



DCW-18-M

SUBARC CIRCLE WELDER



412-331-1776 www.bugo.com

Bug-O Systems is guided by honesty, integrity and ethics in service to our customers and in all we do.





DCW-18-M (DCW-1800-M) Circle Welder

For welding diameters from 10" to 50"
(250 - 1270 mm) O.D.

Use with 3 jaw expandable chuck or manipulator

Options:

- Water cooled version available
- Heavy duty motorized racking
- Three jaw expandable chucks
- Flux Recovery System

Features:

- Wire feeder with one set of drive rolls
- DC drive motor and speed control for rotation
- Meter kit with 0-50 DC volt meter, 0-600 DC amp meter
- Sub-Arc Gun and cable assembly
- 2 Hot leads 4/0
- Burnback control
- 50 ft. (15 m) control cable
- Weld switch, manual - automatic
- Cold wire inch switch up - down
- Torch angle adjustor
- Flux hopper with gate valve
- 60 lbs. (27 kg) wire reel.
- HD Horizontal and Vertical adjustment
- Rise and fall slide assembly
- Rise and fall cam with 7" (175 mm) of travel
- Brushes and collector rings for welding current, rated at 600 amps 100% duty cycle

Technical Data:

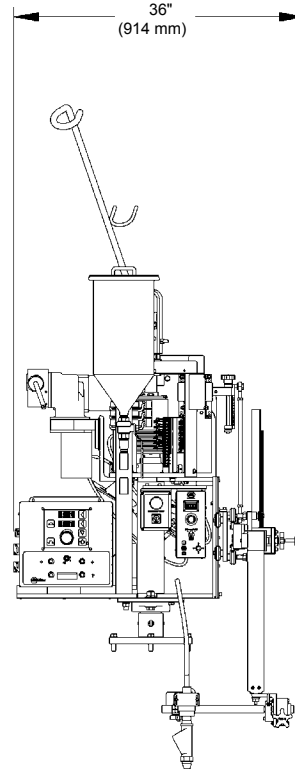
DCW-18-M (DCW-1800-M)

Input Voltage Rotation:	115 VAC
Duty Cycle:	100%
Amperage:	0-600 amps
Voltage:	0-60 volt
Wire Sizes:	1/16"-5/32"
Rotation Speed:	.06-.72 rpm
Cam Range:	0"-7" (0-175 mm)
Welding Radius:	5"-25" (127-635 mm)
Height:	45" (1143 mm)
Net Weight:	TBD
Shipping Weight:	TBD

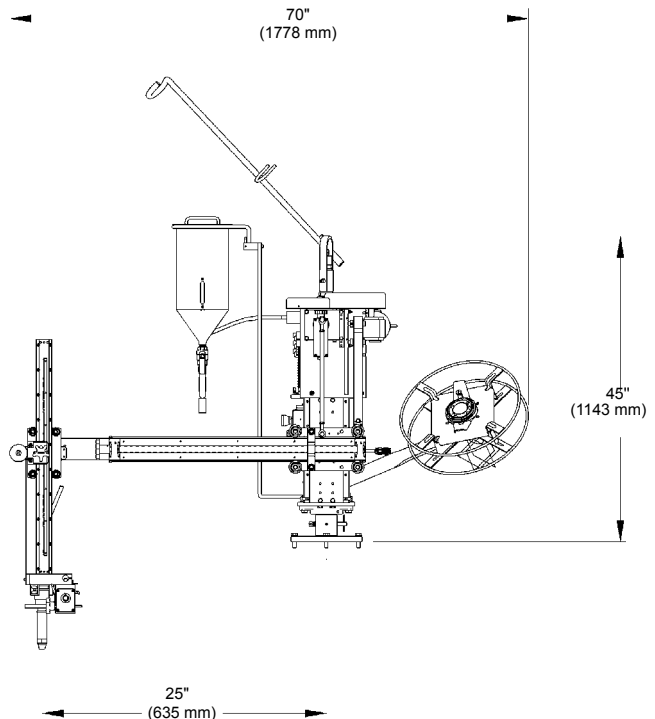
The DCW-18-M may be used with the following Miller® Power Sources:

SubArc DC 650 Digital	#907 622
SubArc DC 800 Digital (50 Hz)	#907 623
SubArc DC 1000 Digital	#907 624
SubArc DC 1250 Digital (50 Hz)	#907 625
SubArc AC/DC 1000 Digital	#907 620
SubArc AC/DC 1250 Digital (50 Hz)	#907 621

SIDE ELEVATION



FRONT ELEVATION





DCW-18-M Circle Welder



Miller® SubArc AC/DC Digital

Miller® SubArc AC/DC 1000/1250 Digital. AC welding output enables the SubArc AC/DC to be used in tandem arc welding systems with a DC lead arc and AC trailing arc, or with AC / AC arc combinations. Using multiple arcs increases deposition rate, resulting in shorter welding cycles for very thick weldments without compromising quality. All AC balance control modes can be set on the SubArc Interface Digital. The easy-to-understand interface includes two DC modes and 12 best-practice AC balance settings. In multiple-arc configurations, the system automatically adjusts the phase shifting between power sources thereby eliminating arc interaction. There is no need to employ a laptop PC for complex wave shaping before operation.

Miller® SubArc AC/DC Digital Specifications (Subject to change without notice.)



