	H: 724 mm (28.5 in.) W: 495 mm (19.5 in.) D: 806 mm (31.75 in.)	102 kg (225 lb.)
	CC/DC: TIG	10-350 A	350 A at 24 VDC	29.3 18.2 13.5 11.8 14.5 13.4 10.7 10.6 10			
	CV: MIG/Flux-cored	10-44 V	400 A at 34 VDC	42.9 24 20.5 17.3 19.2 20.5 16 15.8 16.2			

Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Speed	Wire Diameter Capacity	Max. Spool Size Capacity	Dimensions	Net Weight
PipeWorx Feeder only **(#300 365)** Single-wire model **(#300 949)** Single-wire model, **CE** **(#300 366)** Dual-wire model **(#300 950)** Dual-wire model, **CE**	24 VAC, 11 A	100 V, 750 A at 100% Duty Cycle	1.3-19.8 m/min (50-780 IPM)	0.9-1.6 mm (.035-.062 in.)	27 kg (60 lb.)	H: 356 mm (14 in.) W: 483 mm (19 in.) D: 737 mm (29 in.)	**Single:** 29.5 kg (65 lb.) **Dual:** 41 kg (90 lb.)

Miller recommends

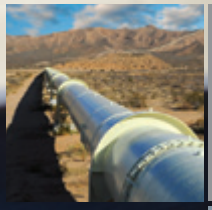
E.H. WACHS®
Superior Equipment. Complete Support.™

ITW Orbital Cutting & Welding

Applications, e.g.

oil, gas & petrochemical industry «

power generation industry «



pipeline distribution «

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Portable weld prep machine tools for industrial applications, e.g.

« NEW DynaPrep MDSF split frames for heavy duty form tooling & pipe weld preparation

HDSF heavy duty split frames - built for big jobs in the field »

TRAV-L-CUTTER portable milling machines «

LCSF low clearance split frames »

EP 424 ID mount end prep machines «

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The **ITW ORBITAL CUTTING & WELDING** division with its brands E.H. WACHS and ORBITALUM TOOLS provides global customers one source for the finest in pipe & tube cutting, beveling and orbital welding products.

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SuitCase® Series

Portable SuitCase feeders that set the standard for performance and provide extreme reliability to stand up to the demands of construction and fabrication.

SuitCase Series Features

Feature	X-TREME 8VS	X-TREME 12VS	X-TREME ArcReach 8VS	X-TREME ArcReach 12VS	X-TREME ArcReach 12RC
Available with Q300 gun	●	●	●	●	●
Available w/Dura-Flux gun		●			
Available with S-Gun			●	●	
Remote voltage control (control cord required)					●
Remote voltage control without a cord			●	●	
Digital meters	◉	●	●	●	●
Impact-resistant case	●	●	●	●	●
Gas purge	●	●	●	●	●
Wire jog	●	●	●	●	●

● Standard ◉ Optional

SuitCase X-TREME 8VS

SuitCase X-TREME 12VS

SuitCase X-TREME 12VS ArcReach

SuitCase 12RC

Portable!

Bernard Q300 gun shown.

For more options, visit ***MillerWelds.com***

Miller recommends

BERNARD™

For information on Bernard gun options, please visit **BernardWelds.com**

Setting the standard for performance

Heavy-duty drive motor with tachometer control provides wire feed speed that is accurate and consistent from the start of the weld to the finish and from one weld to the next. Consistent wire feed speed is very important with large-diameter cored wire, because small changes in wire feed speed make large changes in deposition rates.

Front panel has trigger hold, wire jog, and gas purge for easy operator access. (X-TREME™ feeders only.)

Wide voltage range for small and large wires with no contactor chatter or arc outages.

Ultra-low drag inlet guide pins make loading the wire easy and does not deform the wire on the way into the drive rolls improving wire feeding performance.

Scaled wire pressure knob provides easy adjustment and consistent pressure on the drive rolls and wire.

Digital meters with SunVision™ technology can display voltage, wire feed speed, and also amperage if desired. Meters can be seen clearly even in direct sunlight. (Meters are optional on 8VS.)

Unique and durable case

Impact-resistant, flame-retardant case provides strength and durability, and protects components and welding wire from moisture, dust and other contaminants.

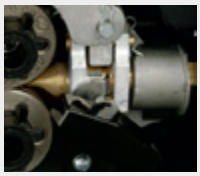
Built-in slide rails allow you to drag the feeder into position for welding.

Innovative feeder door design allows you can change wire while feeder is standing upright or laying down.

Case is available in two sizes. (X-TREME™ feeders only.)

Extreme reliability

Potted and trayed main printed circuit board for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.



Gun locking tab works with guns having corresponding locking grooves to prevent gun from being pulled out if the feeder is dragged by the gun.

Gas inlet recessed into back of case is protected from incidental contact by the weld cable, ensuring consistent and contaminant-free shielding gas delivery to the gun. **Double-filtered gas valve** helps keep dirt from clogging and affecting gas flow.

SuitCase® X-TREME™ 8VS and 12VS

See Literature No. M/6.42

Voltage-sensing feeders designed to run off of arc voltage from almost any welding power source. 8VS model is sized for a 203-mm (8-inch) spool of wire, can be carried to remote welding sites and fits through a 356-mm (14-inch) manhole/manway. 12VS model is sized for a 203- or 305-mm (8- or 12-inch) spool of wire. 305-mm (12-inch) spools are the most common in structural steel and fabrication.

SuitCase® X-TREME™ 8VS and 12VS ArcReach™

See literature No. DC/18.87 (XMT ArcReach System) and DC/19.55 (Dimension NT 450 ArcReach System)

ArcReach™ **Remote control of the power source without a cord. With an ArcReach-equipped SuitCase® feeder and power source you can change output voltage at the feeder, and save a trip to the power supply. No extra control cable to purchase, maintain, string or unstring – saving time and money.**

SuitCase® 12RC

See Literature No. M/6.5

Standard remote voltage control saves the operator a trip back to the power supply for welding adjustments. For applications where the feeder is within 30.5 m (100 feet) of the power source and control cords are acceptable.

Industrial

CC/CV DC

Use with CC (except 12RC model) and CV, DC power sources.

Processes
- MIG (GMAW)
- Flux-cored (FCAW)

Suggested Power Sources
- Invision™ MPa Series
- Dimension™ Series
- XMT® Series (VS model not compatible with RC feeder)
- Bobcat™ Series
- Trailblazer® Series
- Big Blue® Series

Note: Full functionality of ArcReach is only available with ArcReach power sources.

RC feeder requires power source with 14-pin connector.

Suggested Guns
- Bernard™ Q300 (GMAW)
- Bernard™ S-Gun™ (GMAW)
- Bernard™ Dura-Flux™ (FCAW)
- Roughneck® (GMAW)
- Ironmate™ FC-1260 (FCAW)

Most Popular Accessories
- Extension Cables (12RC only, 1 required)
- Flowmeter Kit #300 343
- Shielding Gas Filter #195 189

Model	Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase X-TREME 8VS	**(#300 877) CE**, w/meters, w/o gun	Operates on open-circuit voltage and arc voltage 14-48 VDC/ 110 Max. OCV	330 A at 60% Duty Cycle	1.3-19.8 m/min (50-780 IPM) Actual range in CC mode is dependent on arc voltage applied	**Solid Wire:** 0.6-1.4 mm (.023-.052 in.) **Flux-cored:** 0.8-2.0 mm (.030-5/64 in.)	203 mm (8 in.) 6.4 kg (14 lb)	H: 324 mm (12.75 in.) W: 184 mm (7.25 in.) D: 457 mm (18 in.)	13 kg (28 lb)
SuitCase X-TREME 12VS	**(#300 876) CE**, w/meters, w/o gun		425 A at 60% Duty Cycle		**Solid Wire:** 0.6-1.4 mm (.023-.052 in.) **Flux-cored:** 0.8-2.0 mm (.030-5/64 in.)	305 mm (12 in.) 20 kg (45 lb)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	15.9 kg (35 lb)
SuitCase X-TREME 8VS ArcReach	**(#301 033)**	Operates on open-circuit voltage and arc voltage 14-48 VDC/ 110 Max. OCV	330 A at 60% Duty Cycle	1.3-19.8 m/min (50-780 IPM) Actual range in CC mode is dependent on arc voltage applied	**Solid Wire:** 0.6-1.6 mm (.023-.062 in.) **Flux-cored:** 0.8-1.6 mm (.030-.062 in.)	203 mm (8 in.) 6.4 kg (14 lb)	H: 324 mm (12.75 in.) W: 184 mm (7.25 in.) D: 457 mm (18 in.)	13 kg (28 lb)
SuitCase X-TREME 12VS ArcReach	**(#301 032)**		425 A at 60% Duty Cycle		**Solid Wire:** 0.6-2.0 mm (.023-5/64 in.) **Flux-cored:** 0.8-2.0 mm (.030-5/64 in.)	305 mm (12 in.) 20 kg (45 lb)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	15.9 kg (35 lb)
SuitCase 12RC	**(#301 121) CE**, w/o gun	24 VAC, 10 A, 50/60 Hz	425 A at 60% Duty Cycle	1.3-17.8 m/min (50-700 IPM)	**Solid Wire:** 0.6-1.4 mm (.023-.052 in.) **Flux-cored:** 0.8-2.0 mm (.030-5/64 in.)	305 mm (12 in.) 20 kg (45 lb)	H: 394 mm (15.5 in.) W: 229 mm (9 in.) D: 533 mm (21 in.)	14.1 kg (31 lb)

ArcReach™

increase, improve and maximize

Exclusive Miller® technology uses the weld cables to communicate changes in voltage settings. With an ArcReach System, voltage and wire-feed-speed controls are conveniently located at the operator's fingertips – right at the point of use – not back at the power source. By eliminating control cables to the feeder, cabling is streamlined and operators work at maximum efficiency.

Increase productivity – No time-consuming trips to the power source.

Improve weld quality – Reduces costly "work arounds."

Improve worker safety – Reduces operator hazards and injuries.

Maximize efficiency – Reduces costly cord set up, maintenance and repair.

Spool Guns

Spoolmate 100 Series — includes carrying case, extra contact tips and nozzle.

Portable!

Spoolmate 200 Series

Spoolmatic

Spoolmatic Pro

Also Available —

Spoolmate 3035
(#195 016)
See Literature No. M/1.5

Reliable and economical spool guns designed for home hobbyists and light fabricators.

Spoolmate 100 Series See Literature No. M/1.45

Light industrial gun rated at 135A at 30% duty cycle.

3.7 m (12-ft) direct-connect cable with heavy-duty strain relief provides extended reach and accessibility to your work.

Dual V-knurled drive rolls with adjustable tension control for consistent feeding of different types of wire.

Spoolmate 200 Series See Literature No. M/1.47

Light industrial gun rated at 160A at 60% duty cycle.

3.7-m (12-ft) weld/control cables with strain relief and sheath provides extended reach and accessibility to your work.

Wire feed speed adjustment on the gun — not the machine — for easy setup.

Easy access to drive assembly and drive rolls.

Two-stage trigger with built-in gas valve allowing preflow and postflow.

Toolless head tube removal for easy replacement. Three optional head tubes.

The professional's choice for aluminum welding in industrial and commercial applications.

Spoolmatic See Literature No. M/1.73

Quick-change, single-turn contact tip provides excellent performance and ease of replacement.

Head tubes are Roughneck® and Bernard™ Centerfire™ compatible.

Easy access to drive assembly and removable head tube reduces service time.

Wire feed speed adjustment on the gun handle and reversible drive rolls save time and money.

Built-in gas valve eliminates the need to purge gas lines.

Two-stage trigger includes gas preflow.

Spool canister rotates 180 degrees.

Spoolmatic Pro See Literature No. M/1.76

Aluminum-series-specific tension setting ensures smooth wire feeding performance with 4000 or 5000 series aluminum wires.

Improved motor and drive design improves feedability and arc consistency over longer distances while helping reduce downtime and maintenance costs.

Easy-to-rotate, self-seating head tube allows for better access into tight spots, preventing leaks and providing excellent current transfer. Head tubes are common with the XR-Aluma-Pro gooseneck-style guns.

Head tube options in several different lengths and bend configurations are available for use when a standard head tube doesn't fit the application.

Light Industrial — Spoolmate
Industrial — Spoolmatic

CC CV DC

Spoolmates can only be used with CV, DC power sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- MIG (GMAW) with hard wires
- Pulsed MIG (GMAW-P) with optional pulsing power source (Spoolmatic models only)

Suggested Power Sources

For Spoolmate 100 Series

- Millermatic® 140 Auto-Set™
- Millermatic® 180 Auto-Set™
- Millermatic® 211 Auto-Set™ with MVP™
- Multimatic™ 200

For Spoolmate 200 Series

- Millermatic® 212 Auto-Set™
- Millermatic® 252

For Spoolmatic models

- Millermatic® 212 Auto-Set™
- Millermatic® 252
- Millermatic® 350P/350P Aluminum (except Spoolmatic Pro)
- Shopmate™ 300 DX
- Bobcat™ Series (requires WC-115A with contactor)

These power sources require WC-24

- AlumaPower™ MPa
- CP-302
- Dimension™ Series
- XMT® Series (except VS model)
- XMT® MPa Series
- Trailblazer® Series
- Big Blue® 300 Pro

Most Popular Accessories

For Spoolmate 200 Series

- 45-Degree Head Tube #300 591
- 229-mm (9-in.) Extension Head Tube #300 592
- Heavy-Duty Head Tube #300 593
- Spoolmatic Adaptor Cable #195 287
  Allows connection to older Millermatic 210 and 212 (non-Auto-Set)

For Spoolmatic models

- WC-115A #137 546
- WC-115A (with contactor) #137 546-01-1
- WC-24 #137 549

Model/ Stock Number	Welding Current Rating	Wire Feed Speed	Wire Diameter Capacity	Max. Spool Size Capacity	Dimensions	Net Weight
Spoolmate 100 Series (#300 371)	135 A at 30% Duty Cycle	.13-9.3 m/min. (Millermatic 140) 1.7-15.9 m/min. (Millermatic 180, 211) .89-10.8 m/min. (Multimatic 200)	0.8 – 0.9 mm (.030 –.035 in.) aluminum 0.6 – 0.9 mm (.023 –.035 in.) steel and stainless steel	102 mm (4 in.)	H: 291 mm (11.5 in.) W: 76 mm (3 in.) L: 330 mm (13 in.)	2.7 kg (6 lb) w/cable assembly 4.1 kg (9 lb) w/case
Spoolmate 200 Series (#300 497)	160 A at 60% Duty Cycle, 200 A at 60% Duty Cycle w/ opt. Heavy-Duty Head Tube	1.8-22.2 m/min. (70-875 IPM)			H: 229 mm (9 in.) W: 64 mm (2.5 in.) L: 368 mm (14.5 in.)	5 kg (11 lb) with cable assembly
Spoolmatic (#195 156) 4.5-m (15-ft.) cable **(#130 831)** 9-m (30-ft.) cable	200 A at 100% Duty Cycle	1.8-22.2 m/min. (70-875 IPM) Wire speed dependent on control or Millermatic used.	0.8 – 1.6 mm (.030 –1/16 in.) aluminum Hard wire up to 1.1 mm (.045 in.)	102 mm (4 in.)	H: 260 mm (10.25 in.) W: 64 mm (2.5 in.) L: 384 mm (15.125 in.)	1.3 kg (2.9 lb) gun only
Spoolmatic Pro (#301 147) 4.5-m (15-ft.) cable **(#301 148)** 9-m (30-ft.) cable					H: 260 mm (10.25 in.) W: 64 mm (2.5 in.) L: 384 mm (15.125 in.)	1.4 kg (3.0 lb) gun only

Push-Pull Guns

XR-Aluma-Pro™ and XR™-Pistol guns work in conjunction with XR-Controls, XR-AlumaFeed or select Millermatic machines to provide an outstanding solution for push-pull applications.

Portable!

XR-Aluma-Pro Lite **See Literature No. M/1.75**

Compact 175-amp, 60 percent duty cycle gun with Bernard™ Centerfire™ consumables — ideal for industrial applications.

Lightweight gun reduces hand and welder fatigue.

Rear trigger allows operators to easily access hard-to-reach welds.

XR-Aluma-Pro **See Literature No. M/1.71**

Robust 300-amp, 100 percent duty cycle gun with Miller® Fastip™ consumables — made for heavy industrial applications.

Rotatable, self-seating head tube for various welding positions, reducing operator fatigue.

XR-Pistol **See Literature No. M/1.73**

Quick-change, single-turn contact tip provides excellent performance and ease of replacement.

Wire feed speed adjustment on the gun handle and reversible drive rolls save time and money.

XR-Pistol-Pro **See Literature No. M/1.74**

4000/5000-specific tension setting ensures smooth wire feeding performance.

More powerful motor and new drive design improves feedability and arc consistency.

Head tube options in several different lengths and bend configurations are available for use when a standard head tube doesn't fit the application.

Industrial — XR-Aluma-Pro Lite
Heavy Industrial — XR-Aluma-Pro and all Pistol models

CC/CV DC

Use with CV and CC/CV, DC Power Sources.

Processes
- MIG (GMAW) with aluminum wire (capable of other wires with optional hardwire kits)
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources
- Millermatic® 252
- Millermatic® 350P/350P Aluminum

These power sources require XR-Control below or XR-AlumaFeed™
- AlumaPower™ MPa
- Deltaweld® Series
- Invision™ MPa
- XMT® Series (except VS model)
- XMT® MPa Series
- Trailblazer® Series

Most Popular Accessories
- Hardwire Liner Kit #198 377

**Dependent on control box or Millermatic used.*

***Wire kit #230 708 required to run 1.6 mm (1/16-in.) wire.*

Model	Cable Length 4.6 m (15-ft)	7.6 m (25-ft)	9 m (30-ft)	10.6 m (35-ft)	Welding Current Rating	Wire Feed Speed*	Wire Diameter Capacity	Net Weight (gun only)
XR-Aluma-Pro Lite (Air-Cooled)	—	**(#300 948)**	—	—	175 A at 60% Duty Cycle	1.8-23 m/min (70-900 IPM)	0.8-1.2 mm (.030-.047 in.) aluminum wire	0.9 kg (2.0 lb)
XR-Aluma-Pro (Air-Cooled)	**(#300 000)**	**(#300 001)**	—	**(#300 264)**	300 A at 100% Duty Cycle		0.8-1.6 mm (.030-1/16 in.) aluminum wire**	1.1 kg (2.5 lb)
XR-Aluma-Pro CE (Water-Cooled)	**(#300 003)**	**(#300 004)**	—	**(#300 265)**	400 A at 100% Duty Cycle			1.3 kg (2.9 lb)
XR-Pistol (Air-Cooled)	**(#198 127)**	—	**(#198 128)**	—	200 A at 100% Duty Cycle	1.8-22.2 m/min. (70-875 IPM)	0.8-1.6 mm (.030-1/16 in.) aluminum wire	1 kg (2.2 lb)
XR-Pistol (Water-Cooled)	**(#198 129)**	—	**(#198 130)**	—	400 A at 100% Duty Cycle			1.1 kg (2.4 lb)
XR-Pistol-Pro (Air-Cooled)	**(#300 782)**	**(#300 783)**	—	**(#300 784)**	200 A at 100% Duty Cycle	1.8-23 m/min. (70-900 IPM)	0.8-1.6 mm (.030-1/16 in.) aluminum wire**	1 kg (2.2 lb)
XR-Pistol-Pro (Water-Cooled)	**(#300 786)**	**(#300 787)**	—	**(#300 788)**	400 A at 100% Duty Cycle			1.1 kg (2.4 lb)

XR™-S and XR™-D Controls

See Literature No. M/1.7

Unsurpassed performance and reliability for feeding aluminum and other difficult-to-feed wire types. The perfect choice for use with basic CV MIG power sources.

Includes *both 0.9 mm (.035 in) and factory-installed 1.2 mm (3/64 in) drive rolls. Order 1.6 mm (1/16 in) control box drive rolls separately (#195 591).*

True torque feed motor push-pull design provides continuous push force to wire while gun motor controls speed at the gun, providing accurate and positive feed speed without wire shaving or deformation.

Digital wire feed speed readout, standard jog and purge plus trigger hold for making long weldments without hand fatigue.

Adjustable wire run-in control allows arc start fine tuning. Reduces wire stubbing or arc flaring which can result in contact tip burnback.

XR-D Model Additional Features

Digital weld voltage readout, remote voltage control plus basic programmable weld sequencing for **preflow, postflow, start, and crater** provide higher quality welds.

Heavy Industrial

CC/CV DC

Use with CC/CV, DC Power Sources.

Processes
- MIG (GMAW) with aluminum and other soft alloy wires
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources
- See list above in push-pull guns for power sources requiring XR-Control

Suggested Guns
- Push-pull guns (see above)

Most Popular Accessories
- Optima™ MIG Pulse Control
- Extension Cables
- PSA-2 Control
- Gas Flowmeter Kit #246 127

Stock Number	Input Power	Wire Feed Speed	Wire Diameter Capacity	Max Spool Size Capacity	Dimensions	Net Weight
(#300 601) CE XR-S **(#300 687) CE** XR-D	24 VAC, 50/60 or 100 Hz	1.3-23 m/min (50-900 IPM)	0.8-1.6 mm (.030 - 1/16 in.) aluminum wire Drive roll kit #195 591 required to run 1.6 mm (1/16 in.) wire.	305 mm (12 in.)	H: 406 mm (16 in.) W: 235 mm (9-1/4 in.) D: 540 mm (21-1/4 in.)	19.2 kg (42.5 lb)

ST 44® Series

Must be purchased from ITW Italy

See Literature No. MN/51.2

***Remote voltage control,** enables precise remote operation of the welding power source arc voltage.**

Quick change, no-tools required dual groove, reversible drive rolls. Large diameter design (41 mm) **provides smooth, positive & accurate wire feeding** with long uninterrupted service life.

Industrial 4-roll gear-driven cast aluminium drive system & heavy-duty motor provides wire speeds ranging from 0-20 m/min. Available with **Euro style or US Style torch connections**.

Standard 14 Pin connection to Miller power sources connects the ST 44 Series to any Miller CV power source with a 14 pin receptacle.

2T/4T Latching gun trigger allows the operator to weld for extended periods, without having to maintain pressure on the gun trigger.

Precise control of gas flow with the built-in ***Gas flow meter** ensuring the correct gas flow rate is achieved and maintained.

Adjustable **Run-In & Burn-Back control** allows the operator to set the optimum arc starts & stops, reducing wire stubbing, arc flaring or wire burning-back to the contact tip.

** Optional on certain models*
*** Requires a Miller power source capable of remote voltage control*

Industrial

CV

Use with CV Power Sources.

Processes
- MIG (GMAW)
- Flux-cored (FCAW)

Model	Stock Number	Input Power	Electrode Wire Diameter Capacity	Wire Speed	Wire Type and Diameter	Dimensions	Net Weight
ST 44 **ST 44 D**	**(#029 007 406)** 4 roll drive enclosed wire feed unit, **CE** **(#029 007 404)** As above with digital Meters, RVC & water connections, **CE**	24 VAC, 3A, 50/60Hz	0.6-2.0 mm (.023-5/64 in.)	0/20 m/min (0-790 IPM)	**Solid Steel:** 0.6-2.0 mm (.023-5/64 in.) **Flux-cored:** 0.8-2.0 mm (.030-5/64 in.)	H: 420 mm (16.5 in.) W: 220 mm (8.65 in.) D: 650 mm (25.5 in.)	18 kg (40 lb) Basic 20 kg (44 lb) Digital

I-20/ST-24 Series

See Literature No. M/6.91x for I-20
See Literature No. WFM/4.0 UK for ST-24

This wire feeder is **ideal for most high duty cycle applications** requiring day-in/day-out trouble-free operation.

