

Sub Arc DC Series

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**Submerged Arc Welding
Power Source**



Quick Specs



Heavy Industrial Applications

Fabrication and Construction
Heavy Manufacturing
Pressure Tank/Vessel Fabrication
Pipe Welding
Shipbuilding
Refineries and Foundries
Railcar Manufacturing
Earth-Moving Equipment
Manufacturing

Processes

Submerged Arc (SAW)
Air Carbon Arc (CAC-A)
Cutting and Gouging
Stick (SMAW)
Flux Cored (FCAW)

Input Power 3-Phase Power on all models

Rated Output **650/800:** 650 A at 44 VDC, 100% Duty Cycle
1000: 1000 A at 44 VDC, 100% Duty Cycle
1250: 1000 A at 44 VDC, 100% Duty Cycle

Weight **650/800:** 545 lb (247 kg)
1000/1250: 644 lb (292 kg)

The Power of Blue.®

DC multiprocess capability provides versatility and outstanding arc performance in SAW (Submerged Arc) and CC (Stick, Carbon Arc Gouging).

Internal digital voltage control (DVC) enables operator to preset weld voltage in the CV mode before striking an arc.

Built-in arc control lets you get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.

Hot Start™ makes it easier to start difficult-to-start Stick electrodes such as E-6010 and E-7018.

Line voltage compensation ensures consistent weld performance by keeping output power constant even if primary input power varies by $\pm 10\%$.

Simple control panel features single range amperage/voltage adjustment. Provides easy, efficient operation.

Digital voltmeter and ammeter are easy to read, even at 30 ft (9.2 m).



Sub Arc DC 650

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

14-pin receptacle provides quick, direct connection to Miller 14-pin wire feeders and accessories.

115 V duplex receptacle provides 15 amps of auxiliary power.

Remote on/off capabilities allow operator to turn power source on/off from a distance.

Remote voltage control allows operator to change voltage from SAW Control.

Power efficient for exceptional value and return on your investment.

Fan-On-Demand™ operates only when needed reducing noise, power consumption, and the amount of airborne contaminants pulled through the machine.

Enclosed circuit boards provide additional protection from contaminants resulting in longer service life.

Power cord strain relief provided for your convenience at installation.



Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN **USA**
APPLETON, WI **USA**



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International Phone: 920-735-4554
International FAX: 920-735-4125

Web Site
www.MillerWelds.com



Sub Arc DC 650/800 Specifications (Subject to change without notice.)



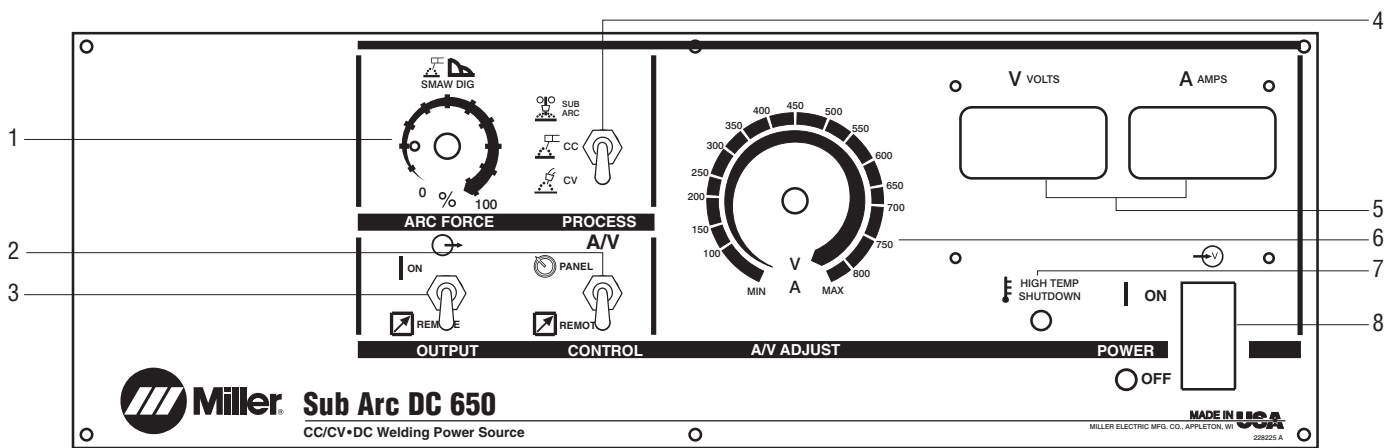
Model	Rated Output	Amperage/Voltage Range	Max. Open-Circuit Voltage*	Amps Input at Rated Output, 50/60 Hz	Dimensions	Net Weight
650 A	650 A at 44 VDC, 100% Duty Cycle	50–815 A in CC mode	72 VDC	230 V 380 V 400 V 440 V 460 V 520 V 575 V KVA KW	H: 27-1/4 in (692 mm) including lift eye W: 22-1/4 in (565 mm) D: 36 in (914 mm) including strain relief	545 lb (247 kg)
800A	10–65 V in CV mode	126 77 73 66 63 54 50.4 50 34.8 3.8** 1.9** 1.8** 1.6** 1.9** 1.1** 1.4** 1.52** 0.76**				

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

Certified to both the Canadian and U.S. Standards for welding equipment.