Model	Amperage/ Voltage Ranges	Rated Output	IP Rating	RMS Amps Input at Rated Output, 3-Phase at NEMA Load Voltages and Class 1 Rating					Max. Open- Circuit Voltage	Dimensions	Net Weight
				380 V (50 Hz)	400 V (50 Hz)	460 V (60 Hz)	KVA	KW			
SubArc AC/DC 1000/1250 Digital	300-1250 A in CC mode 20-44 V in Subarc mode	1000 A at 44 V 100% Duty Cycle	IP23	140 3.0*	141 3.0*	122 3.0*	98 2.37*	53 0.95*	71 VDC	H: 43" (1092mm) (including lift eye) W: 27.5" (699mm) D: 47.5" (1207mm) (not including strain relief)	1225 lb. (540 kg)
		1250 A at 44 V 60% Duty Cycle		179 3.0*	176 3.0*	158 3.0*	122 2.37*	67 0.95*			

*While idling



Miller® SubArc DC Digital

Miller® SubArc DC 650/800 Digital and DC 1000/1250 Digital cover most single- and twin-wire applications. These traditional transformer/rectifier power sources combine high efficiency with the highest reliability. They also feature state-of-the-art digital-control electronics to provide best-in-class welding performance and repeatability.

Miller® SubArc DC Digital Specifications (Subject to change without notice.)



Model	Amperage/ Voltage Ranges	Rated Output	IP Rating	Amps Input at Rated Load Output, 50/60 Hz								Max. Open- Circuit Voltage**	Dimensions	Net Weight
				230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW			
SubArc DC 650/800 Digital	50-815 A in CC mode 20-44 V in Subarc mode	650 A at 44 V, 100% Duty Cycle	IP23	126 3.8*	77 1.9*	73 1.8*	66 1.6*	63 1.9*	50.4 1.4*	50 1.52*	34.8 0.76*	72 VDC	H: 27.25" (692mm) (including lift eye) W: 22.25" (565mm) D: 37.5" (953 mm) (not including strain relief)	545 lb. (247 kg)
				180 5.8*	109 5.2*	104 5.0*	94 4.5*	90 2.9*	72 2.4*	73 3.2*	53 0.5*			
SubArc DC 1000/1250 Digital	100-1250 A in CC mode 20-44 V in Subarc mode	1000 A at 44 V, 100% Duty Cycle	IP23	180 5.8*	109 5.2*	104 5.0*	94 4.5*	90 2.9*	72 2.4*	73 3.2*	53 0.5*	66 VDC	644 lb. (292 kg)	

*While idling

**Open-circuit voltages in CV mode are factory set at values less than indicated for CC.



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Miller® SubArc Interface Control Panels



SubArc Interface Digital
(#300 936)

Wire Drive Assemblies

Drive Rolls

“V” Knurled drive rolls for use with hard-shelled cored wires.

#132 955	1/16 in.	(1.6 mm)
#132 960	5/64 in.	(2.0 mm)
#132 961	3/32 in.	(2.4 mm)
#132 962	7/64 in.	(2.8 mm)
#132 963	1/8 in.	(3.2 mm)
#193 700	5/32 in.	(4.0 mm)
#193 701	3/16 in.	(4.8 mm)
#193 702	7/32 in.	(5.6 mm)



Submerged Arc Torches

OBT 1200 #043 900

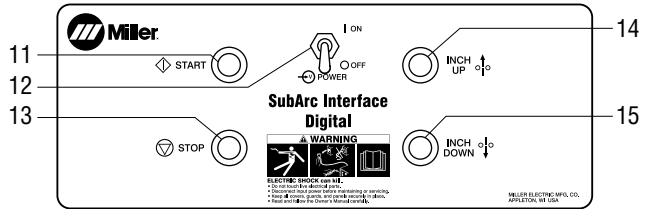
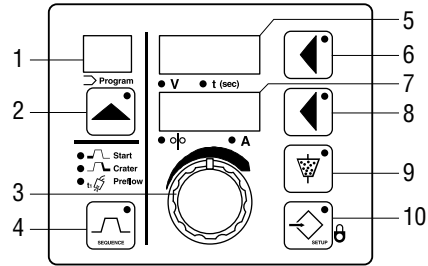


1200-amp, 100-percent-duty-cycle torch with concentric flux flow nozzle. Can be used with 1/16–7/32 inch (1.6–5.6 mm) wire. OBT 1200 features a replaceable breakaway adapter end damage should torch run into an obstruction.

OBT 600 #043 923



600-amp, 100-percent-duty-cycle torch with concentric flux flow nozzle. Can be used with 1/16–7/32 inch (1.6–5.6 mm) wire.



- | | |
|------------------------------|-----------------------|
| 1. Program Display | 9. Flux Push Button |
| 2. Program Push Button | 10. Setup Push Button |
| 3. Adjust Control | 11. Start Button |
| 4. Sequence Push Button | 12. Power Switch |
| 5. Upper Display | 13. Stop Button |
| 6. Upper Display Push Button | 14. Wire Inch Up |
| 7. Lower Display | 15. Wire Inch Down |
| 8. Lower Display Push Button | |



SubArc Wire Drive 400 Digital Low Voltage

#300 938* Standard speed

#300 938 001 Standard speed, for use with Tractor

SubArc Wire Drive 780 Digital Low Voltage

#300 941* High speed

Right-angle wire drive assembly

*Includes adapter plate allowing mounting to 2.5-, 4.25-, and 4.625-inch bolt-hole patterns.

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