Trigger hold control for long extended welds.

Gear driven drive rolls for smooth, positive and accurate wire feed.

On-board burnback and motor ramp control for unmatched starting and stopping performance.

Heavy-duty, 16 gauge metal enclosure for durability in harsh environments.

Optional presettable voltage and wire feed speed on certain power sources.

Euro-type gun adapter for a quick connection to European style guns.

Industrial

CV

Use with CV Power Sources.

Processes
- MIG (GMAW)
- Flux-cored (FCAW) (gas- and self-shielded)

Model	Stock Number	Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Shipping Weight
I-24A	**(#186 493)** Four Drive Roll, w/o gun, **CE**	24 VAC, 7 A, 50/60 Hz	1.9 - 16.5 m/min (75 - 650 IPM)	0.6 - 2.0 mm (.023 - 5/64 in.)	27.2 kg (60 lb)	12 kg (26 lb)

Must be purchased from ITW Italy

Model	Stock Number	Input Power	Wire Speed	Wire Diameter Capacity	Dimensions	Net Weight
ST-24 Base **ST-24** RVC and Water **ST-24** Digital, RVC, Water	**(#029 007 395) CE** **(#029 007 396) CE** **(#029 007 397) CE**	24 VAC, 7 A, 50/60 Hz	0 - 20 m/min (0 - 750 IPM)	0.6 - 1.8 mm (.023 - .072 in.)	H: 279 mm (11 in.) W: 273 mm (10.75 in.) D: 597 mm (23.5 in.)	16.6 kg (36.5 lb)

20 Series Industrial Bench Feeders
70 Series Heavy-Industrial Bench Feeders

Designed for manufacturing, our popular bench feeders are available in two series with multiple models to fit your needs.

24A

S-74D

S-74DX

D-74 MPa Plus

Bernard Q300 gun shown.

For more options, visit ***MillerWelds.com***

20 and 70 Series Features

Feature	20 Series		70 Series			
	22A	24A	74S	74D	74DX	74MPA
Includes Q300 gun	●	●				
Includes Q400 gun			●	●	●	●
Trigger hold	●	●	●	●	●	●
Adjustable run-in control		●			●	●
Automatic run-in control			●	●		●
Digital meters	◉	◉		●	●	●
Remote voltage control		●		●	●	●
Preflow/postflow	◉[1]	◉	●	●	●	●
Spot control	◉[1]	◉	●	●	●	●
Dual-wire models			●	●	●	●
Rotatable drive assembly			●	●	●	●
Dual schedule control					●	
Trigger program select					●	
Trigger dual schedule					●	●
Sequence control					●	●
Locks and limits					●	●
Weld programs					4	2
Trigger schedule select						●
Accu-Mate™						●
Alumination™						●
Synergic Pulsed MIG						●
Profile Pulse™						●

● **Standard** ◉ **Optional** [1]Field option.

Trigger hold allows the operator to make long welds without having to hold the trigger continuously. Reduces operator fatigue.

Miller® standard, quick-change drive rolls save time.

Quick-release drive-roll pressure arm allows drive roll change without losing spring preload setting.

Easy loading and threading of welding wire without having to release the drive-roll pressure arm.

Additional features for 70 Series feeders

Available in dual-wire models which allows two different wire types to be available on one feeder, avoiding downtime from changing spools and drive rolls.

Toolless rotatable drive assembly allows operator to rotate the drive housing, allowing a straight path for wire flow.

High-torque permanent-magnet motor, sealed ball bearing gear drive and solid-state speed and brake control are maintenance free for long life.

Trigger dual schedule for easily changing weld parameters while welding. Achieves the best weld settings for different joint configurations. (DX and MPa models only.)

22A and 24A

See Literature No. M/11.0

Simple and cost-effective feeders for industrial manufacturing and fabricating.

Ideal for most high-duty-cycle applications requiring day-in/day-out trouble-free operation.

On-board burnback and motor ramp control for excellent starting and stopping performance.

Two gear-driven drive rolls on 22A and **four gear-driven drive rolls** on 24A provide smooth, positive wire feed.

Additional features for 24A feeder

Remote voltage control at feeder for easier adjustments in the weld cell.

Adjustable run-in control for better arc-starting performance on a variety of wires.

Four gear-driven drive rolls provide more consistent feeding on larger wire diameters.

74S and 74D

See Literature No. M/3.0

Standard, simple feeders for most heavy-industrial applications, with the 74D providing increased accuracy and control of the most common weld parameters.

Digital meters (74D models only) ensure accuracy when presetting and reading actual voltage, amperage and wire feed speed.

Remote voltage control (74D models only) allows you to set both voltage and wire feed speed at the feeder, saving time and increasing weld quality because optimal weld parameters are easy to set.

74DX

See Literature No. M/3.0

Adds features for weld control and programs.

Adjustable run-in control for improved arc starts.

Dual schedule control allows the operator to switch between two preconfigured welding parameters without readjusting the machine, saving time and enhancing quality.

Trigger program select provides the ability to access any of the four active programs.

Sequence control gives the operator the ability to adjust all of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.

Locks and limits for restricting or limiting operator adjustments, such as voltage and wire feed speed parameters.

Four weld program memories allow operators to recall up to four previously used processes and their weld settings.

74 MPa Plus

See Literature No. M/3.0

Adds push-pull aluminum capabilities. Optimized with Invision™ MPa or XMT® MPa power sources.

Recommended aluminum solution. Dedicated XR Plus guns (gooseneck and pistol grip) work with MPa Plus feeders to coordinate wire feed speed of the gun and the feeder. This provides optimized aluminum feeding and welding performance. See chart below for gun models and stock numbers.

Trigger schedule select saves time when switching between two weld settings by simply tapping gun trigger.

Accu-Mate™ properly seats the MIG gun power pin for best feeding performance.

Alumination™ gives you the ability to use the extended reach of a push-pull system for consistent, versatile and dependable aluminum wire feeding.

Additional features when used with Invision MPa or XMT MPa power sources

Synergic Pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed, eliminating the need to make additional adjustments.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

**Wire kit #230 708 required to run 1.6 mm (1/16 in.) aluminum wire.*

Industrial – 20 Series
Heavy Industrial – 70 Series

CV DC

Use with CV, DC Power Sources.

Processes
- MIG (GMAW)
- Flux-cored (FCAW)
- Pulsed MIG (GMAW-P) with MPa Plus feeder and optional MPa power source

Suggested Power Sources
- CP-302 (22A only)
- Deltaweld® Series
- Invision™ MPa Series
- Dimension™ Series
- XMT® Series (except VS model)

Suggested Guns
- Bernard™
- XR-Aluma-Pro™ Plus and XR™-Pistol Plus (see chart below)

Most Popular Accessories
- Feeder Cart #142 382
- Extension Cables
- Spool Adapter #047 141
- Turntable Assembly #146 236
- Wire Straightener
- Hanging Bail #058 435
- Wire Reel Assembly #108 008
- Spool Covers
  For 20 and 70 Series single-wire models and left side of dual-wire models #057 607
  For right side of dual-wire models #090 389
- Single- and dual-remote configurations are available for 70 Series. For more information, see literature no. M/3.0.

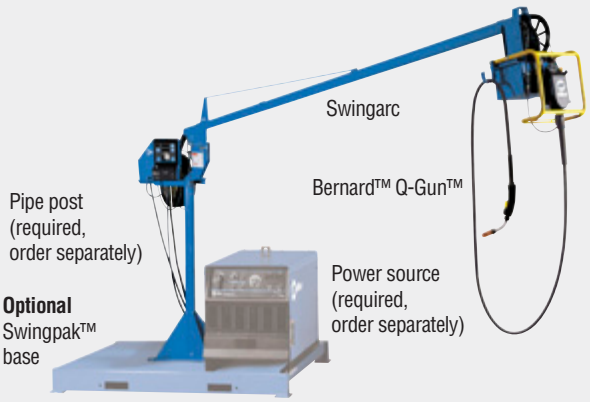
Model	Stock Number	Input Power	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
20 Series	**22A (#300 615)** **22A (#300 615-001)** w/run-in control **22A (#300 615-002)** w/digital display and voltage control **24A (#300 622)** **24A (#300 622-001)** w/digital display	24 VAC, 7 A 50/60 Hz	1.9-19 m/min (75-750 IPM)	**22A:** 0.6-2.0 mm (.023-5/64 in.) **24A:** 0.6-2.4 mm (.023-3/32 in.)	27 kg (60 lb) coil with optional wire reel assembly #108 008	H: 279 mm (11 in.) W: 273 mm (10.75 in.) D: 597 mm (23.5 in.)	**22A:** 15.4 kg (36 lb) **24A:** 18 kg (40 lb)
70 Series (Single-wire models)	**S-74S (#300 616)** **S-74S (#300 616-002) CE,** Euro **S-74D (#300 617)** **S-74D (#300 617-003) CE**, Euro **S-74DX (#300 618)** **S-74DX (#300 618-003) CE,** Euro **S-74 MPa Plus (#300 577) CE**	24 VAC, 10 A 50/60 Hz	1.3-19.8 mm (50-780 IPM)	.023 –1/8 in. (0.6 – 3.2 mm) Low speed motor required for 3.2 mm (1/8-in.) diameter wire (factory option) **MPa Plus model Hard Wire** 0.9 – 2.0 mm (.035 –5/64 in.) **Aluminum*** 0.9 – 1.6 mm (.035 –1/16 in.)	27 kg (60 lb) coil with optional wire reel assembly #108 008	H: 356 mm (14 in.) W: 318 mm (12.5 in.) D: 711 mm (28 in.)	26 kg (58 lb)
70 Series (Dual-wire models)	**D-74S (#300 619)** **D-74S (#300 619-001) CE,** Euro, no gun **D-74D (#300 620)** **D-74D (#300 620-002) CE**, Euro **D-74DX (#300 621)** **D-74DX (#300 621-002) CE,** Euro **D-74 MPa Plus (#300 578) CE**					H: 356 mm (14 in.) W: 533 mm (21 in.) D: 889 mm (35 in.)	39.5 kg (87 lb)

Optional Push-Pull Gun (For MPa Plus feeders only)	Cable Length 4.6 m (15 ft)	7.6 m (25 ft)	10.6 m (35 ft)	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Net Weight
XR-Aluma-Pro Plus (Air-Cooled)	**(#300 000 001)**	**(#300 001 001)**	**(#300 264 001)**	300 A at 100% Duty Cycle	1.8-23 m/min (70-900 IPM)	**Aluminum*** 0.8-1.6 mm (.030-1/16 in.)	1.1 kg (2.5 lb)
XR-Aluma-Pro Plus (Water-Cooled)	**(#300 003 001)**	**(#300 004 001)**	**(#300 265 001)**	400 A at 100% Duty Cycle			1.3 kg (2.9 lb)
XR-Pistol Plus (Air-Cooled)	**(#300 753)**	**(#300 754)**	**(#300 755)**	200 A at 100% Duty Cycle			1 kg (2.2 lb)
XR-Pistol Plus (Water-Cooled)	**(#300 756)**	**(#300 757)**	**(#300 758)**	400 A at 100% Duty Cycle			1.1 kg (2.4 lb)

70 Series Swingarc™

See Literature No. M/13.11

Swingarc boom-mounted wire feeders bring an extra dimension of flexibility and efficiency to weld stations dealing with large weldments, or wherever operator mobility is required.



Models in 2.4 m (8 ft), 3.6 m (12 ft) or 4.8 m (16 ft) lengths maximize output.

Counterbalance design makes it easy to position the boom exactly where it is needed.

360-degree rotation and 60-degree lift angle maximizes work area (4.8 m [16 ft], 7.3 m [24 ft] or 9.75 m [32 ft] diameter work area).

Standard 3 m (10 ft) 14-pin interconnecting cord included.

In-boom cable routing organizes hoses and cables, protects them from damage.

Quick-change drive rolls mean no tools are required by the operator to change drive rolls.

Heavy Industrial

Use with CV, DC Power Sources.

CV DC

Processes

- MIG (GMAW)
- Flux-cored (FCAW) (gas- and self-shielded)

Suggested Power Sources/Guns

- Same as 70 Series

Most Popular Accessories

- Wire Reel Assembly #108 008
- 0.6-3.17 mm (.023-1/8 in.) drive rolls
- Swingpak™ Base #183 997
- 1.2 m (4 ft) Pipe post with 45 mm (18 in.) base #149 838
- 1.8 m (6 ft) Pipe post with 45 mm (18 in.) base #149 839
- 1.2 m (4 ft) Pipe Post with single/dual spool carrier #300 353
- 3.6 m (6 ft) Pipe Post with single/dual spool carrier #300 352

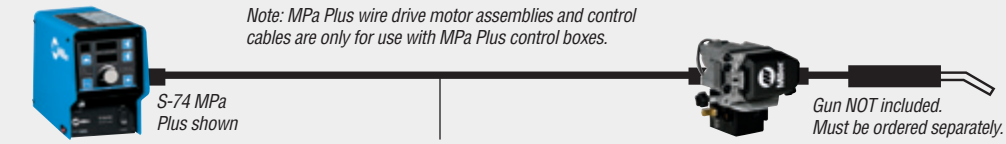
Model/Stock Number					
Single-Wire Feeder Models	**Boom Size**	**Feeder Control Box**	**Dual-Wire Feeder Models**	**Boom Size**	**Feeder Control Box**
SS-74S8 SS-74D8 SS-74DX8 SS-74MPa Plus-8	2.4 m (8 ft) (#300 518) 2.4 m (8 ft) (#300 518) 2.4 m (8 ft) (#300 518) 2.4 m (8 ft) (#300 818)	S-74S (#300 881) S-74D (#300 882) S-74DX (#300 883) S-74MPa Plus (#300 738)	DS-74S8 DS-74D8 DS-74DX8 DS-74MPa Plus-8	2.4 m (8 ft) (#300 521) 2.4 m (8 ft) (#300 521) 2.4 m (8 ft) (#300 521) 2.4 m (8 ft) (#300 821)	D-74S (#300 886) D-74D (#300 887) D-74DX (#300 888) D-74MPa Plus (#300 739)
SS-74S12 SS-74D12 SS-74DX12 SS-74MPa Plus-12	3.7 m (12 ft) (#300 519) 3.7 m (12 ft) (#300 519) 3.7 m (12 ft) (#300 519) 3.7 m (12 ft) (#300 819)	S-74S (#300 881) S-74D (#300 882) S-74DX (#300 883) S-74MPa Plus (#300 738)	DS-74S12 DS-74D12 DS-74DX12 DS-74MPa Plus-12	3.7 m (12 ft) (#300 522) 3.7 m (12 ft) (#300 522) 3.7 m (12 ft) (#300 522) 3.7 m (12 ft) (#300 822)	D-74S (#300 886) D-74D (#300 887) D-74DX (#300 888) D-74MPa Plus (#300 739)
SS-74S16 SS-74D16 SS-74DX16 SS-74MPa Plus-16	4.9 m (16 ft) (#300 520) 4.9 m (16 ft) (#300 520) 4.9 m (16 ft) (#300 520) 4.9 m (16 ft) (#300 820)	S-74S (#300 881) S-74D (#300 882) S-74DX (#300 883) S-74MPa Plus (#300 738)	DS-74S16 DS-74D16 DS-74DX16 DS-74MPa Plus-16	4.9 m (16 ft) (#300 523) 4.9 m (16 ft) (#300 523) 4.9 m (16 ft) (#300 523) 4.9 m (16 ft) (#300 823)	D-74S (#300 886) D-74D (#300 887) D-74DX (#300 888) D-74MPa Plus (#300 739)

Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity
24 VAC, 10 A, 50/60 Hz	1.3 - 19.8 m/min (50-780 IPM) Optional High Speed: 2.3 - 36.6 m/min (92-1435 IPM)	Standard Speed Motor: 0.6 - 3.2 mm (.023 - 1/8 in.) When using 2.4 - 3.2 mm (3/32 - 1/8 in.) wires, consult factory for low speed options.	27 kg (60 lb) coil

70 Series Remote Configurations

See Literature No. M/3.0

Remote wire feeder control box and wire drive assembly for non-Miller boom applications.



Note: MPa Plus wire drive motor assemblies and control cables are only for use with MPa Plus control boxes.

S-74 MPa Plus shown

Gun NOT included. Must be ordered separately.

Single-wire control box
#300 881 S-74S
#300 882 S-74D
#300 883 S-74DX
#300 738 S-74 MPa Plus

Motor control cable
Standard: 11 conductor
MPa Plus: 14 conductor

Wire drive motor assembly
#300 904 Standard left-hand drive
#300 740 MPa Plus left-hand drive

MPa Plus drive can be used with push-only guns, or XR-AlumaPro™ Plus and Pistol Plus push-pull guns.

Motor control cable
11 conductor

Motor control cable
Standard: 11 conductor
MPa Plus: 14 conductor

Gun NOT included. Must be ordered separately.

D-74D shown

Gun NOT included. Must be ordered separately.

Push-only wire drive motor assembly
#300 741 001 Standard right-hand drive
#300 741 MPa Plus right-hand drive

Dual-wire control box
#300 886 D-74S
#300 887 D-74D
#300 888 D-74DX
#300 739 D-74 MPa Plus

Wire drive motor assembly
#300 904 Standard left-hand drive
#300 740 MPa Plus left-hand drive

MPa Plus drive can be used with push-only guns, or XR-AlumaPro™ Plus and Pistol Plus push-pull guns.

Heavy Industrial

Use with CV, DC Power Sources.

CV DC

Processes

- MIG (GMAW)
- Flux-cored (FCAW)

Suggested Power Sources/Guns

- Same as 70 Series

Most Popular Accessories

- Motor Control Cable (11 conductor)
  3 m (10 ft.) #254 935 010
  7.6 m (25 ft.) #254 935 025
  For push-only gun configurations.
- MPa Plus Motor Control Cable (14 conductor)
  3 m (10 ft.) #254 864 010
  7.6 m (25 ft.) #254 864 025
  For MPa Plus configurations only — single-wire or left side of dual-wire.
- Feeder Base #195 369
  For use with spooled wire.

Thunderbolt® XL

225 AC and 225 AC/150 DC

See Literature No. AC/2.0 (AC model) and AD/8.0 (AC/DC model)

Thunderbolt XL 225 AC shown

Economical Stick machines with precise, dependable control.

Accu-Set™ amperage indicator provides precise heat control.

Unit allows higher duty cycle when amperage decreases.

Infinite current control allows the operator to adjust output by as little as one-amp increments.

Output selector switch on AC/DC units allows you to quickly select AC, DCEP or DCEN without adjusting the output leads.

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Light Industrial

225 AC model is AC only.

CC | AC/DC | 1 Phase

Process

- Stick (SMAW)

Comes Complete With

- 4.5 m (15 ft) No. 4 electrode cable with heavy-duty electrode holder
- 3 m (10 ft) work cable with clamp
- Power cord with plug

Most Popular Accessories

- Thunderbolt XL Running Gear #043 927

Model	Stock Number	Welding Mode	Welding Amperage Range	Rated Output at 20% Duty Cycle, 60 Hz (15% Duty Cycle, 50 Hz)	Rated Output at 100% Duty Cycle	Amps Input at Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
Thunderbolt XL 225 AC (CSA)	**(#903 641)** 230 V, 50/60 Hz	AC	30-235	225 A at 25 V	100 A	47.5	80	H: 476 mm (18.75 in.) W: 323 mm (12.75 in.) D: 445 mm (17.5 in.)	39 kg (85 lb)
Thunderbolt XL 225 AC/150 DC (CSA)	**(#903 642)** 230 V, 50/60 Hz	AC	30-235	225 A at 25 V	100 A				47 kg (104 lb)
		DC	30-160	150 A at 25 V	65 A				

Dialarc® 250 AC/DC

See Literature No. AD/2.1

Superb performance and versatility in a flexible Stick machine.

Single-dial infinite current control simplifies and allows precise weld output adjustment.

High and low ranges for both AC and DC allow greater control of weld performance.

Forced-draft cooling fan ensures cooler running product, extending life of power source.

Superior 6010 and 7018 stick welding performance offers wide range of electrode versatility.

High output and duty cycle allow unit to handle nearly all stick welding needs.

Optional remote weld output control provides current control without going back to power source saving time and effort.

Light Industrial

CC | AC/DC | 1 Phase

Processes

- Stick (SMAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (4.8 mm [3/16 in.] carbons)

Most Popular Accessories

- No. 19 Running Gear #041 580

Stock Number	Welding Mode	Welding Amperage Range	Rated Output at 30% Duty Cycle	Max. Open-Circuit Voltage	Amps Input at Rated Output, 60 Hz 200V	208V	230V	460V	575V	KVA	KW	Dimensions	Net Weight
Without Power Factor Correction (#907 017) 220 (208)/230/460 V	AC	35-300	225 A at 29 V	70	84	–	73	36	29	16.8	9.8	H: 616 mm (24.25 in.) W: 483 mm (19 in.) D: 711 mm (28 in.)	163 kg (360 lb)
	DC	35-265	225 A at 29 V	79	92	–	80	40	32	18.6	11.8		
With Power Factor Correction (#907 015) 208/230/460/575 V	AC	35-300	225 A at 29 V	70		60	55	27	22	12.5	9.9		166 kg (365 lb)
	DC	35-265	225 A at 29 V	79		66	60	30	24	13.7	10.8		

Maxstar® 150 S

See Literature No. DC/27.0

Maxstar 150 S with X-CASE (#907 134 012) shown

Best in class — provides maximum portability and performance in the most compact Stick package in the industry.

Multi-voltage plug (MVP™) allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

Portable with adjustable shoulder strap. Easy to transport at only 6 kg (13.2 lb.).

AUTOLINE Power Management Technology — Allows for any input voltage hook-up (120–240 V) with no manual linking.

Adaptive Hot Start™ for stick arc starts reduces electrode sticking.

Single amperage range allows operator to accurately set amperage on both 120- or 240-volt primary power.

Light Industrial

CC DC 1 Phase

Process
- Stick (SMAW)

Comes Complete With
- 3 m (10 ft.) power cord with MVP plugs for 120 V and 240 V
- 4 m (13 ft.) electrode cable with holder and 25 mm Dinse-style connector
- 3 m (10 ft.) work cable with clamp and 25 mm Dinse-style connector

#907 134 012 Includes Above Plus
- Protective X-CASE™

Most Popular Accessories
- MVP™ Plugs
- Protective X-CASE™ #300 184

** Sense voltage for Stick*

Stock Number	Input Power	Rated Output	Welding Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Dimensions	Net Weight
(#907 134) **(#907 134 012)** w/X-CASE **(#907 351) CE**, w/out case	115 V	100 A at 24 V, 35% Duty Cycle	20-100	90 VDC (12-16 VDC*)	26.4	3.0	3.0	H: 229 mm (9 in.) W: 140 mm (5.5 in.) D: 337 mm (13.25 in.)	6.0 kg (13.2 lb.)
	230 V	150 A at 26 V, 30% Duty Cycle	20-150		21.6	4.9	4.7		

Maxstar® 210 STR

See Literature No. DC/32.1

Maximum flexibility with automatic connection to any input power while maintaining the best DC stick/TIG welding performance in its product class.

AUTOLINE Power Management Technology — Allows for any input voltage hook-up (120-480 V) with no manual linking, providing convenience in any job setting.