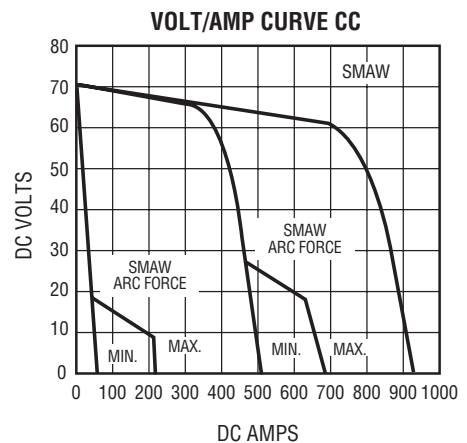
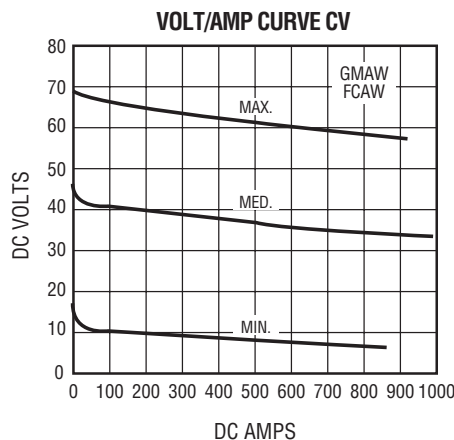
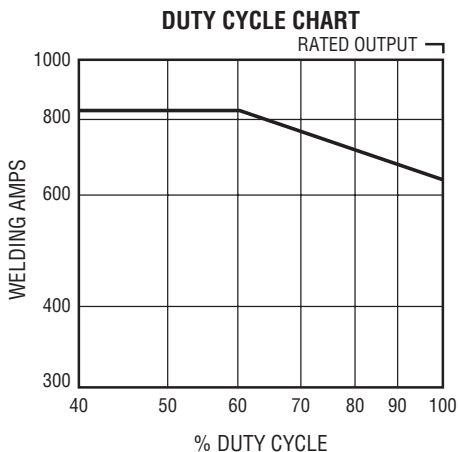
50 Hz models with CE Specifications are manufactured according to the Standard IEC 60974-1.

Control Panel



- Arc Force (DIG) Control
- Remote Amperage/Voltage Control Switch
- Output Switch (Contactor)
- Process Selector Switch
- Digital Meters
- Amperage/Voltage Adjustment Control
- High Temperature Shutdown Light
- Power Switch with Indicator Light

Performance Data



Sub Arc DC 1000/1250 Specifications (Subject to change without notice.)



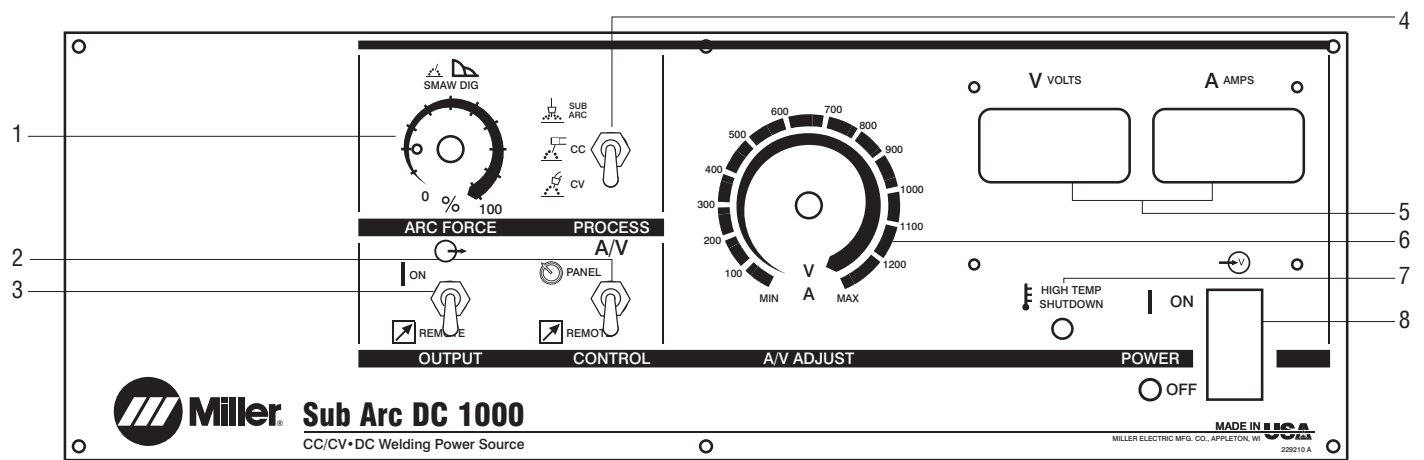
Model	Rated Output	Amperage/Voltage Range	Max. Open-Circuit Voltage*	Amps Input at Rated Output, 50/60 Hz								Dimensions	Net Weight
				230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW		
1000 A	1000 A at 44 VDC, 100% Duty Cycle	100–1250 A in CC mode	66 VDC	180	109	104	94	90	72	73	53	H: 27-1/4 in (692 mm) including lift eye W: 22-1/4 in (565 mm) D: 36 in (914 mm) including strain relief	644 lb (292 kg)
1250 A		10–60 V in CV mode		5.8**	5.2**	5.0**	4.5**	2.9**	2.4**	3.2**	0.5**		

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

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Control Panel



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- 2. Remote Amperage/Voltage Control Switch
- 3. Output Switch (Contactor)
- 4. Process Selector Switch
- 5. Digital Meters
- 6. Amperage/Voltage Adjustment Control
- 7. High Temperature Shutdown Light
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Performance Data