Lift-Arc™ provides TIG arc initiation without the use of high frequency.

Dual schedule allows operators to switch between welding parameters for specific electrodes without readjusting the machine.

Adaptive Hot Start™ for stick arc starts.

Remote amperage control and digital meter.

** Sense voltage for Stick and Lift-Arc TIG*

Industrial

CC DC 3 Phase 1 Phase

Processes
- Stick (SMAW) • TIG (GTAW)

Comes Complete With
- 2.4 m (8 ft.) primary cord (no plug)
- Two 50 mm Dinse connectors
- Adjustable shoulder strap

Most Popular Accessories
- 3.8 m (12.5 ft.) Weldcraft™ A-150 Valve TIG torch #WP-17V-25-2
- Remote Controls
- Air-Cooled TIG Torch Connector

Stock Number	Welding Process	Input Power	Amperage Range	Rated Output at 60% Duty Cycle	Phase	Amps Input at Rated Load Output, 50/60 Hz 120V	208V	240V	400V	480V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 682)	Stick	208-480 V	5-210	160 A at 26.4 V	3-phase	–	15	13	8	6	5.5	5.2	80 VDC (11 VDC*)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) D: 495 mm (19.5 in.)	16.3 kg (36 lb.)
					1-phase	–	26	22	13	11	5.3	5.3			
		120 V	5-100	90 A at 23.6 V	1-phase	23	–	–	–	–	2.8	2.8			
	TIG	208-480 V	1-210	210 A at 18.4 V	3-phase	–	14	12	7	6	5.2	4.9			
					1-phase	–	24	20	12	10	4.9	4.9			
		120 V	1-210	125 A at 15 V	1-phase	22	–	–	–	–	2.6	2.6			

Gold Star® Series

See Literature No. DC/8.1

452/602 Shown

Rugged, reliable performance and superior arc characteristics.

WIRELESS REMOTE COMPATIBLE

- **Hot Start™ and built-in arc control**
- **Enclosed circuit board**
- **Thermal overload protection**
- **Fan-On-Demand™**
- **15 A, 115 V duplex receptacle**
- **Power efficient**
- **Remote control capability**
- **Optional digital volt and amp meters (#300 359 Field).** Easy to install, front-panel mount.

Note: For models AFTER serial number KG283595.

Heavy Industrial

CC DC 3 Phase

Processes
- Stick (SMAW)
- TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)
  (452: 7.5 mm [5/16 in.] carbons)
  (652: 9.5 mm [3/8 in.] carbons)
- Flux-cored (FCAW)
- MIG spray transfer (GMAW) with voltage-sensing feeder

Model	Stock Number	Rated Output	Amperage Range in CC Mode	Max. Open-Circuit Voltage	Dimensions	Net Weight
Gold Star 452/602	**(#903 374)** 200 (208)/230/460 V, 60 Hz **(#907 363)** 380/400/440 V 50/60 Hz, **CE**	450 A at 38 VDC, 60% Duty Cycle	20-590	72 VDC	H: 762 mm (30 in.) W: 585 mm (23 in.) D: 966 mm (38 in.) *Includes lift eye and strain relief*	183 kg (404 lb.)
Gold Star 652/852	**(#903 402)** 230/460/575 V, 60 Hz **(#907 364)** 380/400/440 V 50/60 Hz, **CE**	650 A at 44 VDC, 60% Duty Cycle	50-850	72 VDC		229 kg (505 lb.)

CST™ 280

See Literature No. DC/29.55

Durable power source designed for the construction industry. Ideal for stick electrodes up to 4.8 mm (3/16 in.) and TIG welding of pipe and plate.

CST 280 CST 280 with meter

Superior stick arc performance even on the difficult-to-run electrodes like E6010.

Simple voltage-changeover switch saves time when changing primary voltage. Input voltage can be changed without removal from inverter rack or removal of machine case.

***NEW!* Optional digital meter** for more precise control when presetting or monitoring welding amperage.

Portable in the shop or at the jobsite — at 18.6 kg (41 lb.) the CST 280 is easily moved from location to location.

Lift-Arc™ start provides TIG arc starting without the use of high frequency.

Rack mountable for protection, storage and transportation of multiple power sources while using a single primary power cable.

**Output on single-phase reduced to comply with current limitation on input cable.*

Industrial

CC DC 3 Phase 1 Phase

Processes
- Stick (SMAW)
- TIG (GTAW)

Comes With
- 1.8 m (6 ft.) power cord
- One set of male connectors (Dinse-style model only)

Most Popular Accessories
- CST 280 Rack (see below)
- Remote Controls
- For TIG torches see literature no. DC/29.55

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 244) Dinse **(#907 244 011)** Tweco® **(#907 696)** Tweco® with meter 220-230/460-575 V	Stick/TIG	Three-Phase	5-280	280 A at 31.2 V, 35% Duty Cycle 200 A at 28 V, 100% Duty Cycle	77 VDC	H: 343 mm (13.5 in.) W: 191 mm (7.5 in.) D: 457 mm (18 in.)	18.6 kg (41 lb.)
		Single-Phase	5-200	200 A at 28 V, 50% Duty Cycle* 150 A at 26 V, 100% Duty Cycle*			
(#907 251) Dinse **(#907 251 011)** Tweco® **(#907 563)** Dinse with meter **(#907 251 012)** Dinse w/VRD 208-230/400-460 Volt	Stick/TIG	Three-Phase	5-280	280 A at 31.2 V, 35% Duty Cycle 200 A at 28 V, 100% Duty Cycle	67 VDC		
		Single-Phase	5-200	200 A at 28 V, 50% Duty Cycle* 150 A at 26 V, 100% Duty Cycle*			

CST™ 280 Racks

See Literature No. DC/18.82

Rugged enclosure provides simple means for protecting and transporting multiple welding power sources for construction, maintenance/repair and shipbuilding applications.

CST 280 8-pack rack shown

Light weight and small footprint for easy transportation. The low weight enables the use of elevators to move the rack.

All controls including power switch are located on front of machine for easy access.

Top cover protects machines from falling debris.

Lift eye simplifies crane or overhead lifting device transport.

Lift truck fork pockets.

One main disconnect box with branched fusing for each machine.

Common output ground connection (for same polarity use only).

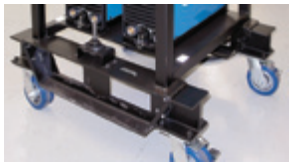
Optional rack running gear available for transporting the rack.

Heavy Industrial

CC DC 3 Phase

Processes
- Stick (SMAW)
- TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)
  (Paralleled CST 280 units: 7.9 mm [5/16 in.] carbons)

Most Popular Accessories



- **4-Pack Rack Running Gear** #195 114
- 8-Pack Rack Running Gear #195 436

Model	Stock Number	Rack Capacity	Input Power to Rack	Amps Input at Rated Output, 50/60 Hz 220V	230V	400V	440V	460V	575V	KVA	KW	Net Weight
4-Pack Rack	**(#907 245)** Dinse **(#907 247)** Tweco®	4 units	220-230/460-575 V, three-phase, 50/60 Hz *Note: CST 280 machines are factory-linked for 460-575 V. Dinse units include one set of male connectors; Tweco units do not.*	137	134	79	72	70	57	58.4	40.8	161 kg (355 lb.)
8-Pack Rack	**(#907 365)** Tweco®	8 units		274	268	158	145	140	114	116.8	81.6	290 kg (640 lb.)
Empty Rack	**(#195 051)**	4 units	—	—								75 kg (166 lb.)
	(#300 580)	8 units										127 kg (280 lb.)

Diversion™ 165 and 180 AC/DC TIG

See Literature No. AD/1.5

Professional-grade arc in a package designed specifically for personal users. Contains all of the features you need — simplicity combined with superior performance and value.

Diversion 165

Diversion 180

Easy-to-understand operator interface. Power up, select material type, set material thickness range and start welding!

Inverter-based, AC/DC power source provides a more consistent welding arc while using less power.

HF arc starting provides non-contact arc starting that eliminates tungsten and material contamination.

Portable. Easy to transport at 22.7 kg (50 lb.).

Fan-On-Demand™ cooling system operates only when needed.

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

Advanced squarewave AC provides a fast freezing weld puddle and deeper penetration.

Weldcraft™ A-150 torch with Diamond Grip™ provides more comfortable grip and reduces operator fatigue.

Diversion 180 includes **multi-voltage plug (MVP™)** which allows for connection to 120- or 240-volt receptacles without tools.

TIG Welding Capability

Max. 4.8 mm (3/16 in.)	Max. 4.8 mm (3/16 in.)
Steel	Aluminum
Min. 0.6 mm (0.025 in.)	Min. 0.75 mm (0.030 in.)

** While idling*

Light Industrial

CC | AC/DC | 1 Phase

Process
- TIG (GTAW)

Comes With
- Power cord with 50 A, 240 V plug (165 model) or MVP plugs for 120 V and 240 V (180 model)
- 3.8-m (12.5-ft.), Weldcraft™ A-150 TIG torch
- 3.7-m (12-ft.) work cable with clamp
- RFCS-RJ45 remote foot control
- Flow gauge regulator with hose

Most Popular Accessories
- Running Gear/Cylinder Rack #301 239
- Protective Cover #300 579
- RCCS-RJ45 Remote Fingertip Control #301 146
- RJ45 to 14-Pin Adapter Cord #300 688
- Weldcraft™ Flexible Torch Body Kits (requires handle #105Z55R) A-125F (#WP-9F) A-150F (#WP-17F)
- TIG Torch Accessory Kit #AK2C

Model/ Stock Number	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Output	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Diversion 165 (#907 626)	230 V	10-165	150 A at 16 V, 20% Duty Cycle	23 (.20*)	5.3 (.04*)	3.7 (.02*)	80 VDC	H: 433 mm (17 in.) W: 251 mm (9.875 in.) D: 608 mm (23.875 in.)	23 kg (50 lb.)
			165 A at 16.6 V, 15% Duty Cycle	25.5 (.20*)	5.9 (.04*)	4.2 (.02*)			
Diversion 180 (#907 627)	115 VAC	10-125	125 A at 15 V, 35% Duty Cycle	26.5 (.88*)	3.1 (.1*)	3.0 (.03*)			
	230 VAC	10-180	150 A at 16 V, 20% Duty Cycle	16 (.44*)	3.7 (.1*)	3.6 (.03*)			
			180 A at 17.2 V, 10% Duty Cycle	20.5 (.44*)	4.7 (.1*)	4.6 (.03*)			

Maxstar® 150 STL and STH DC TIG and Stick

See Literature No. DC/27.1 (STL) and DC/27.2 (STH)

Maxstar 150 STL TIG/stick package with remote and X-CASE (#907 136 017) shown.

** Sense voltage for stick and Lift-Arc™ TIG.*

TIG Welding Capability

Max. 4.8 mm (3/16 in.)
Steel
Min. 0.5 mm (0.020 in.)

Two models available. *See the Stick section for Maxstar 150 S.*

STL: DC TIG/stick with Lift-Arc™ starting without the use of high frequency.

STH: DC TIG/stick with HF and Lift-Arc™ starting, plus built-in pulsing allowing selection of four fixed-pulse frequencies.

AUTOLINE Power Management Technology — Allows for any input voltage hook-up (120-240 V) with no manual linking.

Multi-voltage plug (MVP™) allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

Portable with adjustable shoulder strap. Easy to transport at 6.2 kg (13.7 lb.).

Built-in gas solenoid eliminates the need for bulky torch with a gas valve.

Light Industrial

CC | DC | 1 Phase

Processes
- TIG (GTAW) • Stick (SMAW)
- Pulsed TIG (GTAW-P) w/STH

Comes With
- 13 m (10 ft.) power cord with MVP plugs for 120 V and 240 V
- 4 m (13 ft.) electrode cable with holder and 25 mm Dinse-style connector
- 3 m (10 ft.) work cable with clamp and 25 mm Dinse-style connector

TIG/Stick Includes Above Plus
- 3.8 m (12.5 ft.) Weldcraft™ A-150 TIG torch (#WP1712RDI25)
- Protective X-CASE™
- Flow gauge regulator with hose
- RCCS-6M remote fingertip control (#907 135 017, #907 136 017 only)
- AK2C TIG torch accessory kit

Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Net Weight
Maxstar 150 STL **(#907 135)** Machine only **(#907 135 016)** TIG/stick package **(#907 135 017)** TIG/stick package with remote fingertip control	TIG	115 V	5-150	150 A at 16 V, 30% Duty Cycle	28.0	3.4	3.1	90 VDC 12-16 VDC*	6.2 kg (13.7 lb.)
		230 V	5-150	150 A at 16 V, 30% Duty Cycle	14.2	3.2	3.1		
Maxstar 150 STH **(#907 136)** Machine only **(#907 136 017)** TIG/stick package with remote fingertip control **(#907 352) CE**	Stick	115 V	20-100	100 A at 24 V, 35% Duty Cycle	26.4	3.0	3.0		
		230 V	20-150	150 A at 26 V, 30% Duty Cycle	21.6	4.9	4.7		

Syncrowave® 210 Series

AC/DC TIG and Stick

See Literature No. AD/4.6

Continuing the tradition of innovation through advanced inverter technology for light-industrial and personal users.

WIRELESS REMOTE COMPATIBLE

Syncrowave 210 Runner TIG/MIG Complete package shown.

Easy to use.
1) Turn power on.
2) Select the process.
3) Set amperage or voltage based on material thickness.
Then weld! It's easy as 1,2,3.

TIG Welding Capability

Max. 6.4 mm (1/4 in.)	
Steel	Aluminum
Min. 0.5 mm (0.020 in.)	

AUTOLINE Power Management Technology Allows for any input voltage hook-up (120-240 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Multi-voltage plug (MVP™) allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

Update and expand. Front panel memory card data port provides the ability to easily update software and expand product features.

Low power draw. Inverter-based power source provides full welding output from 240 volts while drawing less than 30 amps.

Pro-Set™ (TIG/stick) eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls.

AC balance (TIG) control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds.

Pulse (TIG). Pulsing can increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion. Expandable feature.

DIG (stick) control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

Auto-Set™ (MIG) automatically sets your welder to the proper parameters. Simply set the wire size, material thickness, and shielding gas and you're ready to weld. (TIG/MIG complete package only.)

Light Industrial

CC | AC/DC | 1 Phase

Processes

- AC/DC TIG (GTAW)
- DC Stick (SMAW)
- Pulsed TIG (GTAW-P)
- MIG (GMAW)*
- Flux-cored (FCAW)*

**TIG/MIG Complete package only.*

Comes With

- 3-m (10-ft.) power cord with MVP™ plugs for 120 V and 240 V
- 3.8-m (12.5-ft.) Weldcraft™ A-150 TIG torch (#WP1712MFDI50)
- 3.7-m (12-ft.) work cable with clamp and Dinse connector
- Electrode holder with Dinse connector
- RFCS-14 remote foot control
- Flow gauge regulator with hose
- Factory-installed running gear with EZ-Change™ low cylinder rack

TIG/MIG Complete package comes with above plus

- Spoolmate™ 100 spool gun (#300 371)
- 4-14 pin connector
- Flow-thru Dinse-style connector
- Memory card

Most popular accessories

- 7.6 m (25 ft.) Weldcraft™ A-150 TIG Torch #WP-17-25-R
- Protective Cover #195 142
- RCC-14 Remote Control #151 086
- Wireless Remote Foot Control #300 429
- Memory Card Expansion
  DC pulse expansion #301 128
  AC frequency expansion #301 127
- TIG Torch Accessory Kit #AK2C
  Includes one short back cap, one of each size (#4, #5, #6) alumina nozzle, and one of each size (.040, 1/16, 3/32 in.) of the following: collet, collet body, and 178 mm (7-in.) 2% ceriated tungsten electrode.
- TIG Torch Accessory Kit #AK-150MFC
  Allows A-150 torch customization. Converts into 28 different torch styles while using existing cable. Includes collets, collet bodies, nozzles, torch heads, handle and more.

Stock Number	Input Power	Welding Process	Welding Amperage Range	Rated Output (R.M.S.)	Amps Input at Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 596)	115 V	DC TIG	5-125 A	95 A at 13.8 V, 60% Duty Cycle	17.4 (.58 while idling)	47 VDC	H: 800 mm (31.5 in.) W: 470 mm (18.5 in.) D: 1092 mm (43 in.)	Runner package: 61 kg (133.5 lb.)
		AC TIG	5-125 A	90 A at 13.6 V, 60% Duty Cycle	12.4 (.58 while idling)			
		DC Stick	20-90 A	70 A at 22.8 V, 60% Duty Cycle	20.5 (.58 while idling)			
	230 V	DC TIG	5-210 A	125 A at 15 V, 60% Duty Cycle	11.9 (.35 while idling)			
		AC TIG	5-210 A	114 A at 14.6 V, 60% Duty Cycle	8.62 (.35 while idling)			
		DC Stick	20-150 A	90 A at 23.6 V, 60% Duty Cycle	11.9 (.35 while idling)			

Maxstar® 210/280 Series

DC TIG and Stick

See Literature No. DC/32.1 (210) and DC/35.0 (280)

Dynasty® 210/280 Series

AC/DC TIG and Stick

See Literature No. AD/4.81 (210) and AD/4.9 (280)

Maxstar and Dynasty 210 Series (Maxstar 210 shown)

Dynasty 280 DX

210 Series TIG Welding Capability

Max. 6.4 mm (1/4 in.)	Max. 6.4 mm (1/4 in.)
Steel	Aluminum (Dynasty only)
Min. 0.05 mm (0.002 in)	Min. 0.3 mm (0.012 in)

280 Series TIG Welding Capability

Max. 9.5 mm (3/8 in.)	Max. 9.5 mm (3/8 in.)
Steel	Aluminum (Dynasty only)
Min. 0.1 mm (0.004 in)	Min. 0.3 mm (0.012 in)

Base and DX models available. Base model provides essential TIG and stick functions. DX model adds extended ranges to sequencer, full trigger options, and full preflow and pulser functions.

Note: See the Stick section for Maxstar 210 STR.

AUTOLINE Power Management Technology — Allows for any input voltage hook-up (210 models: 120-480 V, 280 models: 208-575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Blue Lightning™ high-frequency (HF) arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters.

Lift-Arc™ provides AC or DC arc initiation without the use of high frequency.

Hot Start™ adaptive control provides positive arc starts without sticking.

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

Pro-Set™ eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls. Simply select the feature and adjust until Pro-Set appears on the display.

Sleep timer conserves electricity. This programmable feature will power down the machine if it sits idle for a specified time.

Update and expand. Front panel memory card data port provides the ability to easily update software and expand product features.

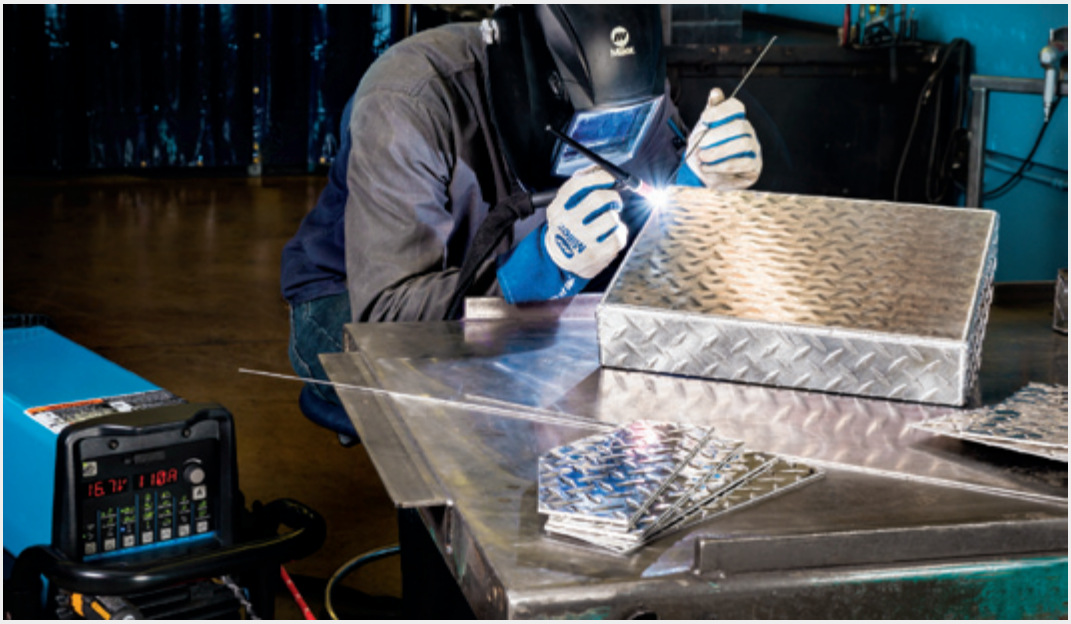
Optional cooler power supply (CPS) is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 1.3. *Not available on Maxstar 210 Series.*

Optional Cooler-On-Demand™ feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler. *Only available on CPS models.*

**Refer to owner's manual for 208-volt output ratings and duty cycle.*

***Sense voltage for low OCV stick and Lift-Arc™ TIG.*

Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output at 60% Duty Cycle	Amps Input at Rated Load Output, 50/60 Hz 120V	208V	230V	240V	400V	460V	480V	575V	KVA	KW	Max. Open-Circuit Voltage	Net Weight
Maxstar 210 (#907 683) Maxstar 210 DX (#907 684) (#907 184 001), CE	TIG	3-Phase	1-210	210 A at 18.4 V	—	14	—	12	7	—	6	—	5.2	4.9	80 VDC (11 VDC**)	17.2 kg (38 lb.)
		1-Phase	1-210	210 A at 18.4 V	—	24	—	20	12	—	10	—	4.9	4.9		
		1-Phase (120V)	1-150	125 A at 15 V	22	—	—	—	—	—	—	—	2.6	2.6		
	Stick	3-Phase	5-210	160 A at 26.4 V	—	15	—	13	8	—	6	—	5.5	5.2		
		1-Phase	5-210	160 A at 26.4 V	—	26	—	22	13	—	11	—	5.3	5.3		
		1-Phase (120V)	5-100	90 A at 23.6 V	23	—	—	—	—	—	—	—	2.8	2.8		
Maxstar 280 (#907 552) (#907 538) w/CPS **Maxstar 280 DX (#907 553) (#907 539)** w/CPS **(#907 539 002)** w/CPS, **CE**	TIG	3-Phase	1-280	235 A at 19.4 V	—	17	15	—	9	7	—	6	6.2	6.0	60 VDC (11 VDC**)	21.3 kg (47 lb.) 22.7 kg (50 lb.) with CPS
		1-Phase	1-280	235 A at 19.4 V*	—	28	26	—	15	13	—	10	6.0	6.0		
	Stick	3-Phase	5-280	200 A at 28 V	—	20	18	—	10	9	—	7	7.2	7.0		
		1-Phase	5-280	180 A at 27.2 V*	—	30	27	—	15	13	—	10	6.2	6.2		



Dynasty welders add AC TIG capabilities and the following AC features (limited on base model)

Waveforms for advanced squarewave, soft squarewave, sine wave and triangular wave.

Balance control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds. DX models provide extended ranges.

Frequency controls the width of the arc cone and can improve directional control of the arc.

Dynasty 280 DX with Insight

Designed to deliver Welding Intelligence.™ The Dynasty 280 DX with Insight incorporates Insight Core™ (standard) and Insight Centerpoint™ welding information management systems into its capabilities. These systems help welding operations improve quality, retain weld records, increase productivity and manage costs.

Dynasty 280 DX water-cooled package shown

**Refer to owner's manual for 208-volt output ratings and duty cycle.*

***Sense voltage for low OCV stick and Lift-Arc™ TIG.*

Industrial

CC | AC/DC | 3 Phase | 1 Phase

Maxstar is DC only

Processes

- TIG (GTAW)
- Stick (SMAW)
- Pulsed TIG (GTAW-P)
- Air Carbon Arc (CAC-A) w/280 models

Comes With

- 2.4 m (8 ft.) power cord (no plug)
- Two 50 mm Dinse connectors
- Quick reference guide (Dynasty models only)

Complete packages Come With

- 2.4 m (8 ft.) power cord (no plug)
- Quick reference guide (Dynasty models only)
- Small Runner™ cart
- Coolmate™ 1.3
- Coolant (4 one-gallon bottles)
- Remote control (foot or wireless foot
- Weldcraft™ water-cooled torch kit
  Dynasty 210: W-250 (WP-20)
  Dynasty 280: W-280 (WP-280)

Most Popular Accessories

- 2-Wheel Trolley Cart #300 971
- Small Runner™ Cart #301 318
- Coolmate™ 1.3 #300 972
- Coolant #043 810

- **Contractor Kits**
  w/RCCS-14 finger control #301 311
  w/RFCS-14 HD foot control #301 309

- **Weldcraft™ Water-Cooled Torch Kits**
  W-250 (WP-20) #300 185
  W-280 (WP-280) #300 990
  W-375 #301 268
- Remote Controls
  RCCS-14 fingertip control #043 688
  RFCS-14 HD foot control #194 744
  Wireless foot control #300 429

Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output at 60% Duty Cycle	Amps Input at Rated Load Output, 50/60 Hz 120V	208V	230V	240V	400V	460V	480V	575V	KVA	KW	Max. Open-Circuit Voltage	Net Weight
Dynasty 210 **(#907 685)** **(#907 685 002)** w/CPS **Dynasty 210 DX** **(#907 686)** **(#907 686 002)** w/CPS **(#907 686 003)** w/CPS, **CE**	TIG	3-Phase	1-210	210 A at 18.4 V	—	14	—	12	7	—	6	—	5.2	4.9	80 VDC (11 VDC**)	21.3 kg (47 lb.) 22.7 kg (50 lb.) with CPS
		1-Phase	1-210	210 A at 18.4 V	—	24	—	20	12	—	10	—	4.9	4.9		
		1-Phase (120V)	1-150	125 A at 15 V	22	—	—	—	—	—	—	—	2.6	2.6		
	Stick	3-Phase	5-210	160 A at 26.4 V	—	15	—	13	8	—	6	—	5.5	5.2		
		1-Phase	5-210	160 A at 26.4 V	—	26	—	22	13	—	11	—	5.3	5.3		
		1-Phase (120V)	5-100	90 A at 23.6 V	23	—	—	—	—	—	—	—	2.8	2.8		
Dynasty 280 **(#907 550)** **(#907 537)** w/CPS **Dynasty 280 DX** **(#907 551)** **(#907 514)** w/CPS **(#907 514 003)** w/Insight and CPS **(#907 514 002)** w/CPS, **CE**	TIG	3-Phase	1-280 (DC) 2-280 (AC)	235 A at 19.4 V	—	19	17	10	9	7	7.0	6.7			60 VDC (11 VDC**)	23.6 kg (52 lb.) 25 kg (55 lb.) with CPS
		1-Phase		235 A at 19.4 V*	—	33	30	17	15	12	6.9	6.8				
	Stick	3-Phase	5-280 5-280	200 A at 28 V	—	22	20	11	10	8	8.2	7.9				
		1-Phase		180 A at 27.2 V*	—	34	31	17	15	12	7.1	7.0				

Maxstar® and Dynasty® 350 and 700

DC (Maxstar) and AC/DC (Dynasty) TIG and Stick

See Literature No. DC/24.0 (Maxstar) and AD/5.0 (Dynasty)

Dynasty 350 Dynasty 700

WIRELESS REMOTE COMPATIBLE

TIG Welding Capability

700 Max. 25.4 mm (1 in.)	700 Max. 25.4 mm (1 in.)
350 Max. 15.9 mm (5/8 in.) Steel	350 Max. 15.9 mm (5/8 in.) Aluminum (Dynasty only)
350 Min. 0.3 mm (0.012 in.)	350 Min. 0.4 mm (0.015 in.)
700 Min. 0.5 mm (0.020 in.)	700 Min. 0.5 mm (0.020 in.)

AUTO-LINE Power Management Technology — Allows for any input voltage hook-up (208–575 V) with no manual linking, providing convenience in any job setting.

Blue Lightning™ high-frequency arc starter for more consistent non-contact starts and greater reliability compared to traditional HF arc starters.

Lift-Arc™ provides AC or DC arc starting without the use of high frequency.

Hot Start™ adaptive control provides positive arc starts.

Auto-postflow calculates the length of postflow time based on the amperage setting. Eliminates need to independently set postflow time.

120-volt auxiliary power dual receptacle to power cooling system or small tools.

Program memory features nine program memories that maintain/save your parameters.

High-speed DC TIG pulse controls capable of 5000 pulses per second.

Dynasty welders add AC TIG capabilities and the following AC features

Waveforms for advanced squarewave, soft squarewave, sine wave and triangular wave.

Balance control to provide adjustable oxide removal enabling high-quality aluminum TIG welds.

Frequency to control arc cone width and improve directional control of arc.

AC amplitude/amperage allows EP and EN amperages to be set independently to precisely control heat input to the work and electrode.

Dynasty 350 system shown

*Sense voltage for Low OCV Stick and Lift-Arc™ TIG.

Heavy Industrial

CC | AC/DC | 3 Phase | 1 Phase

Maxstar is DC only

Processes

- TIG (GTAW)
- Stick (SMAW)
- Pulsed TIG (GTAW-P)
- Air Carbon Arc (CAC-A)

350 Models Come With

- 2.4-m (8-ft.) power cord (no plug)
- Two 50-mm Dinse connectors (350)
- Setup video and reference guide

700 Models Come With*

- Thread-lock torch connector
- Two thread-lock weld cable connectors
- Setup video and reference guide

Power cord NOT included.

Most Popular Accessories

• Runner™ Cart	#300 244
• Coolmate™ 3.5	#300 245
• Coolant	#043 810
• Weldcraft™ Water-Cooled Torch Kits	
W-250 (WP-20)	#300 185
W-375	#301 268
W-400 (WP-18SC)	#300 186
• Remote Controls	
RCCS-14 fingertip control	#043 688
RFCS-14 HD foot control	#194 744
Wireless foot control	#300 429

Model/Stock Number	Welding Process	Input Power	Welding Amp Range*	Rated Output	Amps Input at Rated Load Output, 50/60 Hz 208V	230V	400V	460V	575V	KVA	KW	Max. Open-Circuit Voltage	Machine Only Net Weight
Maxstar 350 (DC) **(#907 334)**	TIG/ Stick	3-Phase	3–350	300 A at 32 V, 60% Duty Cycle	33	30	17	15	12	12.0	11.5	75 VDC (10–15 VDC*)	61 kg (135 lb.)
		1-Phase	3–350	225 A at 29 V, 60% Duty Cycle	41	37	—	19	15	8.6	8.2		
Maxstar 700 (DC) **(#907 103) (#907 103-02-1), CE**	TIG/ Stick	3-Phase	5–700	600 A at 44 V, 60% Duty Cycle	89	80	46	40	32	32	31	75 VDC (10–15 VDC*)	90 kg (198 lb.)
		1-Phase	5–700	450 A at 38 V, 60% Duty Cycle	106	96	—	48	38	22	21		
Dynasty 350 (AC/DC) **(#907 204) (#907 204-01-2), CE**	TIG/ Stick	3-Phase	3–350	300 A at 32 V, 60% Duty Cycle	35	32	16	16	13	12.7	12.1	60 VDC (11 VDC*)	61 kg (135 lb.)
		1-Phase	3–350	225 A at 29 V, 60% Duty Cycle	47	43	—	21	17	9.8	9.1		
Dynasty 700 (AC/DC) **(#907 101) (#907 101-01-2), CE**	TIG/ Stick	3-Phase	5–700	600 A at 44 V, 60% Duty Cycle	97	88	51	44	35	35	34	75 VDC (10–15 VDC*)	90 kg (198 lb.)
		1-Phase	5–700	450 A at 38 V, 60% Duty Cycle	115	104	—	52	42	24	22		

Syncrowave® 250 DX and 350 LX

AC/DC TIG and Stick

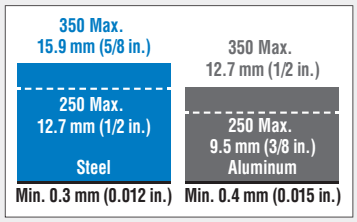
See Literature No. AD/4.2

The world's first conventional squarewave TIG power source with decades of proven performance.

Syncrowave 250
Machine Only

Syncrowave 350
Complete Package

TIG Welding Capability



Squarewave output with AC balance control features adjustable penetration and cleaning action while increasing arc stability on various aluminum alloys, and helps eliminate tungsten spitting and arc rectification.

120-volt auxiliary power receptacle for cooling system or small tools.

Syncro Start™ allows the choice of soft, medium, or hot TIG starts based on the tungsten size and application.

HF arc starting for non-contact arc initiation that reduces tungsten and material contamination.

Dual digital meters allow for quick and easy viewing of actual and preset values of amperage and voltage.

Adjustable postflow of 0 to 50 seconds protects the electrode and area near the termination of the weld.

Coolmate™ **3CS cooler** (shown in Complete package). Three-gallon cooling system features a flow indicator to visually indicate system is working and an external filter to stop objects from entering the water-cooled torch cable.

Last procedure recall automatically recalls the last procedure setup when switching polarity.

Line voltage compensation keeps power source constant regardless of fluctuations in input power (±10 percent).

Lift-Arc™ provides DC arc initiation without the use of high frequency.

Heavy Industrial

CC | AC/DC | 1 Phase

Processes

- TIG (GTAW)
- Stick (SMAW)
- Pulsed TIG (GTAW-P) (optional on 250 DX)
- Air Carbon Arc (CAC-A)

Comes With

- Two 50 mm Dinse connectors
- Power cord NOT included, must be ordered separately

Complete Packages Come With

- No. 37 Running Gear
- Coolmate™ 3CS cooler
- Coolant (four gallons)
- 7.6 m (25 ft.) water-cooled torch (Syncro 250: Weldcraft™ W-250) (Syncro 350: Weldcraft™ W-375)
- 4.6 m (15 ft.) work lead with clamp
- RFCS-14 remote foot control
- Two 50 mm Dinse connectors
- Regulator/flowmeter with hose
- Torch accessory kit with tungsten
- Cable cover
- Power cord NOT included, must be ordered separately

Most Popular Accessories

- Pulser Module for Syncrowave 250 DX #300 548
  For welding thin materials. Provides a heating and cooling effect of the weld puddle to reduce heat input and control distortion of the material. Provides 0.25 to 10 pulses per second.
- Sequencer Module #300 547
  Provides a starting current higher or lower than the welding current. Provides final slope and final current for trailing the weld. Provides a spot timer for TIG spot application.

**Add 63 kg (139 lb.) with Complete Package.*

Model	Stock Number	Welding Amperage Range	Rated Output	Amps Input at Rated Output (Syncrowave 250: 60 Hz; Syncro 350: 50/60 Hz) 208V	230V	460V	575V	KVA	KW	Max. Open-Circuit Voltage	Net Weight*
Syncrowave 250 DX	**(#907 195)** 230/460/575 V, 50/60 Hz, Machine only **(#907 516)** 220/400/440/520 V, 50/60 Hz, **IEC**	3–310	200 A at 28 VAC, 60% Duty Cycle	—	77	38	31	17.6	8.6	80 VDC	172 kg (378 lb.)
			250 A at 30 VAC, 40% Duty Cycle	—	96	48	38	21.98	11.76		
Syncrowave 350 LX	**(#907 199)** 230/460/575 V, 50/60 Hz, Machine only **(#907 517)** 220/400/440/520 V, 50/60 Hz, **IEC**	3–400	300 A at 32 VAC, 60% Duty Cycle	—	110	55	42	25	10.6		225 kg (496 lb.)
			350 A at 34 VAC, 40% Duty Cycle	—	128	65	50	29.5	13.7		

STi 160

See Literature No. DC/27.15 UK

Must be purchased from ITW Italy

Inverter-based, DC power source has a simple-to-use operator interface providing only the necessary controls in a compact machine.

Portable in the shop or at the job site — at 5.2 kg (11.5 lb) the shoulder strap allows the end user to easily move from location to location.

Dual fan technology. An optimised power source cooling system which enables the machine to operate at a lower temperature, thus increasing its performance and life cycle.

Thermal overload protection with indicator light helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

VRD function is a simple design that reduces the open-circuit voltage to 20 volts when the welding power source is not in use.

Digital meter with presetting. Shows preset current before welding and actual value during welding.

Lift-Arc™ start provides TIG arc starting without the use of high frequency or the risk of tungsten contamination.

Adjustable Hot Start™ for Stick arc starts. Adjust the optimal start current for the application. The current automatically increases the output amperage at the start of a weld.

Adjustable Arc force™ prevents sticking. Adjust the optimal arc force value. Adjustable arc force supports positional welding by increasing the output amperage.

Full-function remote control connector for precise amperage control for critical welds on thin materials.

**VRD voltage.*

Light Industrial

CC DC 1 Phase

Processes

- Stick (SMAW)
- TIG (GTAW)

Most Popular Accessories

- Stick Welding Kit: 3 m (10 ft) electrode holder with cable and 3 m (10 ft) work clamp with cable #058 066 079
- RCCS-6M remote fingertip control
  4 m (13 ft) #195 184
  8 m (26 ft) #195 503
- RFCS-6M remote foot control
  4 m (13 ft) #195 183
  6 m (20 ft) #195 504
- RMS-6M 8 m (26 ft) remote on/off control #195 269
- Dinse-Style Flow Thru Adapter
  25 mm for TIG #195 234
- 6-Pin Remote Plug #217 796

Model	Stock Number	Input Power	Welding Amperage Range	Rated Welding Output at 40°C (104°F)	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Weight
STi 160	**(#059 016 012)** Machine only, **CE**	230 VAC Stick	4 – 150 A	100 A at 24.0 VDC, 100% Duty Cycle	20	4.5	2.8	70 V (20 V*)	H: 245 mm (9-5/8 in) W: 145 mm (5-3/4 in) D: 380 mm (15 in)	6.0 kg (13.2 lb.)
				150 A at 26.0 VDC, 25% Duty Cycle	30	7.0	4.8			
		230 VAC TIG	4 – 160 A	100 A at 14.0 VDC, 100% Duty Cycle	13	3.0	2.0	70 V (20 V*)		
				160 A at 16.4 VDC, 20% Duty Cycle	22	5.1	3.5			

STi 203®

See Literature No. DCM/29.6 UK

Must be purchased from ITW Italy

Portable in the shop or at the job site — at 13 kg the STi 203 easily moves from location to location.

Inverter-based, DC power source has a **simple-to-use operator interface** providing only the necessary controls in a compact machine.

Remote amperage control provided through 14-pin receptacle on front of the machine. This permits use of standard remote amperage control devices.

Lift-Arc™ start provides TIG arc start ing without the use of high frequency.

Adaptive Hot Start™ for Stick arc starts automatically increases the output amperage at the start of a weld should the start require it. Prevents the electrode from sticking and creating an inclusion.

DIG control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

Digial Meters – preset current or actual while welding.

Industrial

CC DC 3 Phase

Most Popular Accessories

- Remote Controls
  RCC-14 Fingertip Control #151 086
  RCCS-14 Fingertip Control #043 688
  RFCS-14 HD Foot Control #194 744
  RHC-14 Hand Control #129 340
- International-Style Connectors
  Note: All STi power sources are equipped with International-style connectors for secondary connections. (Power source is shipped with two 50-mm male plugs for use with #1 or #2 AWG size cable.)
  Dinse 50 mm (1 male) #042 418
  Dinse 50 mm (1 male, 1 female) #042 419
  Tweco Terminal Adapter #042 465
  Cam-Lok Terminal Adapter #042 466

Stock Number	Welding Mode	Rated Output	Welding Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz 380	400	440	KVA	KW	Dimensions	Net Weight
(#059 016 015) 400 VAC, 50/60 Hz, **CE**	TIG (GTAW)	200 A at 18 VDC, 40% Duty Cycle	5 – 200 A	85 VDC	13.5	12.8	11.5	8.86	6.51	L: 460 mm W: 190 mm H: 345 mm	17 kg (37.5 lb.)
	Stick (SMAW)	200 A at 28 VDC, 40% Duty Cycle			8.7	8.3	7.5	5.73	4.2		

STH 160

See Literature No. DC/27.25 UK

Must be purchased from ITW Italy

Inverter-based, DC power source has a simple-to-use operator interface providing only the necessary controls in a compact machine.

Best-in-class TIG and Stick arc characteristics for those demanding jobs.

Portable in the shop or at the job site — at 6.0 kg (13.2 lb) the shoulder strap allows the end user to easily move from location to location.

Built-in pulsing capabilities allow the operator to select from four fixed pulse frequencies to satisfy the application.

HF start for non-contact arc starting that eliminates tungsten or material contamination.

Dual fan technology. An optimised power source cooling system which enables the machine to operate at a lower temperature, thus increasing its performance and life cycle.

Thermal overload protection with indicator light helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

VRD function is a simple design that reduces the open-circuit voltage to 20 volts when the welding power source is not in use.

Digital meter with presetting. Shows preset current before welding and actual value during welding.

Lift-Arc™ start provides TIG arc starting without the use of high frequency or the risk of tungsten contamination.

Adjustable Hot Start™ for Stick arc starts. Adjust the optimal start current for the application. The current automatically increases the output amperage at the start of a weld.

Adjustable Arc force™ prevents sticking. Adjust the optimal arc force value. Adjustable arc force supports positional welding by increasing the output amperage.

Selectable trigger configuration allows the operator to choose standard or 2T trigger method.

Built-in gas solenoid eliminates the need for a bulky torch with gas valve.

Full-function remote control connector for precise amperage control for critical welds on thin materials.

Built-in upslope/downslope function helps provide better arc starts and reduces craters.

Adjustable preflow and postflow gives operator better control of the gas parameters affecting weld zone.

**VRD voltage.*

Light Industrial

CC DC 1 Phase

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P)
- Stick (SMAW)

Most Popular Accessories

- P-CASE #656 161 007
- Stick Welding Kit: 3 m (10 ft) electrode holder with cable and 3 m (10 ft) work clamp with cable #058 066 079
- RCCS-6M remote fingertip control
  4 m (13 ft) #195 184
  8 m (26 ft) #195 503
- RFCS-6M remote foot control
  4 m (13 ft) #195 183
  6 m (20 ft) #195 504
- RMS-6M 8 m (26 ft) remote on/off control #195 269
- Dinse-Style Flow Thru Adapter 25 mm adapter for TIG torch connection #195 234
- 6-Pin Remote Plug #217 796

Model/ Stock Number	Input Power	Welding Amperage Range	Rated Welding Output at 40°C (104°F)	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Weight
STH 160 (#059 016 013), CE	230 VAC Stick	4 – 150 A	100 A at 24.0 VDC, 100% Duty Cycle	20	4.5	2.8	70 V (20 V*)	H: 245 mm (9-5/8 in.) W: 145 mm (5-3/4 in.) D: 380 mm (15 in.)	6.0 kg (13.2 lb.)
			150 A at 26.0 VDC, 25% Duty Cycle	30	7.0	4.8			
STH 160 L (#059 016 021), CE	230 VAC TIG	4 – 160 A	100 A at 14.0 VDC, 100% Duty Cycle	13	3.0	2.0			
			160 A at 16.4 VDC, 20% Duty Cycle	22	5.1	3.5			

Miller recommends

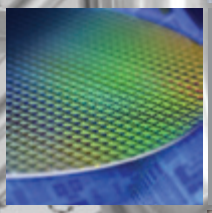
orbitalum
orbital | cutting + welding

ITW Orbital Cutting & Welding

Applications, e.g.

pharmaceutical, biotechnology & chemical industry «

food & beverage industry «



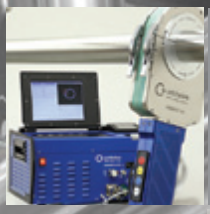
semiconductor industry «

aerospace industry «

heating, ventilation & air conditioning industry «

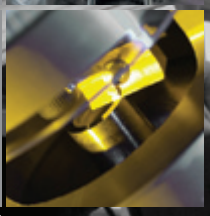
power generation industry «

Orbital cutting, beveling & welding machines for high-purity process piping, e.g.



« orbital (TIG) welding power sources and orbital welding heads »

pipe cutting & beveling machines »



tube facing machines »

pipe end prep machines «

The **ITW ORBITAL CUTTING & WELDING** division with its brands ORBITALUM TOOLS and E.H. WACHS provides global customers one source for the finest in pipe & tube cutting, beveling and orbital welding products.

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Wireless Remote Foot Control

See Literature No. AY/6.5

The Wireless Remote Foot Control, designed specifically for TIG welding in manufacturing, fabrication and plant applications, allows the operator to adjust amperage at the point of use without being limited to the range of the remote cord.

** Some applications are not suitable for wireless communication. Keep in mind that the rated range is subjective, and depends on factors such as obstructions, frequency interference, transmission technology, and weather. The figures listed assume ideal conditions are present.*

Improves productivity and maneuverability by eliminating cord tangles. Reduces clean up time and work area cord clutter.

Improves safety by eliminating control cord and reducing potential trip hazard.

Improves reliability by eliminating control cord failure.

Multiple frequency sharing allows up to 20 systems to operate in a 27.4-m (90-ft) radius with accuracy and precision — and without delay, system interference, or crosstalk.

Auto On feature extends the battery life up to 250 hours of welding without turning the pedal on and off.

Easy-to-install receiver plugs directly into the 14-pin receptacle of Miller machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver. (Control is preprogrammed when purchased with the receiver.)

Easy-Glide Wear Pads™ glide across concrete, making it easy to reposition the pedal for comfort and speed.

Industrial

Processes
- TIG (GTAW)
- Pulsed TIG (GTAW-P)

Comes Complete With
- Wireless foot control transmitter
- Wireless 14-pin receiver
- Battery box with 3 AA batteries
- 4 Easy-Glide Wear Pads™

Suggested Power Sources
- Maxstar® 150 STL/STH*
- Maxstar® 200 SD/DX/LX
- Maxstar® 350/700
- Dynasty® 200 SD/DX
- Dynasty® 350/700
- Syncrowave® 250 DX
- Syncrowave® 350 LX
- PipeWorx™ Welding System (may require separate kit

**Requires Adapter Cord #300 507.*

Note: If your power source is not listed, visit MillerWelds.com/wireless to check compatibility.

Most Popular Accessories
- Replacement Easy-Glide Wear Pad™ #248 274 (sold individually)
- Replacement Battery Box #249 297

Model/Stock Number	Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Weight
Wireless Foot Control System (#300 429), CE	Foot Control (Transmitter)	(3) AA Batteries	250 hrs	27.4 m (90 ft.)	-25°C to +70°C (-13°F to +158°F)	2.4 Ghz (ISM Band)	<3 mW	Internal	1.4 kg (3 lb.) w/Batteries
	14-Pin Receiver	10–35 V AC or DC	N/A						0.07 kg (0.16 lb.)

Wireless Remote Hand Control

See Literature No. AY/6.6

The Wireless Remote Hand Control, designed for Stick, TIG, MIG and Flux-cored welding, allows the operator to adjust parameters for different joint configurations, electrodes and wire types/sizes at the point of use instead of walking back to the machine.

** Some applications are not suitable for wireless communication. Keep in mind that the rated range is subjective, and depends on factors such as obstructions, frequency interference, transmission technology, and weather. The figures listed assume ideal conditions are present.*

Improves productivity by allowing parameter adjustments up to 90 meters (300 ft.) away from welder without returning to the machine or calling for assistance.

Improves weld quality. Operators can easily adjust their machines to optimize the parameters for different joint configurations, electrodes, and wire types and sizes.

Improves safety by eliminating control cord and reducing potential trip hazard.

Smart Touch™ buttons increase or decrease machine parameters in 1% or 5% increments, for quick and accurate adjustments.

Multiple frequency sharing allows up to 20 systems to operate in a 27.4 m (90-ft) radius with accuracy and precision — and without delay, system interference, or crosstalk.

Easy-to-install receiver plugs directly into the 14-pin receptacle of Miller machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver.

Digital meter display allows presetting percentage of machine output before welding, and viewing amperage and voltage while welding.

High-visibility color makes hand control easy to locate on the job site.

Industrial

Processes
- TIG (GTAW)
- Pulsed TIG (GTAW-P)
- Stick (SMAW)
- MIG (GMAW)*
- Flux-cored (FCAW)*

**Only with voltage-sensing feeder.*

Comes Complete With
- Wireless hand control transmitter
- Wireless 14-pin receiver
- Battery box with 3 AA batteries
- Belt clip

Suggested Power Sources
- Gold Star® Series
- CST™ 280
- Maxstar® (except STR)
- Dynasty®
- Dimension™ Series
- XMT® Series (except VS)
- Trailblazer®
- Big Blue® 300 Pro
- Big Blue® 350X PipePro®
- Big Blue® Eco Pro

Note: If your power source is not listed,visit MillerWelds.com/wireless to check compatibility.

Most Popular Accessories
- Replacement Belt Clip #249 233
- Replacement Battery Box #249 297

Model/Stock Number	Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Weight
Wireless Hand Control System (#300 430), CE	Hand Control (Transmitter)	(3) AA Batteries	250 hrs	91 m (300 ft.)	-25°C to +70°C (-13°F to +158°F)	2.4 Ghz (ISM Band)	<3 mW	Internal	.27 kg (0.6 lb.) w/Batteries
	14-Pin Receiver	10–35 V AC or DC	N/A						0.07 kg (0.16 lb.)

Blue Star® 185

See Literature No. ED/2.5

Reliable outdoor portable power! Great for farm, ranch, maintenance, construction and hobbyist.

All engine controls on front panel, lighter weight, more power and greater fuel capacity!

Compact and portable, its small footprint uses little truck space. Optional running gear also makes the Blue Star one-man portable.

Stick and TIG capable.

Accu-Rated™ peak generator power is usable for maximum generator loads such as plasma cutting, Millermatic® MIG welders and motor starting.

Includes electric start, 120 VAC GFCI and 240 VAC receptacles, 6.25-gallon fuel capacity, auto-idle and engine hour meter.

Light Industrial

CC DC

Processes
- Stick (SMAW)
- TIG (GTAW)

Gasoline Engine
Kohler CH440:
13.4 HP at 3600 RPM

One-cylinder, four-cycle, OHV, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories
• Lifting Eye	#195 353
• Running Gear	#301 246
• Protective Cover	#301 245

Stock Number	Welding Mode	Welding Process	Amperage Range	Rated Output at 40° C (104° F)	Single-Phase Generator Power at 40° C (104° F)	Dimensions	Net Weight
(#907 664) Kohler	CC/DC (Stick/TIG)	DC Stick/TIG	60-195	185 A at 25 V, 20% Duty Cycle 150 A at 25 V, 100% Duty Cycle	Peak: 6500 watts Continuous: 6200 watts	H: 629 mm (24.75 in.) W: 524 mm (20.625 in.) D: 794 mm (31.25 in.)	134 kg (296 lb.)

Bobcat™/Trailblazer®: Which is right for you?

Gas Model Comparison

Bobcat™

The most popular welder/generator:
- Cost-effective price point
- Good for Stick and Flux-Cored welding
- Standalone generator power
- Rugged and powerful performance

Trailblazer®

The best performer in the industry:
- Professional welder's choice
- Independent weld and generator power
- Exceptional fuel efficiency and quiet operation
- Unbeatable arc performance

Sound Levels (at 23 feet)	Bobcat 225	UPGRADE	Bobcat 250	UPGRADE	Trailblazer 275	UPGRADE	Trailblazer 325
At Maximum Load/At 150 Amps	73.5 dB/72 dB		72.5 dB/72 dB		73.5 dB/65 dB		73.5 dB/65 dB
Compared to Previous Model	up to 25 percent less noise		up to 33 percent less noise		up to 68 percent less noise		up to 68 percent less noise
Sound Quality	Good		Very good		Excellent		Excellent
Fuel System							
Typical Runtime per 12 Gallon Tank	13 hours		13/15.5 hours with EFI		Up to 19.5 hours with options		Up to 19.5 hours with options
Efficiency	Good		Good/Very good with EFI		Excellent		Excellent
Type	Gasoline		Gasoline or LP		Gasoline or LP		Gasoline
Delivery	Carburetor		Carburetor or EFI available		Carburetor		Carburetor or EFI available
Generator							
Watts	11,000		11,000/12,000 with EFI		12,000/11,000 with LP		12,000
Clean Power Quality	Very good/Excellent		Very good/Excellent		Excellent		Excellent
Power While Welding	Fair/Good With voltage control set near maximum		Good Easier to fine-tune with arc voltage control near maximum		Smart-Cor™ delivers excellent independent weld and generator power with no interaction between tools and welding arc		Smart-Cor™ delivers excellent independent weld and generator power with no interaction between tools and welding arc
Excel™ Power Generator (120 V, 60 Hz at all Engine Speeds)	N/A		N/A		N/A		Excel™ Power available
Weld Performance							
Stick	Good/Very good		Very good		Excellent		Excellent
MIG – Wire (Solid/FCAW), Steel	Fair (.035 in.)		Good (.035–1/16 in.)		Excellent (.023–1/16 in.)		Excellent (.023–5/64 in.)
MIG – Wire, Aluminum w/Spool Gun	Fair/Good (add WC-115A with contactor)		Very good (add WC-115A with contactor)		Excellent (add WC-24)		Excellent (add WC-24)
DC TIG (Steel)	Good		Very good		Excellent		Excellent
Pulsed DC TIG (Thin Metal, Out of Position)	N/A		N/A		Yes		Yes
AC Weld	70–150 amps (TIG: add HF-251D-1 and contactor kit)		40–250 amps (TIG: add HF-251D-1 and contactor kit)		Add Dynasty®		Add Dynasty®
Carbon Arc Gouging	N/A		Good/Very good Carbons: Rated 3/16 in.		Very good Carbons: Rated 3/16 in.		Very good Carbons: Rated 3/16 in., Capable 1/4 in.
Key Features							
Digital Meters with SunVision™	N/A		N/A		Yes		Yes
Maintenance Displays	Hours/Oil change		Hours/Oil change/Fuel		Hours/Oil change/Fuel/RPMs		Hours/Oil change/Fuel/RPMs
Battery Charge/Jump Start	N/A		N/A		N/A		12/24-volt available
14-pin Receptacle	N/A		N/A		Yes		Yes

Bobcat™ Series Gas, LP and Diesel

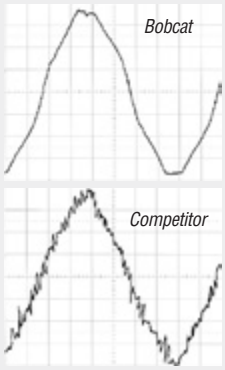
Bobcat 250 EFI shown

Bobcat engine-driven welder/generators are the top selling in their class because they are engineered to be reliable, powerful and durable. Their multiprocess capabilities make them ideal for maintenance trucks where reduced size and weight are essential.

Cleaner and stronger generator power

11,000 watts (12,000 on Bobcat 250 with EFI) of clean, truly usable generator power that is Accu-Rated™, not inflated — tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

Advanced generator technology virtually eliminates power spikes and other electrical imperfections so welds are cleaner and jobsite tools can run without interruption, maximizing quality, productivity and profit.



Waveform Comparison

Fewer refueling trips

Large 12-gallon fuel capacity means extended runtimes and less refueling.

Versatile AC and DC welding

Provides AC and DC welding output for greater versatility and quality welds on all types of metals. DC is smooth and easy to run while AC stick is used when arc blow occurs.

More portable, uses less truck space

Smaller and lighter — 17 percent less cubic space and weighing up to 100 pounds less than the competition — means moving Bobcat welder/generators is faster and easier, for maximum productivity. And because they take up less space, they let work trucks carry more equipment and gear so your work crews can meet weight limits and be ready for anything.

17%
LESS CUBIC SPACE THAN THE COMPETITION

Easier maintenance

Easy-to-read front panel maintenance displays show engine hours and hours left before an oil change is due. This intuitive design makes maintenance fast and easy.

- Oil checks from the top by the front panel
- Toolless panels that allow for quick access
- Single-side fuel fill and oil drain/filter

Engine Driven

Bobcat™ 225 (Gas) See Literature No. ED/4.4

Cost-effective, multiprocess welder/generator primarily used for stick welding. Great for farm, ranch, maintenance/repair and as a stand-alone generator.

Features three DC stick/TIG controls, one AC stick TIG control and one wire range for output control. Stick ranges designed for 2.4, 3.2 and 4 mm (3/32, 1/8 and 5/32 in.). Very easy to set.

Bobcat™ 3 Phase (Gas) See Literature No. ED/4.33

Designed for farm and ranch owners in need of single- and three-phase power to run 480-volt three-phase pivot irrigation systems or to provide backup power for home, farm and/or ranch.

Bobcat™ 250 (Gas, LP or Diesel) See Literature No. ED/4.4 (Gas/LP) and ED/4.34 (Diesel)

Most Popular! **Multiprocess engine-driven welder/generator capable of carbon arc gouging features a larger stabilizer for less spatter and smoother arc. Ideal welder/generator for maintenance/repair, construction, farm/ranch or as a stand-alone generator.**

Convenient front panel fuel gauge.

More precise amperage settings with wider range for optimal stick/flux-cored welding.

Features four AC/DC stick/TIG controls and two wire ranges for output control. Stick ranges designed for 2.4, 3.2, 4 and 4.8 mm (3/32, 1/8, 5/32 and 3/16 in.). Very easy to set.

Add optional electronic fuel injection (EFI) — improved fuel efficiency for maximum productivity and profitability

Adding EFI to your Bobcat 250 welder/generator provides multiple benefits. With EFI you'll get faster, more reliable starts in any weather — no choke adjustments needed. EFI-equipped Bobcat 250 machines are also up to 42 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity.

**Recommended for operation at altitudes above 5,000 feet.*

Industrial

CC/CV AC/DC

Processes

- AC/DC Stick (SMAW)
- MIG (GMAW)[1]
- Flux-cored (FCAW)[1]
- AC[2]/DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)[3] (rated 4.8 mm [3/16 in.] carbons)

[1]With voltage-sensing feeder only.

[2]With Dynasty® 210 Series or HF-251 (non-critical).

[3]Bobcat 250 models only.

Engines

Gas: Kohler CH730
23.5 hp at 3,600 rpm
EFI Gas: Kohler ECH730
23 hp at 3,600 rpm
LP: Kohler CH730
Liquid withdrawal LP system
21.5 hp at 3,600 rpm
V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
EPA Tier 4 Final Diesel: Kubota D722
19 hp at 3,600 rpm
Three-cylinder, industrial, liquid-cooled
Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ Feeders
- Dynasty® 210 Series
- Spectrum® 625 X-TREME™
- Multi-Terrain Running Gear
- Off-Road Running Gear
- Protective Cage with Cable Holders
- Hose and LP Tank Mounting Assembly
- Remote Oil Drain/Filter Kits
- All-Purpose Running Gear
- Full KVA Adapter Cord #300 517
- Protective Cover
- HWY-1000 Trailer #195 013
- GFCI Panel Mount 120 VAC Duplex Kit #300 975
- Electric Fuel Pump Kit* (gas models only) #300 976
- Spark Arrestor Kit (gas models only) #300 924

	Model	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Generator Power 40°C (104°F)	Net Weight
Gasoline	**Bobcat 225**	**(#907 498 001)** Kohler **(#907 498)** Kohler with GFCI	CC/AC	Stick/TIG	70 – 150 A	150 A at 25 V, 100% Duty Cycle	Single-phase Peak: 11,000 watts Continuous: 9,500 watts	220 kg (485 lb.)
			CC/DC	Stick/TIG	50 – 225 A	225 A at 25 V, 100% Duty Cycle		
			CV/DC	MIG/FCAW	19 – 28 V	200 A at 20 V, 100% Duty Cycle		
	Bobcat 3 Phase	**(#907 505)** Kohler with GFCI	CC/AC	Stick/TIG	50 – 200 A	200 A at 25 V, 100% Duty Cycle	Single-phase/three-phase Peak: 11,000 watts Continuous: 9,500 watts/10,000 watts	225 kg (495 lb.)
			CC/DC	Stick/TIG	50 – 210 A	210 A at 25 V, 100% Duty Cycle		
			CV/DC	MIG/FCAW	19 – 28 V	200 A at 20 V, 100% Duty Cycle		
Gas or LP	**Bobcat 250**	**(#907 500 001)** Kohler **(#907 500)** Kohler with GFCI **(#907 500 002)** Kohler with electric fuel pump* **(#907 502) EFI** Kohler **(#907 504) LP** Kohler with GFCI *(order Hose and LP tank mounting assembly #300 917 separately)*	CC/AC	Stick/TIG	40 – 250 A 40 – 275 A w/EFI	250 A at 25 V, 60% Duty Cycle 225 A at 25 V, 100% Duty Cycle	Single-phase Peak: 11,000 watts Continuous: 9,500 watts **EFI Model** **Peak: 12,000 watts** **Continuous: 10,500 watts**	227 kg (501 lb.)
			CC/DC	Stick/TIG	40 – 250 A 40 – 275 A w/EFI	250 A at 25 V, 100% Duty Cycle		
			CV/DC	MIG/FCAW	17 – 28 V	275 A at 25 V, 60% Duty Cycle 250 A at 25 V, 100% Duty Cycle		
Diesel	**Bobcat 250 Diesel**	**(#907 565 001)** Kubota **(#907 565)** Kubota with GFCI	CC/AC CC/DC	Stick/TIG	40 – 275 A	250 A at 25 V, 100% Duty Cycle	Single-phase Peak: 11,000 watts Continuous: 9,500 watts	289 kg (638 lb.)
			CV/DC	MIG/FCAW	17 – 28 V	275 A at 25 V, 60% Duty Cycle 250 A at 28 V, 100% Duty Cycle		

Trailblazer® Series

Gas, LP and Diesel

See Literature No. ED/4.75 (Gas/LP) and ED/4.8 (Diesel)

Trailblazer 325 EFI shown

Trailblazer welder/generators deliver unbeatable arc performance providing the smoothest, most stable arc in the industry. The Trailblazer exclusive Auto-Speed™ technology delivers superior runtimes, increased fuel efficiency, and improved welder/generator performance.

Unbeatable arc performance

Wide amperage output with better welding deposition rates means you can get jobs done faster, saving time and money. The Trailblazer also has precise arc control, which allows you to fine-tune the arc to match your personal preferences and quickly dial in the perfect parameters to optimize weld quality and maximize productivity across a variety of applications and welding processes.

Cleaner and stronger generator power

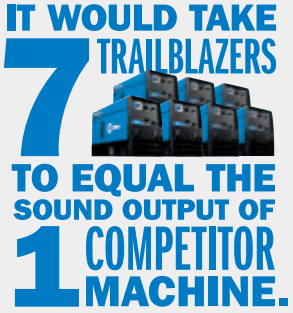
Combines a 25 hp engine and 12,000 watts of clean, truly usable generator power that is Accu-Rated™, not inflated — tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

Maximum cost savings

Less money spent on fuel means more profit for you. Every Trailblazer welder/generator has fuel-saving Auto-Speed technology — add optional Excel™ power and EFI to save even more on fuel costs and enjoy a combination of advanced, profit-enhancing features that are only available on a Trailblazer welder/generator.

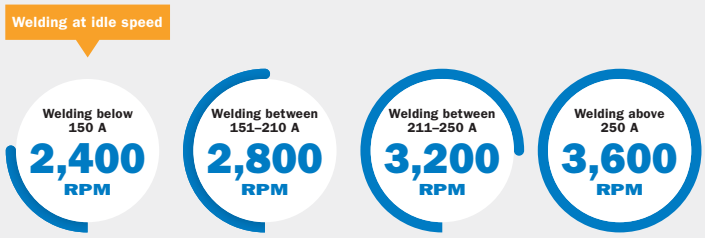
Safer, more productive jobsites

Quieter jobsites are safer and more productive because work crews can communicate easier, and work can start earlier and end later — even in noise-sensitive areas.



Auto-Speed technology

Get the welding power you need — plus reduced fuel consumption and lower noise levels for a more-profitable, safer jobsite. Unlike competitive machines that operate at 3,600 rpm (max) under any load, Miller-exclusive Auto-Speed technology responds to weld requirements by automatically adjusting engine speed to one of four rpm levels so the engine never works harder than necessary. Refueling time and operating costs are reduced, which means more productivity and profitability. Auto-Speed technology — available only from Miller.



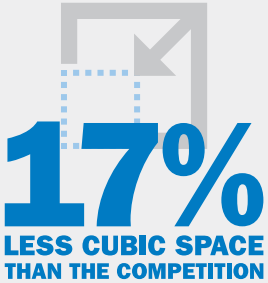
Auto-Speed™ in XX18 mode

Fewer refueling trips

Spend more time working and less time refueling. Only Trailblazer welder/generators provide Auto-Speed technology, plus Excel power and electronic fuel injection (EFI) options, to deliver maximum runtime.

More portable, uses less truck space

Smaller and lighter — 17 percent less cubic space and 10 percent less machine weight than the competition — means moving Trailblazer welder/generators is faster and easier, for maximum productivity.

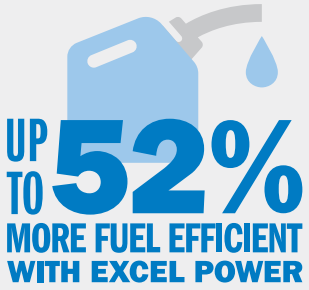


Options to Maximize Your Trailblazer 325 Performance

Excel™ power

Unlike competitive machines that provide auxiliary power only at 3,600 rpm (max), Excel power delivers a full 2,400 watts (20 A) of 120-volt inverter-based, pure sine wave power at all speeds, including idle. With Excel power you can operate jobsite tools like grinders at quiet, fuel-saving speeds.

Refueling time and operating costs are reduced with Excel power, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered. Excel power — available only from Miller.

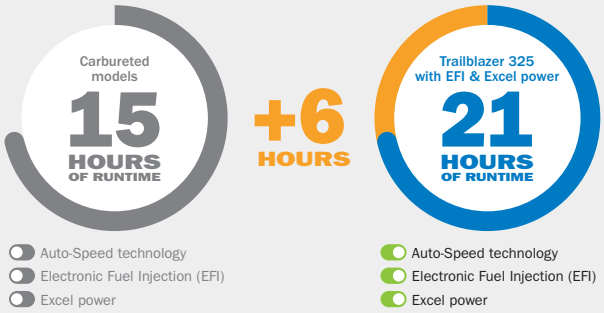


Based on generator-only use for total runtime.

EFI (gas models)

Adding EFI to your Trailblazer welder/generator adds multiple benefits. With EFI, you'll get faster, more-reliable starts in any weather — no choke adjustments needed. EFI-equipped Trailblazer machines are also up to 40 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity.

Add Excel power to your Trailblazer with EFI, and you'll have the most fuel-efficient compact welder/generator available.



Based on typical usage — 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

Battery charge/jump start (gas models)

Reduce downtime with battery charge/jump start capability. Designed and recommended for mechanics or anyone else responsible for a fleet of trucks or equipment. By using your Trailblazer to charge dead batteries or jump a stubborn engine, you'll keep your crew working and the fleet up and running.

Note: Battery charge/jump cables (#300 422) must be ordered separately.

**Recommended for operation at altitudes above 5,000 feet.*

Heavy Industrial

CC CV DC

Processes

- Stick (SMAW)
- MIG (GMAW)[1]
- Flux-cored (FCAW)[1]
- DC TIG/Pulsed TIG (GTAW/GTAW-P)[2]
- Air carbon arc cutting and gouging (CAC-A) (rated 4.8 mm [3/16 in.] carbons, capable 6.4 mm [1/4 in.] carbons)

[1]*With wire feeder.*

[2]*Two-piece TIG torch recommended.*

Engines

Gas: Kohler CH730
23.5 hp at 3,600 rpm
EFI Gas: Kohler ECH730
23 hp at 3,600 rpm
LP: Kohler CH730
Liquid withdrawal LP system
21.5 hp at 3,600 rpm
V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
EPA Tier 4 Final Diesel: Kubota D902
24.8 hp at 3,600 rpm
Three-cylinder, industrial, liquid-cooled
Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

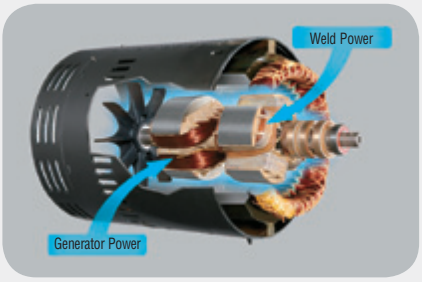
- Spoolmatic® 30A / WC-24 Control #130 831 / #137 549
- SuitCase® X-TREME™ 12VS
- Dynasty® Series
- Spectrum® 625 X-TREME™
- Multi-Terrain Running Gear
- Off-Road Running Gear
- Protective Cage with Cable Holders
- Hose and LP Tank Mounting Assembly
- All-Purpose Running Gear
- Full KVA Adapter Cord #300 517
- Protective Cover
- HWY-1000 Trailer #195 013
- Electric Fuel Pump Kit (gas models only) #300 976
  Recommended for operation at altitudes above 5,000 feet.
- 7.6 m (25 ft.) Battery Charge/Jump Cables with plug (for Trailblazer 325 EFI #907 512 002 only) #300 422

	Model	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Single-Phase Generator Power 40°C (104°F)	Net Weight
Gas or LP	**Trailblazer 275**	**(#907 506 001)** Kohler **(#907 506)** Kohler with GFCI **(#907 691) LP** Kohler with Excel power and GFCI *(order hose and LP tank mounting assembly #300 917 separately)*	CC/DC	Stick/TIG	10 – 275 A	275 A at 28 V, 100% Duty Cycle	Peak: 12,000 watts 11,000 watts (LP) Continuous: 10,500 watts 9,500 watts (LP) **Excel Power (optional) 2,400 watts** 20 A at 120 V, 60 Hz pure generator power at idle speed and while welding	208 kg (459 lb.)
			CV/DC	MIG/FCAW	10 – 35 V	275 A at 28 V, 100% Duty Cycle		
Gasoline	**Trailblazer 325**	**(#907 510 001)** Kohler **(#907 510)** Kohler with GFCI **(#907 510 002)** Kohler w/electric fuel pump* **(#907 512) EFI** Kohler **(#907 512 001) EFI** Kohler with Excel power **(#907 512 002) EFI** Kohler with Excel power and battery charge/jump start **(#907 512 003) EFI** Kohler w/Excel power and GFCI	CC/DC	Stick/TIG	10 – 325 A	325 A at 28 V, 100% Duty Cycle		209 kg (460 lb.)
			CV/DC	MIG/FCAW	10 – 35 V	325 A at 28 V, 100% Duty Cycle		
Diesel	**Trailblazer 325 Diesel**	**(#907 566 001)** Kubota **(#907 566)** Kubota with GFCI **(#907 566 002)** Kubota with Excel power **(#907 566 005)** Kubota with GFCI Int'l receptacles	CC/DC	Stick/TIG	10 – 325 A	325 A at 33 V, 100% Duty Cycle		281 kg (620 lb.)
			CV/DC	MIG/FCAW	10 – 35 V	325 A at 33 V, 100% Duty Cycle		

Trailblazer® 302 Air Pak™

See Literature No. ED/4.78

Powerful all-in-one tool is designed for repair and construction with unbeatable multiprocess weld quality, integrated rotary screw air compressor, 13,000 watts of generator power for jobsite tools, and battery charge/jump start.



Strongest combined generator/compressor power

- Delivers an industry-leading 13,000 watts of peak generator power independent of weld settings — enough to power a Spectrum® 875 plasma cutter, and provide air for plasma cutting at the same time (rated 15.9 mm [5/8-inch] mild steel).

Four tools in one

- Professional welding performance in all processes with the best welding arc in its class
- 13,000-watt generator
- 31 CFM rotary screw air compressor
- 12-/24-volt battery charger/jump starter

Superior arc performance

- Preset dig settings optimized for the majority of Stick welding applications
- Best in class Wire arc performance
- Two Lift-Arc™ TIG modes ideal for most DC TIG applications

Battery charge/jump start

- Provides selectable 12- or 24-volt battery charging capability
- Provides up to 450 amps of battery jump-starting capability
- Convenient front panel battery charger/jump starter access

Rotary screw air compressor

- Delivers up to 31 CFM and 160 PSI of air with no storage tank
- Runs many tools at idle speed
- Gives 100 percent deliverable air
- Compressor is warranted by Miller for three years
- Air outputs rated at an industry high 40° C (104° F)
- Front panel air pressure adjustment (80 to 160 PSI)
- Screw compressor is designed for more than 30,000 hours of operation
- Automatic overpressure shutdown with indication

**Additional models are available – visit MillerWelds.com or your distributor.*

***Battery charge/jump cables (#300 422) must be ordered separately.*

Heavy Industrial

CC/CV AC/DC

Processes

- AC/DC Stick (SMAW)
- MIG (GMAW)[1]
- Flux-cored (FCAW)[1]
- AC[2]/DC[3] TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 4.8 mm [3/16 in.] carbons, capable 6.4 mm [1/4 in.] carbons using integrated air compressor)
- Battery Charger/Jump Start

[1]With wire feeder.

[2]With Dynasty® 200 Series or HF-251 (non-critical).

[3]Two-piece TIG torch recommended.

Gasoline Engine

Kohler CH750: 30 HP at 3600 RPM V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ 12VS Wire Feeder
- Spoolmatic® 30A Aluminum Spool Gun / WC-24 Control #130 831 / #137 549
- Spectrum® 625 X-TREME™ #907 531
- Protective Cover #300 379
- Adapter Cord, Full KVA #300 517
- 7.6 m (25-ft.) Battery Charge/Jump Cables with Plug #300 422

	Stock Number*	Welding Mode	Process	Amperage/ Voltage Ranges	Rated Weld Output at 32 V 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
Gasoline	**(#907 549-001**)** Kohler **(#907 549**)** Kohler with GFCI and Electric Fuel Pump **(#907 549-003**)** Kohler with GFCI, Cooler/Separator and Electric Fuel Pump	CC/DC	Stick/TIG	10-300 A	280 A at 100% Duty Cycle	**Peak:** 13,000 watts **Continuous:** 11,000 watts	H: 711 mm (28 in.) H: 876 mm (34.5 in.) to top of exhaust W: 508 mm (20 in.) D: 1514 mm (59.625 in.)	350 kg (771 lb.)
		CV/DC	MIG/FCAW	13-35 V, 350 A	300 A at 100% Duty Cycle 350 A at 60% Duty Cycle			
		CC/AC	TIG/Stick	10-225 A	200 A at 60% Duty Cycle			

Air Compressor	Features	Free Air Delivery at 3600 RPM	Free Air Delivery at 3000 RPM	Free Air Delivery at 2400 RPM (Idle)	Working Pressure Constant	Duty Cycle	Oil Capacity
By Miller	Rotary screw with electric clutch for on/off. Oil change intervals 500 hours. Life expectancy 30,000 hours.	0.88 m^3/min. (31 CFM)	0.79 m^3/min. (28 CFM)	0.62 m^3/min. (22 CFM)	80–160 PSIG	100%	1.7 L (1.75 qt.)

Big Blue® 350X PipePro®

Designed exclusively for transmission pipeline work, the system offers a complete welding solution. With Stick welding capabilities — as well as MIG/FCAW welding capabilities to meet high-strength steel requirements — it is ideal for the most demanding pipeline jobs.

Bernard™ PipePro Dura-Flux™

- Features a lightweight, rotatable Hi-Viz™ neck that matches the SuitCase X-TREME HD performance, resulting in optimal arc characteristics.
- Power cable with internal trigger leads provides better weld-joint access.
- Replaceable liner makes maintenance simple.
- Comfortable handle with dual schedule switch optimizes wire feed speed and reduces user fatigue.

Hobart Brothers Fabshield® 79T8/79T8Ni2

- Self-shielded flux-cored tubular wires specifically designed for transmission pipeline applications.
- Fast-freezing, easy-to-remove slag decreases time spent clearing weld beads.
- All-position welding, excellent vertical-down performance, reduces fatigue and weld cycle time.
- Four 10-lb vacuum-packed spools per jobsite-friendly bucket, 490 kg (1080 lb) per pallet.
- Ideal for multipass welding on deep-groove pipe weld butt joints.
- 79T8 typical applications are on X70 grade pipe and below.
- 79T8Ni2 typical applications are on X80 grade pipe.

Miller Big Blue 350X PipePro

- Easy arc starts and better arc control provide improved arc performance to produce more consistent welds.
- Enhanced MIG/FCAW arc control for best in class performance.
- Quieter — 40% less noise improves work site communication and safety.
- The Vault — ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.
- 12,000 watts of peak single-phase auxiliary power runs multiple jobsite tools.
- Compact size and weight optimizes truck space.
- 20% greater fuel efficiency.
- Auto Remote Sense™ (ARS) — eliminates confusion of a remote/panel switch.
- LINE-X® cover is tough to provide superior impact, corrosion and abrasion protection.
- Optional stainless steel package available.
- CSA, IEC and NEMA compliant.

Miller SuitCase® X-TREME™ 8HD

- Voltage-sensing, heavy-duty wire feeder features numerous performance-driven benefits.
- High-torque motor can handle large or small diameter flux-cored wires with ease.
- Improved motor control allows for incredible precision and arc control.
- Dual schedule operation when connected to PipePro Dura-Flux gun, fixed 12% reduction in wire feed in Schedule B.

Miller Wireless Remote Hand Control

- Completely cordless design increases project productivity, saves money and improves operator safety.
- Extends remote welding control range to 91.4 m (300 ft.) for jobsite mobility.
- Eliminates costly cord failures.
- Improves weld quality with precise operator control.
- Belt clip keeps the remote secure and accessible.

Heavy Industrial

CC/CV DC

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 6.4 mm [1/4 in.] carbons)

Diesel Engine

Mitsubishi S4L2: 24.7 HP at 1800 RPM
Four-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Big Blue 350X PipePro System Consists Of (ordered separately)

- Big Blue® 350X PipePro® engine drive
- SuitCase® X-TREME™ 8HD wire feeder #300 594-003
- Wireless Remote Hand Control and 14-pin receiver #300 430
- Wireless Antenna Kit #300 749
- Bernard™ PipePro® Dura-Flux™ gun with 3 m (10 ft) cable with 1.6 mm (1/16 in.) liner #301 011
- Hobart Brothers Fabshield®
  - 1.6 mm (1/16 in.) 79T8 #S228519-V32
  - 1.6 mm (1/16 in.) 79T8Ni2 #S228819-V32
  - 2.0 mm (5/64 in.) 79T8 #S228525-V32
  - 2.0 mm (5/64 in.) 79T8Ni2 #S228825-V32

Most Popular Accessories

Big Blue 350X PipePro

- 1-Phase Full KVA Plug Kit #119 172
- Engine Filter Kit (includes air, oil and fuel filters) #244 711

SuitCase X-TREME 8HD Feeder

- V-Knurled Drive Rolls
  - 1.6 mm (1/16 in.) #079 609
  - 2.0 mm (5/64 in.) #079 610

PipePro Dura-Flux Gun

- Quik Tip™ Contact Tips
  - 1.6 mm (1/16 in.) #T1116
  - 2.0 mm (5/64 in.) #T1564
- Hi-Viz™ Quik Tip™ Insulator #7010062
- Neck (70° x R2 in) #7010068
- Neck Liner
  - 1.6 mm (1/16 in.) #QJL-116
  - 2.0 mm (5/64 in.) #QJL-564
- Cable Liner
  - 1.6 mm (1/16 in.) #44215
  - 2.0 mm (5/64 in.) #44315

Model/Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Net Weight
Big Blue 350X PipePro Engine Drive only (#907 527) Mitsubishi	CC/DC	TIG	20-400 A	400 A at 26 V, 40% Duty Cycle 350 A at 24 V, 100% Duty Cycle	**Peak:** 12,000 watts **Continuous:** 10,000 watts	H: 813 mm (32 in.) W: 667 mm (26-1/4 in.) D: 1422 mm (56 in.)	**Caterpillar** 470 kg (1037 lb.) **Mitsubishi** 462 kg (1018 lb.)
		Stick	20-400 A	350 A at 34 V, 60% Duty Cycle 325 A at 33 V, 100% Duty Cycle			
	CV/DC	MIG	14-40 V	350 A at 31.5 V, 100% Duty Cycle			

Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Max. Spool Size Capacity	Dimensions	Net Weight
SuitCase X-TREME 8HD (#300 877)	Operates on open-circuit voltage and arc voltage: 14-48 VDC/110 Max. OCV	330 A at 60% Duty Cycle	**Low Range** 0.65-5.2 m/min (25-200 IPM) **High Range** 4.5-19.8 m/min (175-780 IPM) dependent on arc voltage	**Solid Wire** 0.6-1.6 mm (.023-.062 in.) **Flux-cored** 0.8-2.0 mm (.030-.078 in.)	203 mm (8 in.), 6.4 kg (14 lb.)	H: 324 mm (12-3/4 in.) W: 184 mm (7-1/4 in.) D: 457 mm (18 in.)	14 kg (30 lb.)

Big Blue® 400X Pro

See Literature No. ED/5.7

Clean, quiet and reliable low-speed diesel is more efficient than ever before. Ideal for construction, piping and fleet use.

400-amp output now available in a compact package. Provides up to 400 amps at 100 percent duty cycle.

The Vault—ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.

Low OCV Stick (VRD) for improved operator safety without compromising arc starts.

Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Quiet operation. Only 71.6 decibels (96 Lwa) under full load. Improves jobsite communication and safety.

CE, CSA, IEC and NEMA compliant.

Standard features include digital weld meters, auto idle, 120-volt block heater and output contactor control.

Heavy Industrial

CC CV DC

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 4.8 mm [3/16-in.] carbons)

Diesel Engine

Kubota V1505: 20.2 HP at 1800 RPM

Four-cylinder, industrial, liquid-cooled

CAT C1.5: 21.7 HP at 1800 RPM

Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® Feeders
- Dynasty® 200 Series
- Spectrum® 875
- Protective Cover #195 301

	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Ship Weight
Diesel	**(#907 631)** Kubota, **CE** **(#907 630)** CAT, **CE**	CC/DC	TIG/Stick	20 – 400 A	300 A at 32 V, 100% Duty Cycle 350 A at 27 V, 100% Duty Cycle 400 A at 24 V, 100% Duty Cycle	**Peak:** 12,000 watts **Continuous:** 10,000 watts	H: 813 mm (32 in.) W: 667 mm (26.25 in.) D: 1422 mm (56 in.)	**Kubota**: 454 kg (1000 lb.) **CAT**: 481 kg (1060 lb.)
		CV/DC	MIG/FCAW	14 – 40 V				

Big Blue® 500X Pro

See Literature No. ED/11.0

Clean, quiet, multiprocess machines designed to give welders the output needed for heavy-duty applications on construction and fabrication sites.

Meter maintenance displays:

- Oil pressure
- Coolant temperature
- Battery voltmeter

Infinite arc control allows the arc characteristics to be changed for specific applications in Stick, MIG and FCAW.

Low OCV Stick (VRD) for improved operator safety without compromising arc starts.

CSA, IEC and NEMA compliant. Perkins-powered models are **CE** approved.

Deluxe model adds a polarity reversing switch and a vandalism lockout (protects control panel and receptacles, see photo at right).

Heavy Industrial

CC CV DC

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 9.5 mm [3/8-in.] carbons)

Diesel Engine

Perkins 404D.22:
32.6 HP at 1800 RPM
Four-cylinder, industrial, liquid-cooled

Deutz D2011L03:
32 HP at 1800 RPM
Three-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Protective Cover #194 683
- HWY-224 Trailer #043 805
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749
- Spark Arrestor Kit #195 012

	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Single-Phase Generator Power at 40°C (104°F)	Dimensions	Ship Weight
Diesel	**International Style Receptacles** **(#907 603)** Deutz **(#907 603 001)** Deutz Deluxe **(#907 602)** Perkins, **CE** **(#907 602 001)** Perkins Deluxe **US Style Receptacles** **(#907 635)** Deutz **(#907 635 001)** Deutz Deluxe	CC/DC	TIG/Stick	20 – 500 A	400 A at 36 V, 100% Duty Cycle 450 A at 38 V, 60% Duty Cycle 500 A at 38 V, 40% Duty Cycle	**Three-phase** Peak: 21,000 watts Continuous: 15,000 watts **Single-phase** Peak: 15,000 watts Continuous: 12,000 watts	H: 1067 mm (42 in.) W: 724 mm (28.5 in.) D: 1654 mm (65.125 in.)	728 kg (1601 lb.)
		CV/DC	MIG/FCAW	14 – 40 V				

Big Blue® 500 X and 600 X

See Literature No. ED/10.11

Meter maintenance displays:

- Hour meter function and Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown — engine shuts down before system runs out of fuel, making restarts easy

Designed and built with reliable, heavy duty industrial components to allow operation in remote locations, without downtime.

Enclosed robust case design protects internal components from impact, allows air flow to cool and prolong the life of the engine, and reduces sound levels.

Hot Start™ makes it easy to start all types of stick electrodes.

Arc-Drive enhances Stick welding, especially on pipe, by focusing the arc and preventing the electrode from going out.

5500-watt peak AC power independent of weld settings means no interaction between tools and welding arc.

Quick and easy maintenance with single-side access to oil level check, oil fill, oil filter, fuel filter and air cleaner.

** With engine gauges and dry battery*

Heavy Industrial

CC DC

Diesel Engine

500 X – Deutz D2011L03i
3-cylinder, industrial, air/oil-cooled

500 X – Perkins 404D-22
4-cylinder, industrial, liquid-cooled

600 X – Deutz F3L912
3-cylinder, industrial, air-cooled

600 X – Deutz D2011L04i
4-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Engine Filter Kits
  - Deutz 2011 #246 988
  - Deutz 912 #246 989
  - Perkins 404 #246 985
- Cold Weather Starting Aids available for all units

Model	Stock Number	Description*	Process	Amp/Volt Ranges	Rated Output at 40°C (104°F)	Generator Output Rated at 40°C (104°F)	Shipping Weight
Big Blue 500 X CC	**(#907 185) (#907 185 001)**	Deutz D2011L03i	DC, Stick/TIG	55-500 A	400 A at 36 V (14.4 kW), 100% Duty Cycle 450 A at 38 V (17.1 kW), 60% Duty Cycle 500 A at 30 V (15 kW), 40% Duty Cycle	**Peak:** 5500 watts **Continuous:** 4000 watts, 34/17 A, 120/240 VAC, 50/60 Hz while welding	**907 185:** 728 kg (1604 lb.) **907 187:** 732 kg (1614 lb.)
	(#907 187) (#907 187 021)	Perkins 404.22, **CE**					
Big Blue 600 X CC	**(#907 193) (#907 193 001)** w/Auto Idle	Deutz D2011L04i	DC, Stick/TIG	65-600 A	500 A at 40 V (20 kW), 100% Duty Cycle 550 A at 34 V (18.7 kW), 60% Duty Cycle 600 A at 30 V (18 kW), 40% Duty Cycle		**Deutz:** 769 kg (1695 lb.) **Perkins:** 762 kg (1680 lb.) **Deutz F4L:** 826 kg (1820 lb.)
	(#907 189)	Deutz F3L912					

Big Blue® 450X Duo CST™

See Literature No. ED/5.5

Durable dual-operator welder/generator, delivers proven CST 280 Stick/TIG performance maximizing productivity and efficiency. Two separate outputs powered by one low-speed diesel engine delivers 280 amps of output per operator. Fuel efficient and quiet operation makes it ideal for any jobsite.

Two superior arcs in one compact package.

Save fuel, reduce maintenance costs and increase productivity.

Simple-to-operate process **selector knob automatically sets proper DIG setting** on E6010 and E7018 electrodes providing superior Stick performance.

Lift-Arc™ start for TIG starts without the use of high frequency.

Remote amperage control permits the use of standard and wireless amperage control devices.

Quiet operation. At just 72.2 dB at 7 m (23 ft.) it's quieter than most single-operator models, improving jobsite communication and safety.

Low-speed Mitsubishi diesel engine.

Heavy Industrial

CC DC

Processes

- Stick (SMAW) • TIG (GTAW)
- RMD* • Pulsed MIG (GMAW-P)* Air Carbon Arc Cutting and Gouging (CAC-A) (rated 4.8 mm [3/16 in.] carbons, capable 6.4 mm [1/4 in.] carbons)

**SF model only.*

Diesel Engine

Mitsubishi S4L2: 24.7 HP at 1800 RPM Four-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430 / #300 749
- Adapter Cord, Full KVA #300 517
- Single-Phase Full KVA Plug Kit #119 172
- Protective Cover #195 301
- Engine Filter Kit #252 782

	Stock Number	Mode/ Process	Output Mode	Amperage Range	Rated Output at 50° C (122° F)	Single-Phase Generator Power at 50° C (122° F)	Dimensions	Net Weight
Diesel	**(#907 473)** Mitsubishi	CC/DC (Stick/TIG)	Separate (dual outputs)	5-225 A (each side) 5-280 A (one side only)	175 A at 27 V, 100% Duty Cycle	Continuous: 10,000 watts	H: 813 mm (32 in.) W: 667 mm (26.25 in.) D: 1,422 mm (56 in.)	483 kg (1,064 lb.)
			Paralleled (combined)	10-450 A	350 A at 27 V, 100% Duty Cycle			

Big Blue® 700X Duo Pro

See Literature No. ED/5.6

A complete multiprocess and multioperator welder/generator in one rugged package. Up to 400 amps of output per operator can be paralleled with a single switch to provide up to 800 amps of power.

Two independent pipe quality arcs in one compact package.

Multiprocess CC/CV capability provides independent operator controls and the best Stick, MIG, Flux-cored and TIG performance available with no interaction.

Easy arc starts and better arc control for best in class performance.

Independent remote control connections allow the use of standard and wireless volt/amperage control devices for each operator.

Quiet operation. At just 68 dB at idle or 76 dB at 7 m (23 ft.) at full load, it's quieter than many single-operator models, improving jobsite communication and safety.

Smaller, lighter, quieter, and smoother running than competitive models with comparable output.

Standard features include oil pan heater, intake manifold heater, output paralleling switch and automatic idle.

Smart feeder compatible (SF model only). Advanced RMD® and pulsed MIG processes are now available in an engine-driven welder/ generator. Discover increased productivity, quality, and improved efficiency in field welding.

Heavy Industrial

CC CV DC

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 9.5 mm [3/8 in.] carbons)

Diesel Engine

Deutz D2011L04i: 48.6 HP at 1800 RPM Four-cylinder, industrial, air/oil-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ 8VS/12VS
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430 / #300 749
- Spectrum® 875
- Adapter Cord, Full KVA #300 517
- Full KVA Plug Kit: 1-Phase #119 172, 3-Phase #254 140
- Protective Cover #194 683
- HWY-224 Trailer #043 805
- Engine Filter Kit #246 988

	Stock Number	Welding Mode/Process	Output Mode	Amp Range	Rated Output at 40°C (104°F)	Generator Power at 40°C (104°F)	Dimensions	Net Weight
Diesel	**(#907 520)** Deutz **(#907 520 001)** Deutz with 3-Phase Power and Parallel Switch **(#907 520 002)** Deutz with SF	CC/DC (Stick/TIG)	Separate (dual outputs)	20-400 A	300 A at 32 VDC, 100% Duty Cycle 400 A at 36 VDC, 40% Duty Cycle	Single-Phase: 5,500 watts peak/ 4,000 watts continuous **Additional Generator Power** Three-Phase: 27,000 watts peak/ 20,000 watts continuous **or** Single-Phase: 19,000 watts peak/ 12,000 watts continuous 380/400V Three-Phase Auxiliary Power	H: 1,092 mm (43 in.) W: 724 mm (28.5 in.) D: 1,654 mm (65.125 in.)	784 kg (1,729 lb.)
			Paralleled (combined)	40-800 A	500 A at 40 VDC, 100% Duty Cycle 700 A at 28 VDC, 60% Duty Cycle			
		CV/DC (MIG/FCAW)	Separate (dual outputs)	14-50 V	300 A at 29 VDC, 100% Duty Cycle 400 A at 34 VDC, 40% Duty Cycle			
			Paralleled (combined)	14-50 V	500 A at 39 VDC, 100% Duty Cycle 700 A at 28 VDC, 60% Duty Cycle			

Big Blue® 800X Duo Air Pak™

See Literature No. ED/13.0

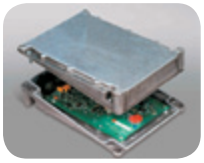
Our most powerful engine drives offer dual-operator productivity, independent compressor controls and multiprocess flexibility.

WIRELESS REMOTE COMPATIBLE

Multi-arc welding. One dependable engine — two independent arcs with up to 400 amps each. Or plug in additional inverters for a true multioperator work platform! Example: Two additional XMTs equals four operators, up to 200 amps each. Premium quality arcs allow operators to work independently with no arc interaction. Multioperator welding has never been easier or more versatile.

Ingersoll Rand ultra-reliable industrial rotary screw compressor. 30,000-hour life expectancy. Independent on/off control for applications not requiring compressed air — allows greater fuel savings and longer compressor service intervals.

The Vault – ultimate control board reliability. Housed in a sealed aluminum case, sealed connections are made through watertight plugs that protect the circuit board from dust, dirt, moisture and heat.



Low OCV Stick (VRD) reduces the open-circuit voltage to 15 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

Auto Remote Sense™ (ARS) detects if a remote control is plugged into the 14-pin receptacle and eliminates confusion of a remote/panel switch.

Electronic engine display simultaneously displays fuel level, engine hours, coolant temperature, oil and air pressure, compressor hours, battery volts and engine RPM. Also tracks oil change intervals and displays engine diagnostics for easier servicing.

Increased efficiency. More arcs and better fuel economy equal increased profits for your business. Estimated savings are 34 percent with a dual-operator unit versus two single-operator units.

Infinite arc control allows the arc characteristics to be changed for specific applications in Stick, MIG and FCAW.

Thermal overload protection prevents machine damage if the duty cycle is exceeded or airflow is blocked.

Standard features include digital weld meters, auto matic idle, 120-volt block heater, lockout/tagout battery disconnect switch and vandalism lockout (protects control panel and receptacles, see photo at right).

Heavy Industrial

CC/CV DC

Processes

- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 12.7 mm [1/2-in.] carbons)
- Stud (12.7 mm [1/2 in.])

Diesel Engine

Deutz TD2011L04i:

63.4 HP at 1800 RPM

Turbo-charged, four-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ 8VS/12VS
- Full KVA Adapter Cord #300 517
- Full KVA Plug Kit
  - Single-phase #119 172
  - Three-phase #254 140
- Protective Cover #301 113
- Wireless Remote Hand Control / Wireless Antenna Kit #300 430 / #300 749

- Desiccant Air Dry System
  - Side mount #195 117
  - Rear mount #195 117 001

  Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.
- Spark Arrestor Kit #195 012

	Stock Number	Welding Mode/ Process	Output Mode	Amp/Volt Ranges	Rated Output at 100% Duty Cycle at 40°C (104°F)	Generator Power at 40°C (104°F)	Dimensions	Net Weight
Diesel	**(#907 634)** Deutz with US Style Receptacles **(#907 536)** Deutz with International Style Receptacles	CC/DC (Stick/TIG)	Separate (dual outputs)	20-400 A	400 A at 36 V (each side)	Three-phase Peak: 27,000 watts Continuous: 20,000 watts Single-phase Peak: 15,000 watts Continuous: 12,000 watts 380/400V Three-Phase Auxiliary Power	H: 1,194 mm (47 in.) H: 1,397 mm (55 in.) to top of exhaust W: 724 mm (28.5 in.) D: 1,765 mm (69.5 in.)	968 kg (2,095 lb.)
			Paralleled (combined)	40-800 A	700 A at 44 V, 800 A at 38 V			
		CV/DC (MIG/FCAW)	Separate (dual outputs)	14-50 V	400 A at 34 V (each side)			
			Paralleled (combined)	14-50 V	750 A at 40 V, 800 A at 38 V			

Air Compressor	Features	Free Air Delivery	Working Pressure Constant	Duty Cycle	Oil Capacity	Automatic Compressor Shutdowns
Ingersoll-Rand CE55 G1	Rotary screw with electric clutch for on/off. Oil change intervals of 500 hours. Life expectancy of 30,000 hours.	Idle: 1.13 m^3/min (40 cfm) Weld: 1.70 m^3/min (60 cfm)	100 psig (7 bar)	100%	3.79 L (4 qt.)	Oil temperature

SubArc Digital Series

See Literature No. AD/7.3

The SubArc Digital Series of power sources, interface controls and accessories include digital control and communication electronics designed to improve weld performance and simplify the integration of the equipment in more advanced applications.

Subarc DC 650 Digital | Subarc DC 1000 Digital | Subarc AC/DC 1000 Digital

Low-voltage accessory operation and improved environmental protection. The Digital Series accessories are powered with 24 VAC control voltage from the power source. All power sources, interface controls and wire drives are IP-23 rated providing a high level of protection for harsh environments.

Easy to integrate. Our SubArc power sources are easy to integrate by using a standard Modbus® connection.

All power sources also feature thermal overload protection, line voltage compensation and Fan-On-Demand.™

Two DC power source models and one AC/DC power source model. Power sources have sufficient power capacity to cover applications from traditional DC single-arc to multi-wire tandem welding. In the case of electroslag welding or other high-current demand, two or more power sources can easily be paralleled (both DC and AC/DC machines).

**While idling.*

Heavy Industrial

CC CV | AC DC | DC | 3 Phase

Subarc DC Series is DC only.

Processes

- Submerged Arc (SAW)
- Electroslag (ESW)
- Air carbon arc cutting and gouging (CAC-A)

Most Popular Accessories

- 4.6 m (15 ft.) SubArc Parallel Cable #260 775 015
- 4.6 m (15 ft.) SubArc Tandem Cable #260 878 015
- 14-pin Insight Core Module #301 072
  (requires Insight Core to SubArc Digital Series Adapter Kit #301 295)

Model/ Stock Number	Amperage Range (CC Mode)	Voltage Range (Subarc Mode)	Rated Output	Amps Input at Rated Output, 60 Hz 230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions *(Includes lift eye, but not strain relief)*	Net Weight
SubArc DC 650 Digital (#907 622) 230/460/575 V **SubArc DC 800 Digital, 50 Hz (#907 623)** 380/400/440 V, 50 Hz, **CE**	50-815 A	20-44 V	650 A at 44 V, 100% Duty Cycle	126 3.8*	63 1.9*	50.4 1.4*	50 1.52*	34.8 0.76*	75 Vpk	H: 692 mm (27.25 in.) W: 565 mm (22.25 in.) D: 953 mm (37.5 in.)	247 kg (545 lb)
SubArc DC 1000 Digital (#907 624) 230/460/575 V **SubArc DC 1250 Digital, 50 Hz (#907 625)** 380/400/440 V, 50 Hz, **CE**	100-1250 A	20-44 V	1000 A at 44 V, 100% Duty Cycle	180 5.8*	90 2.9*	72 2.4*	73 3.2*	53 0.5*	68 Vpk		292 kg (644 lb)
SubArc AC/DC 1000 Digital (#907 620) 460 V **SubArc AC/DC 1250 Digital, 50 Hz (#907 621)** 380/400 V, 50 Hz, **CE**	300-1250 A	20-44 V	1000 A at 44 V, 100% Duty Cycle	– –	122 3.0*	– –	98 2.37*	53 0.95*	93 Vpk	H: 1092 mm (43 in.) W: 699 mm (27.5 in.) D: 1207 mm (47.5 in.)	540 kg (1225 lb)

SubArc Interface Controls

See Literature No. AD/7.3

SubArc Interface Digital

SubArc Interface Analog

Easier setup and operation. The SubArc Digital Series Interface controls recognize the power source and wire drive connected, and automatically configure the system for proper operation.

Internal terminal strip is able to integrate with positioners, sidebeams, turning rolls and other peripheral equipment.

Most Popular Accessories

- SubArc Control Cables
  - 9 m (30 ft.) #260 622 030
  - 15 m (50 ft.) #260 622 050
  - 24.4 m (80 ft.) #260 622 080
  - 30.5 m (100 ft.) #260 622 100
  - 36.6 m (120 ft.) #260 622 120
  - 61.0 m (200 ft.) #260 622 200

Model/Stock Number	Input Power from Welding Power Source	Welding Power Source Type	Dimensions	Net Weight
SubArc Interface Digital (#300 936), CE	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant voltage (CV), AC or DC, with remote contactor and output control capabilities	H: 178 mm (7 in.) W: 286 mm (11.25 in.) D: 292 mm (11.5 in.)	8.2 kg (18 lb.)
SubArc Interface Analog (#300 937), CE	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant current (CC), constant voltage (CV), DC, with remote contactor and output control capabilities		

SubArc Wire Drive Assemblies

See Literature No. AD/7.3

SubArc Strip Drive 100 Digital Low Voltage

SubArc Wire Drive 400 Digital Low Voltage

SubArc Strip Drive 100 Digital Low Voltage is a heavy-duty, right-angle wire drive assembly designed for automated strip clad applications.

SubArc Strip Drive 400 and 780 Digital Low Voltage are right-angle wire drive assemblies. The 400 model is standard speed and the 780 is high speed.

**Includes adapter plate allowing mounting to 63.5-, 107.9-, and 117.5-mm (2.5-, 4.25-, and 4.625-inch) bolt-hole patterns.*

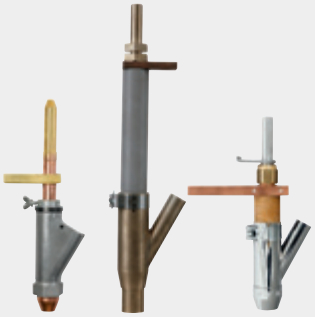
Most Popular Accessories

- Motor Extension Cables
  - 1.5 m (5 ft.) #254 232 005
  - 3 m (10 ft.) #254 232 010
  - 7.6 m (25 ft.) #254 232 025
  - 19.8 m (65 ft.) #254 232 065
- Single-Wire Straightener #199 733
- Twin-Wire Straighteners (for Twin-Wire torches only)
  - Single adjustment #301 160
  - Double/separate adjustment #301 162
- Drive Rolls
- Manual Slides
  - Single slide #301 137
  - Cross slide #301 138

Model	Stock Number	Input Power	Input Power Cord	Rating	Wire Feed Speed	Wire Diameter Capacity	Net Weight
SubArc Strip Drive 100 Digital Low Voltage, CE	**(#300 939)** Wire drive only **(#300 940)*** w/ mounting bracket	38 VDC	1.2 m (4 ft.)	1/5 hp, 21 rpm	0.3–1.6 m/min. (10–69 IPM)	N/A (strip cladding applications)	9.1 kg (20 lb.)
SubArc Wire Drive 400 Digital Low Voltage, CE	**(#300 938)*** Standard speed **(#300 938 001)** Standard speed, for use with tractor	38 VDC	1.2 m (4 ft.)	1/5 hp, 85 rpm	0.8–10.2 m/min. (30–400 IPM)	2.4–4.8 mm (3/32–3/16 in.)	15 kg (33 lb.)
SubArc Wire Drive 780 Digital Low Voltage, CE	**(#300 941)*** High speed	38 VDC	1.2 m (4 ft.)	1/4 hp, 143 rpm	1.3–19.8 m/min. (50–780 IPM)	1.6–3.2 mm (1/16–1/8 in.)	15 kg (33 lb.)

SubArc Torches

See Literature No. AD/7.3



OBT 600 OBT 1200 1200-Amp Twin-Wire

OBT 600 (#043 923) is a 600-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1.6 – 4.8 mm (1/16 – 3/16 in.) wire.

OBT 1200 (#043 900) is a 1200-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1.6 – 4.8 mm (1/16 – 3/16 in.) wire. OBT 1200 features a replaceable breakaway adapter end to prevent costly damage should torch run into an obstruction.

1200-Amp Single-Wire Torch (#301 141 short)
1200-Amp Twin-Wire Torch (#301 143 short, #301 144 long)
Both of the short torches are 288 mm (11.3 in.) in length and the long torch is 427 mm (16.8 in.). The single-wire torch uses 1.6 – 4.0 mm (1/16 – 5/32 in.) consumables and the twin-wire torches use 1.2 –2.4 mm (3/64 – 3/32 in.) consumables.

Most Popular Accessories

- OBT 600 Torch Body Extensions
  - 25.4 mm (1 in.) #043 967
  - 50.8 mm (2 in.) #043 969
  - 101.6 mm (4 in.) #043 973
  - 152.4 mm (6 in.) #043 975
- OBT 1200 Torch Body Extension #043 981
- Contact Tips

SubArc Flux Hopper

See Literature No. AD/7.3

Improved flux delivery system. Our SubArc Flux Hopper Digital Low Voltage utilizes a flux valve mechanism that assures continuous delivery of flux to the arc.

Sight glass allows the weld operator to visually monitor the remaining flux in the hopper.

Versatile opening is sized to allow hook-up of any flux-hopper-mounted recovery system.

Includes slag screen to capture fused slag particles from entering the flux hopper.

Most Popular Accessories

- Flux Hopper Extension Cables
  - 3 m (10 ft.) #260 623 010
  - 7.6 m (25 ft.) #260 623 025
  - 19.8 m (65 ft.) #260 623 065

Model/Stock Number	Input Power	Input Power Cord	Flux Capacity	Net Weight
SubArc Flux Hopper Digital Low Voltage (#300 942)	12 VDC (PWM signal from SubArc Interface)	3.3 m (11 ft.)	11 kg (25 lb.)	10.4 kg (23 lb.)

SubArc Tractor

See Literature No. AD/7.5

Digital weld controller package shown

Designed and built to provide maximum reliability in the toughest conditions. This simple-to-use self-propelled submerged arc welding tractor can easily connect to SubArc DC or AC/DC Digital power supplies.

Vertical, horizontal and rotary torch adjustment allows for greater access to hard-to-reach spots.

Heavy-duty, four-wheel, chain-driven trackless operation with rubber wheels provides superior and reliable mobility.

Manual clutch enables freewheeling movement of the tractor.

Travel speed is precisely controlled by a closed-loop microprocessor control with tach feedback.

Packages Include

- SubArc Tractor with remote start/stop control and guide rolls
- SubArc Interface weld controller (analog or digital)
- SubArc Wire Drive 400 for Tractor
- 11.3 kg (25 lb.) capacity flux hopper with valve
- 60 lb. (27 kg) wire reel
- OBT 600 torch
- Wire straightener

Most Popular Accessories

- SubArc Control Cables
- Contact Tips
- Drive Rolls

Input Power from Welding Power Source	Wire Feed Speed	Wire Diameter Capacity	Gun Positioning Slides	Drive Motor	Travel Speed	Dimensions	Net Weight
24 VAC, 1-phase, 50/60 Hz, 200 watts	0.8-10.2 m/min. (30-400 ipm)	1.6-4.8 mm (1/16-3/16 in.)	101.6 mm (4 in.) vertical and horizontal	24 VDC permanent magnet gear motor	10-168 cm/min. (4-66 ipm)	H: 1,102 mm (43.375 in.) W: Varies depending on system configuration D: 903 mm (35.5 in.)	73 kg (162 lb.) without flux or wire

Spectrum® Series

Plasma Cutters

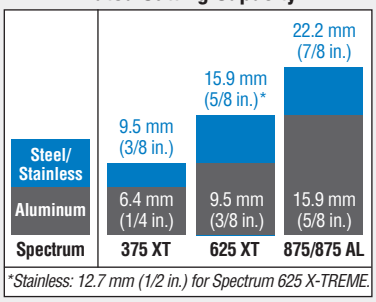
Our Spectrum line of plasma cutters provides big cutting power in portable packages with more flexible cables and Auto-Refire technology. Step up to Spectrum 625 and 875 models to add Ultra-Quick Connect hand-held torches and machine torch capabilities.

Spectrum 375 X-TREME | Spectrum 625 X-TREME | Spectrum 875 | Spectrum 875 Auto-Line

Spectrum Features

Feature	375 XT	625 XT	875	875 AL
Auto-Line (120–240 V)	●	●		
Auto-Line (208–575 V)				●
Dual Input Voltage				
MVP Plugs/Adapters	●	●		
Ultra-Quick Connect Torch w/Flexible Cable		●	●	●
Quick Connect Flexible Work Cable w/Clamp	●	●	●	●
Built-in Gas/Air Filter and Regulator	●	●	●	●
Auto-Refire	●	●	●	●
Auto Postflow	●	●	●	●
Auto Air Regulation				●
X-CASE	●	●		
Machine Torch Capable		●	●	●

Steel/Stainless/Aluminum Rated Cutting Capacity



*Stainless: 12.7 mm (1/2 in.) for Spectrum 625 X-TREME.

Cut capacity ratings are based on traveling speed of approximately 15 inches per minute to achieve a precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Factors that can affect actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For highly thermal conductive metals such as aluminum, cutting capacities may be reduced up to 30 percent compared to mild steel.

Power Factor Correction (PFC). Uses less energy by utilizing input power more efficiently and increases productivity by reducing nuisance circuit breaker trips.

Miller engine drive generator compatibility. See MillerWelds.com/spectrumpower.

LED indicators for easy troubleshooting.

Non-high-frequency arc starting does not interfere with or damage controls or computers.

Postflow cooling circuitry extends life of the consumable and torch by cooling them with postflow air after trigger is released.

Auto-Refire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

Built-in gas/air filter and regulator. Provides air filtration of airborne particles five microns and larger. Additional filtration and water separation recommended.

LVC™ **line voltage compensation** provides peak performance power under variable input voltage conditions for clean, steady cuts.

Wind Tunnel Technology™ prevents abrasive dust and particles from damaging internal components.

Fan-On-Demand™ cooling system only operates when needed, reducing the amount of airborne dust/dirt pulled through the unit.

Quick connect flexible work cable with heavy-duty clamp.

Ultra-Quick Connect™ **hand-held torches with flexible cables.** XT40 (625 X-TREME™) and XT60 (875 models) hand-held torches feature quick torch connection, ergonomic handles to help prevent operator fatigue and flexible cables that make maneuvering easier.

Long and short body machine torches. XT40M (625 X-TREME™) and XT60M (875 models) machine torches are available in long or short body configurations. XT60M is also available in 7.6- or 15.2-m (25- or 50-ft.) cable lengths.

Machine torch capable. 625 X-TREME™ and both 875 models can be ordered with a machine torch or can be converted to use a machine torch with optional Automation Kits.

Models/ Packages

Spectrum 375 X-TREME hand-held torch package (#907 529) shown

Spectrum 875 Auto-Line machine torch package (#907 584 002) shown

	Hand-Held Torch Packages			Machine Torch Packages			
				7.6 m (25 ft.)		15.2 m (50 ft.)	
Model	3.7 m (12 ft.)	6.1 m (20 ft.)	15.2 m (50 ft.)	Long Body	Short Body	Long Body	Short Body
Spectrum 375 XT	(#907 529)	—	—	—	—	—	—
Spectrum 625 XT	(#907 579)	(#907 579 001)	—	(#907 579 002)	(#907 579 003)	—	—
Spectrum 875	—	(#907 583)	(#907 583 001)	(#907 583 002)	(#907 583 003)	—	—
Spectrum 875 AL	—	(#907 584)	(#907 584 001)	(#907 584 002)	(#907 584 003)	(#907 584 004)	(#907 584 005)

Spectrum® 375 X-TREME™/625 X-TREME™ Features

See Literature No. PC/9.2 and PC/9.6

AUTO-LINE Power Management Technology — Allows for any input voltage hook-up (120 – 240 VAC, single-phase, 50/60 Hz) with no manual linking, providing convenience in any job setting.

X-CASE™ provides the ultimate protection during transport and storage. Additional space is ideal for MVP plugs, consumables box, gloves, etc.

Multi-voltage plug (MVP™) on 375 XT or MVP™ adapter on 625 XT allows connection to 120 or 240 V receptacles without tools.

Automatic gouging consumable detection (on 625 XT only). Detects gouging consumable and adjusts gas pressure to optimize performance, eliminating the need for a manual regulator.

375 XT model includes XT30 torch with ergonomic design and flexible cable.

625 XT model includes Ultra-Quick Connect XT40 torch with ergonomic design and flexible cable; or **XT40M long body or short body machine torch.**

Spectrum 625 shown

Spectrum® 875/875 Auto-Line™ Features

See Literature No. PC/9.8

AUTO-LINE Power Management Technology — **Spectrum 875 Auto-Line model** allows for any input voltage hook-up (208 – 575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Standard Spectrum 875 model operates on 208/230 V, single-phase input voltage only.

Consumables storage compartment provides convenient access to consumables and parts.

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

Includes Ultra-Quick Connect™ XT60 torch with ergonomic design and flexible cable; or **XT60M long body or short body machine torch.**

Spectrum 875 shown

**Recommended 30 A branch circuit for maximum performance.*

Model	Input Power	Rated Output at 40°C (104°F)	Amps Input at Rated Output	KVA	KW	Compressor Requirement
Spectrum 375 X-TREME 120 – 240 VAC, 50/60 Hz	Single-Phase	120 V (15 A): 20 A at 88 VDC, 35% Duty Cycle	18.1	2.2	2.1	142 L/min. (5.0 CFM) at 621 kPa (90 PSI)
		120 V (20 A): 27 A at 91 VDC, 20% Duty Cycle	25.6	3.1	3.0	
		240 V: 40 A at 140 VDC, 50% Duty Cycle	13.6	3.3	3.1	
Spectrum 625 X-TREME 120 – 240 VAC, 60 Hz	Single-Phase	120 V (15 A): 20 A at 88 VDC, 35% Duty Cycle	18.1	2.2	2.1	170 L/min. (6.0 CFM) at 621 kPa (90 PSI)
		120 V (20 A): 27 A at 91 VDC, 20% Duty Cycle	25.6	3.0	2.9	
		240 V: 40 A at 140 VDC, 50% Duty Cycle	13.6	6.4	6.3	
Spectrum 875 208/230 VAC, 50/60 Hz	Single-Phase	208 V: 60 A at 140 VDC, 40% Duty Cycle 230 V: 60 A at 140 VDC, 50% Duty Cycle	208 V: 47 230 V: 42	9.9	9.8	191 L/min. (6.75 CFM) at 621 kPa (90 PSI)
Spectrum 875 Auto-Line 208 – 575 VAC, 50/60 Hz	Three-Phase	208 V: 60 A at 140 VDC, 40% Duty Cycle 230 – 380 V: 60 A at 140 VDC, 50% Duty Cycle 380 – 575 V: 60 A at 140 VDC, 60% Duty Cycle 380 – 575 V: 50 A at 140 VDC, 100% Duty Cycle	208 V: 27.5 230 V: 25 380 V: 15 460 V: 12.4 575 V: 9.8	9.9	9.4	
	Single-Phase	208 V: 60 A at 140 VDC, 40% Duty Cycle 230 V: 60 A at 140 VDC, 50% Duty Cycle 230 V: 50 A at 140 VDC, 100% Duty Cycle	208 V: 47.4 230 V: 42.2	9.9	9.7	

Light Industrial — 375 XT/625 XT
Industrial — 875/875 Auto-Line

DC · 3 Phase · 1 Phase

Only 875 Auto-Line has 3-Phase capabilities.

Processes
- Air Plasma Cutting
- Air Plasma Gouging (625/875 models)

375 X-TREME Comes Complete With
- XT30 hand-held torch with 3.7-m (12-ft.) cable
- Heavy-duty work clamp with 3.7-m (12-ft.) flexible cable
- 3-m (10-ft.) MVP™ power cord with MVP™ 5-15P (120 VAC, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE™ for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two tips, deflector and air fitting

625 X-TREME Comes Complete With
- XT40 hand-held torch with 3.7-m (12-ft.) or 6.1-m (20-ft.) cable; **OR** XT40M long body or short body machine torch with 7.6-m (25-ft.) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 3.7-m (12-ft.) power cord with 240 V, L6-30P twist lock plug
- MVP™ adapters with 5-15P (120 VAC, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE™ for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two 40 A tips and one 30 A tip, 30 A drag shield, deflector and air fitting
- Machine torch packages include corresponding Automation Kit

875 and 875 Auto-Line Come Complete With
- XT60 hand-held torch with 6-m (20-ft.) or 15.2-m (50-ft.) cable; **OR** XT60M long body or short body machine torch with 7.6-m (25-ft.) or 15.2-m (50-ft.) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 3-m (10-ft.) power cord
- Extra consumables
- Machine torch packages include corresponding Automation Kit

Most Popular Accessories
- Automation Kits
- Cart
- Cutting Guides
- Filters
- Protective Covers/Cases
- Torches/Consumables

LiveArc™ Workstation

The LiveArc system is built to deliver a real-world, arc-on welding experience. Advanced motion-tracking technology provides feedback on technique parameters during initial simulation (practice) mode as well as live arc training mode.

Builds higher skill levels • Produces faster results • Provides a cost-effective solution

Powerful industrial computer at the heart of the system features solid-state technology and filterless, fanless cooling. The system is compatible with Miller wire feed power sources and is capable of MIG and Flux-cored applications.

Requires 120-volt, single-phase power for operation.

Motion-tracking cameras provide feedback on gun parameters.

Touchscreen monitor works with a gloved hand and features a 546-mm (21.5-inch) widescreen HD display.

Protective monitor cover disables the power source when opened.

Calibration tool is easy to use and enables flexible coupon placement by making the system aware of the exact joint location.

Rugged ArcStation™ base features a 12.7-mm (1/2-inch) reversible steel table top and ships complete with drawers, gun holder, quick-release clamps and heavy-duty casters for mobility.

SmartGun is an industry-exclusive 400-amp MIG gun featuring built-in LEDs that are tracked by the system's cameras. The ergonomic soft-grip handle provides tactile vibration feedback that helps guide real-time performance adjustments, reinforcing optimal position and movement.

OLED display on gun provides initial visual feedback to guide proper gun positioning. Pushbuttons provide a convenient alternative to the touchscreen for navigation.

LiveArc Options

#301 233 LiveArc workstation

#301 233-001 LiveArc workstation with welding positioning arm

#301 234 Welding positioning arm (includes software)

Optional welding positioning arm is available for training in out-of-position welding applications.

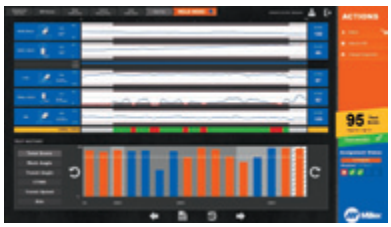
Intuitive user interface

Assignment selection screen

- Guides the user through a range of targeted exercises
- Includes a library of Miller-designed assignments and the flexibility to configure customized assignments
- Offers assignment completion status, history summary and easy access to detailed performance history data

Welding Procedure Specifications (WPS) screen

- Guides the user through proper selection and preparation of materials
- Provides correct power source and wire feeder settings
- Provides target values and limits for various parameters
- Displays instructor-determined target score and assignment completion status



Post-weld feedback screen

- Data is provided following tests in both simulation and live arc modes
- Assignment parameters can be configured to suit the skill level (and scoring potential) of the user
- Performance feedback on various parameters is provided
- All test data is stored and allows for monitoring and evaluation

MORE on the WEB

For more detailed information, visit

MillerWelds.com/livearc

Choose the Right Fume Extractor.

Miller's complete line of FILTAIR® fume extractors are designed specifically for welding — drawing weld fumes away from the user's breathing zone and keeping your facility clean. We offer many types of fume extraction equipment to best fit your environment and fume control needs.

For more detailed information, visit **MillerWelds.com/filtair**

FILTAIR	130	400	SWX	MWX	Capture 5	2000–12000
Weld Fume Extractor Type	Portable, high-vacuum	Stationary, high-vacuum suited for use with fume guns and/or attachments	Stationary, low-vacuum suited for wall or column mounting	Mobile, low-vacuum	Mobile, low-vacuum with the industry's largest capture zone	Centralized, low-vacuum customizable systems
Ideal For	Contractors, maintenance and repair operations, light fabrication work and light manufacturing	Fabrication, manufacturing, and maintenance and repair operations	Fabrication shops, manufacturing, and training centers where weld areas are near filtration system	Fabrication shops, manufacturing, and training centers	Manufacturing and fabrication – the best solution for weldments over 18 inches long	Manufacturing, hand-held and automation, fabrication shops, and training facilities
Welding Arcs	1	Up to 6 per unit	Up to 2 per unit	1	1	Up to 16 per unit
Filter Type	Manual cleaning	Self-cleaning (automatic)	SWX-D: Disposable SWX-S: Self-cleaning	MWX-D: Disposable MWX-S: Self-cleaning	Self-cleaning (automatic)	Self-cleaning (automatic/programmable)

FILTAIR® 130 and 400

See Literature No. AY/3.1 (130) and AY/3.3 (400)

Portable (130 model) and stationary (400 model) high-vacuum weld fume extractors designed for use with accessories like nozzles and fume guns to collect weld fume particles at the source.

FILTAIR 130
(includes 2.4-m (8-ft.) collection hose)

FILTAIR 400
(collection hoses not included, order separately)

Features common to all models

Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

FILTAIR 130 features

Unrivaled filtering performance. Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.

Less noise. Up to 70 percent quieter than some other extractors. Only 68.5 decibels at 1.5 m (5 ft.).

Portable and compact. At only 21 kg (46 lb.) the vertical-shaped machine is easy to move around.

FILTAIR 400 features

Extraction flexibility. Capable of utilizing more than 18.3 m (60 ft.) of collection hose to extend accessories for fume extraction. Rigid ducting can be used to extend overall reach.

User flexibility. With four-port access, the unit can remain centrally located while providing mobility of accessories.

Extract at the source. Designed for solid and flux-cored wires for most welding applications. MIG fume guns are available in models ranging from 300 to 600 amps.

Processes

- Stick (SMAW) • Flux-cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Comes With

- FilTek™ XL Filter
- 2.4-m (8-ft.) collection hose (130 model only)
- 6.1-m (20-ft.) power cord (130 model only)

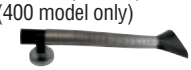
Most Popular Consumables

- Replacement Filters
  For 130 model (cleanable) #301 267
  For 400 model #300 925

Most Popular Accessories

- Collection Hose
  5.2 m (17 ft) #300 672
  10.4 m (34 ft) #300 673

- **Magnetic Nozzles**
  300 mm (11.8 in.) width #300 669
  600 mm (23.6 in.) width (400 model only) #300 670



- **Flexible Funnel Magnetic Nozzle** #300 668
- **Dual Hose Inlet to Duct Adapter** (400 model only) #301 070 Y-shaped adapter connects duct to one or two hose attachments.

- **Bernard™ FILTAIR Fume Extraction MIG Gun** Ideally suited for almost any solid-wire welding application. Available in 300 and 400 A models.
- **Bernard™ Clean Air™ Fume Extraction MIG Gun** Suited for use with solid and flux-cored wires. Available in 400, 500 and 600 A models.

Model/Stock Number	Accu-Rated™ Airflow	Sound Level	Motor	Input Power	Dimensions	Net Weight
FILTAIR 130 (#300 595)	62 L/sec (132 cfm)	68.5 dBA at 1.5 m (5 ft.)	1 hp	115 V, 1-phase, 60 Hz at 11 A	H: 584 mm (23 in.) W: 305 mm (12 in.) D: 305 mm (12 in.)	21 kg (46 lb.)
FILTAIR 400 (#300 894)	189 L/sec (400 cfm)	74 dBA at 1.5 m (5 ft.)	8.85 hp	460 V, 3-phase, 60 Hz	H: 1372 mm (54 in.) W: 660 mm (26 in.) D: 1,219 mm (48 in.)	250 kg (551 lb.)

FILTAIR® SWX and MWX Series

See Literature No. AY/3.2 (SWX) and AY/3.0 (MWX)

Powerful systems mounted next to the weld area or easily positioned near the weld area. Disposable or cleanable filter models for multiple applications.

SWX wall- or column-mounted fume extraction systems designed specifically for welding.

SWX-D (disposable filter) model with telescoping arm shown

SWX models are available with telescoping arm which can extend from 0.9 m to 1.4 m (3 to 4.5 ft.), making them ideal for smaller spaces.

MWX mobile fume extraction systems designed specifically for welding.

MWX-S (self-cleaning) model with 3 m (10 ft.) extraction arm shown

Features common to all models

Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

Class-leading suction power of 875 cfm is Accu-Rated™ at the hood to better capture weld fumes and provide a cleaner environment.

Superior filters. Our FilTek XL filters are specifically designed for welding with a MERV 15 rating to outlast, out-filter, and outperform all the rest.

Durable aluminum pre-assembled extraction arm with external adjustments for better airflow and longer life.

Self-cleaning models additional features

Unrivaled filtering performance. Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.

Quick and efficient cleaning cycle operates with a push of a button on the control panel.

Note: Compressed air required to operate cleaning mechanism.

Disposal drawer provides easy and convenient access to empty out collected particles. Handle releases drawer allowing it to slide out.

Upgrade to self-cleaning models for high arc-on time, extracting from heavy fume processes, or when welding aluminum or galvanized materials.

Processes
- Stick (SMAW)
- Flux-cored (FCAW)
- MIG (GMAW)
- TIG (GTAW)

Comes With
- FilTek™ XL filter
- Pre-assembled arm

Most Popular Consumables
- **Replacement Filters**
  Self-Cleaning models
  #300 540
  Disposable filter models
  #300 539
  FilTek XL filters efficiently capture the smallest weld fume particles and offer superior filter life.

Most Popular Accessories
- **Hood Light with Arc Sensor**
  For SWX Series
  #300 763
  For MWX Series
  #300 689
  Illuminates the welding zone and enables the fume extractor to start automatically when welding begins.

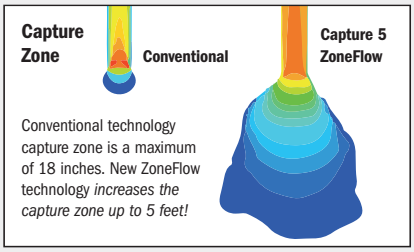
- **SWX Dual Arm Add-On Packages**
  With telescoping arm
  With 2.1 m (7 ft.) standard arm
  With 3 m (10 ft.) standard arm
  With 3.7 m (12 ft.) standard arm
  Includes 203-m (8-inch) diameter arm, blower, control box, mounting bracket, duct and back draft dampers to turn single-arm weld fume extractor into dual-arm extractor.

Model Pkg / Length of extraction arm		**Filter Media**	**Accu-Rated™ Airflow**	**Extraction Arm Diameter**	**Sound Level**	**Motor**	**Input Power**	**Dimensions**	**Net Weight**
SWX-S (Self-Cleaning) Telescoping arm 2.1 m (7 ft.) std arm 3 m (10 ft.) std arm 3.7 m (12 ft.) std arm	**SWX-D (Disposable Filter)** Telescoping arm 2.1 m (7 ft.) std arm 3 m (10 ft.) std arm 3.7 m (12 ft.) std arm	45.52 m^2 (490 ft^2)	413 L/sec (875 cfm)	203 mm (8 in.)	Approx. 74 dBA at 1.5 m (5 ft.)	1 hp, 3,450 rpm	115 V, 1-phase, 60 Hz at approx. 11.9 A	**SWX-S** H: 838 mm (33 in.) **SWX-D** H: 737 mm (29 in.) W: 692 mm (27.25 in.) D: 838 mm (33 in.)	**SWX-S**: 88 kg (195 lb.) **SWX-D**: 59 kg (130 lb.) **Blower/bracket** 43 kg (95 lb.)
MWX-S (Self-Cleaning) 2.1 m (7 ft.) std arm 3 m (10 ft.) std arm 3.7 m (12 ft.) std arm	**MWX-D (Disposable Filter)** 2.1 m (7 ft.) std arm 3 m (10 ft.) std arm 3.7 m (12 ft.) std arm				Approx. 70 dBA at 1.5 m (5 ft.)			H: 883 mm (34.75 in.) W: 806 mm (31.75 in.) D: 1,219 mm (48 in.)	**MWX-S** 136 kg (300 lb.) **MWX-D** 108 kg (238 lb.)

FILTAIR® Capture 5

See Literature No. AY/3.5

The capture zone redefined. Innovative, extended-capture fume extraction system designed specifically for welding.



ZoneFlow™ technology. Extends the capture area up to 1.5 m (5 ft) versus 305-457 mm (12-18 in.) with conventional source capture arms. See illustration above.

Minimizes downtime with fewer fume extractor adjustments. With increased capture area, arm interactions are dramatically minimized.

Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

Source capture is designed to draw weld fume away from the welder's breathing zone and keep the facility clean.

Processes
- Stick (SMAW) • Flux-cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Comes With
- FilTek™ XL Filter
- Durable, easy-to-move, pre-assembled, aluminum extraction arm with toolless external adjustments for higher airflows and longer filter life

Most Popular Consumable

- **Replacement FilTek XL Filter** #301 106
  Filter is designed for the Capture 5 automatic self-cleaning system.

Length of extraction arm	Filter Media	Accu-Rated™ Airflow	Extraction Arm Diameter	Sound Level	Motor	Input Power	Dimensions	Net Weight
3 m (10 ft) 3.7 m (12 ft)	42 m^2 (452 ft^2)	425 L/sec (900 cfm)	254 mm (10 in.)	Approx. 77 dBA at 1.5 m (5 ft.)	3 hp, 3,450 rpm	208/230 V, 1-phase, 60 Hz at 13.5 A 460 V, 3-phase, 60 Hz at 3.7 A 575 V, 3-phase, 60 Hz at 3.0 A	**H:** 1,092 mm (43 in.) **W:** 915 mm (36 in.) **D:** 1,219 mm (48 in.)	282 kg (620 lb.) with 3.7 m (12 ft.) arm

FILTAIR® 2000-12000

See Literature No. AY/3.4

The industrial centralized weld fume extractors are custom engineered solutions designed for multiple capture sources which require ducting and accessories to complete the system.

FILTAIR 4000 model shown. Other models are available (2000, 6000, 8000, and 12000).

**Based on clean filters.*
***Dimensions for base models without factory options.*

FILTAIR engineering resources. Design and engineering resources recommend, develop and support custom-engineered solutions.

Improves operating efficiency. Creates a cleaner shop with less downtime spent cleaning equipment. Raises productivity with more motivated employees and fewer absences. Lowers insurance premiums and meets OSHA and EPA compliance.

Stand-alone space saver. Our fully assembled fume extractor provides up to a 65 percent smaller footprint versus traditional cartridge-style extractors. It provides all the necessary extraction tools, while offering customizable options.

Less noise. Up to 75 percent quieter than cartridge-style extractors. High-efficiency motors and integrated silencer housing create a safer, more productive work area.

Integrated electrical controls. Control panel manages all of the collector functions, including the fan, the filter differential, and the pulse cleaning system.

24 VDC motor start/stop feedback relay allows an external signal to automate the remote start of collector fan from other equipment.

Easy-clean filter with surface-loaded filter technology allows for more effective weld fume pulse cleaning without penetration into the filter. This provides an easier filter cleaning process, while outlasting conventional cartridge filters.

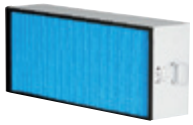
Smaller size and fewer filters. One FilTek XL filter replaces up to three cartridge-style filters increasing efficiency, reducing extractor size, and lowering operational costs.

Processes
- Stick (SMAW) • Flux-cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Custom Solutions
- Configured to source fume extraction
- Configured for ambient push-pull collection

Comes With
- FilTek™ XL Filter
- Top **or** front air inlet
- Configured for indoor **or** outdoor mounting (outdoor models are wind load and seismic rated and include remote-mounted control box)

Most Popular Consumable



- **Replacement High-Efficiency Filter** #300 927

Most Popular Accessories
- Extraction Arms
- Arm Mounting Bracket Kit
- Low Profile Hoods

Model	Nominal Airflow Range*	Number of Filter Packs	Sound Level	Input Power	Dimensions** (H x W x D)	Ship Weight
FILTAIR 2000	453-1,510 L/sec. (960-3,200 cfm)	2	72-75 dBA at 1.5 m (5 ft.) Peak pulse cleaning is 92.7 dBA at 1.5 m (5 ft.)	230, 460 or 575 V, 3-phase, 60 Hz	1,692 mm (66.6 in.) 792 mm (31.2 in.) 2,113 mm (83.2 in.)	590 kg (1,300 lb)
FILTAIR 4000	906-2,596 L/sec. (1,920-5,500 cfm)	4			2,187 mm (86.1 in.) 792 mm (31.2 in.) 2,113 mm (83.2 in.)	726 kg (1,600 lb)
FILTAIR 6000	1,359-4,078 L/sec. (2,880-8,640 cfm)	6			2,977 mm (117.2 in.) 792 mm (31.2 in.) 2,113 mm (83.2 in.)	1,021 kg (2,250 lb)
FILTAIR 8000	1,812-5,437 L/sec. (3,840-11,520 cfm)	8			3,429 mm (135 in.) 945 mm (37.2 in.) 2,113 mm (83.2 in.)	1,315 kg (2,900 lb)
FILTAIR 12000	2,718-6,343 L/sec. (5,760-13,440 cfm)	12			3,056 mm (120.3 in.) 1,516 mm (59.7 in.) 2,113 mm (83.2 in.)	1,769 kg (3,900 lb)

FILTAIR® Industrial Centralized Systems Accessories

Miller offers a full line of accessories for complete system solutions and turnkey installation.

Telescoping arm | Standard arm | Arm mounting bracket and ducting kit

Easy-to-operate, pre-assembled extraction arms and mounting equipment

- **Telescoping arms** are designed to fit small booth spaces used in training centers and educational booths. Telescopes from 0.9 to 1.4 m (3 to 4.5 ft.) with a wide range of motion to cover all positions
- **Standard arms** are designed to cover larger spaces, the standard extraction arms are available in 2.1-, 3.0-, and 3.7 m (7-, 10-, and 12-ft.) versions. External brackets and adjustments allow air to pass through with less resistance giving you stronger cfm (airflow)
- **Arm mounting bracket and ducting kit** includes a supporting bracket and collar for connecting an extraction arm to ductwork

Model	152 mm (6 in.) Diameter	203 mm (8 in.) Diameter
Telescoping Arm	(#301 242)	(#301 237)
Standard Arm	**(#300 953)** 2.1 m (7 ft.) arm **(#300 954)** 3.0 m (10 ft. arm) **(#300 955)** 3.7 m (12 ft. arm	**(#300 980)** 2.1 m (7 ft.) arm **(#300 981)** 3.0 m (10 ft. arm) **(#300 982)** 3.7 m (12 ft. arm
Arm Mounting Bracket and Ducting Kit	(#300 952)	(#300 771)

Spark Cooler®

- Cools sparks using the fume extractor's airflow
- Very efficient — maximizes the extractor's power
- Simple design is easy to install

FILTAIR low profile hood

- Available in sizes from 1.2 x 1.2 m (4 x 4 feet) up to 4.9 x 4.9 m (16 x 16 feet) in 0.3-m (1-foot) increments
- Exclusive design — capture velocity zone is maximized and distributed over the work area
- Hood airflow design reduces sound for better communication
- Unique airflow offers spark abatement in the extraction rail, and also in the recommended Spark Cooler
- Clear, UV-protected polycarbonate ceiling panels allow maximum light into the cell
- Corner lift hooks are convenient for installing or hanging over a work area. The hood can also be placed on an existing cell enclosure or supported with post assemblies

Cleaner air with FilTek® XL filters

The FilTek XL filter's higher MERV rating means unrivaled filtering performance.

MERV Comparison

Applicable Weld Fume MERV Rating Categories[1]	Particle Size Range Efficiency %[2]		
	0.3 to 1 µm	1 to 3 µm	3 to 10 µm
10	Not Rated	50–65%	85%
11	Not Rated	65–80%	85%
12	Not Rated	80–90%	85%
13	<75%	90%	90%
14	75–85%	90%	90%
15 Miller® FilTek XL	85–95%	90%	90%
16 Miller® FilTek XL	≥95%	≥95%	≥95%
HEPA[3]	≥99.97%	≥99.97%	≥99.97%
Weld Fume Composition[4]	75–95%	≤15%	≤10%

[1] *American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 52.2*
[2] *National Air Filtration Association (NAFA) Guide*
[3] ***HEPA filters are depth loading and have high restrictions to air flow, reducing system performance versus FilTek XL filters.***
[4] *Jenkins, Pierce, Edgar, Particle Size Distribution of GMAW and FCAW*

Filters are rated on a MERV scale, which measures filter efficiency based on particle count. MERV ratings range from 1-16, with 16 being the best at filtering small particles — such as those found in weld fumes. The vast majority of weld fumes are less than one micron in diameter, or roughly 1/100th the width of a human hair.

Filters in common air filtration systems often have MERV ratings between 7-11. FilTek XL filters are rated at class-leading MERV 15–16 to capture up to 95 percent of weld fume particulates including those found in hexavalent chromium.

Coolant Systems

See Literature No. AY/7.2

1 Phase

Coolmate 1.3 Coolmate 3 Coolmate 3.5 Coolmate 4

Coolmate™ 1.3

#300 972 115 VAC

For Maxstar/Dynasty 280 Series.

Light industrial, 1.3-gallon cooler designed for water-cooled torches on power sources rated up to 280 A*.

Coolmate™ 3

#043 007 115 VAC, **CE** **#043 008** 230 VAC, **CE**

Economical, 3-gallon cooler designed for water-cooled torches rated up to 500 A*.

Coolmate™ 3.5

#300 245 115 VAC, **CE**

For Maxstar/Dynasty 350 and 700.

Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 A*.

Coolmate™ 4

#042 288 115 VAC

The best performer in its class — industrial, 4-gallon cooler designed for water-cooled torches rated up to 600 A*.

**May vary with torch design and cable length.*

Miller coolant systems are backed by the best warranty in the industry — one full year.

Coolant

Sold in multiples of four in 1-gallon recycleable plastic bottles. Miller® coolants contain a base of ethylene glycol and deionized water to protect against freezing to -38°C (37°F) or boiling to 108°C (227°F).

Low Conductivity Coolant
(Clear, Pre-mixed) #043 810

For TIG and MIG applications. NOT for use in push-pull systems or systems where aluminum is in coolant path/circuit.

Aluminum-Protecting Coolant
(Green, Pre-Mixed) #043 809

Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.

Model	Motor Input Voltage	Maximum Current Draw	Maximum Cooling Capacity	IEC Cooling Capacity	Tank Capacity	Dimensions	Net Weight
Coolmate 1.3	115 V, 60 Hz	4.7 A (60 Hz)	3400 W (11,600 BTU/hr) 3.6 L/min (3.8 qt/min)	1330 W (4540 BTU/hr) 1 L/min (1.1 qt/min)	4.9 L (1.3 gal)	H: 286 mm (11.25 in.) W: 264 mm (10.38 in.) D: 610 mm (24 in.)	20 kg (43 lb.)
Coolmate 3	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3820 W (13,000 BTU/hr) 4 L/min (4.2 qt/min)	1420 W (4840 BTU/hr) 1 L/min (1.1 qt/min)	11.4 L (3 gal)	H: 337 mm (13.25 in.) W: 311 mm (12.25 in.) D: 584 mm (23.25 in.)	18 kg (40 lb.)
	230 V, 50/60 Hz	2.5 A (50 Hz), 3.0 A (60 Hz)					
Coolmate 3.5	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4140 W (14,000 BTU/hr) 4.7 L/min (5 qt/min)	1660 W (5660 BTU/hr) 1 L/min (1.1 qt/min)	13.2 L (3.5 gal)	H: 298 mm (11.75 in.) W: 400 mm (15.75 in.) D: 660 mm (26 in.)	29 kg (64 lb.)
Coolmate 4	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	5500 W (18,000 BTU/hr) 5.6 L/min (5.9 qt/min)	1780 W (6070 BTU/hr) 1 L/min (1.1 qt/min)	15 L (4 gal)	H: 413 mm (16.25 in.) W: 387 mm (15.25 in.) D: 476 mm (18.75 in.)	17 kg (38 lb.)

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€ Manufactured in Europe.

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