

SubArc Portable Welding System

Submerged Arc Welding 

Quick Specs

Heavy Industrial Applications

Pressure vessel
Pipe fabrication/construction
Fabrication
Manufacturing

Processes

Submerged arc (SAW)

Input Power

Column requires 1-phase power
Power source requires 3-phase power

Rated Output

DC 650: 650 A at 44 V, 100% duty cycle
DC 1000: 1,000 A at 44 V, 100% duty cycle

SubArc Portable Welding System is a ready-to-weld submerged arc system for pressure vessel, pipe and welding that requires positioning equipment which can adapt to your application.

Self-contained system houses column, boom and power source on a mobile platform, providing a compact, turnkey submerged arc welding solution.

Built-in fork pockets and caster wheels provide mobility options to move the welding system to your workpiece.

Ease of positioning the weld head through use of integrated motorized column, manual telescoping boom, cross slides and 360-degree column rotation.

Motorized column with pendant control provides 44 inches (1,117 mm) of vertical travel to accommodate workpieces of various heights.

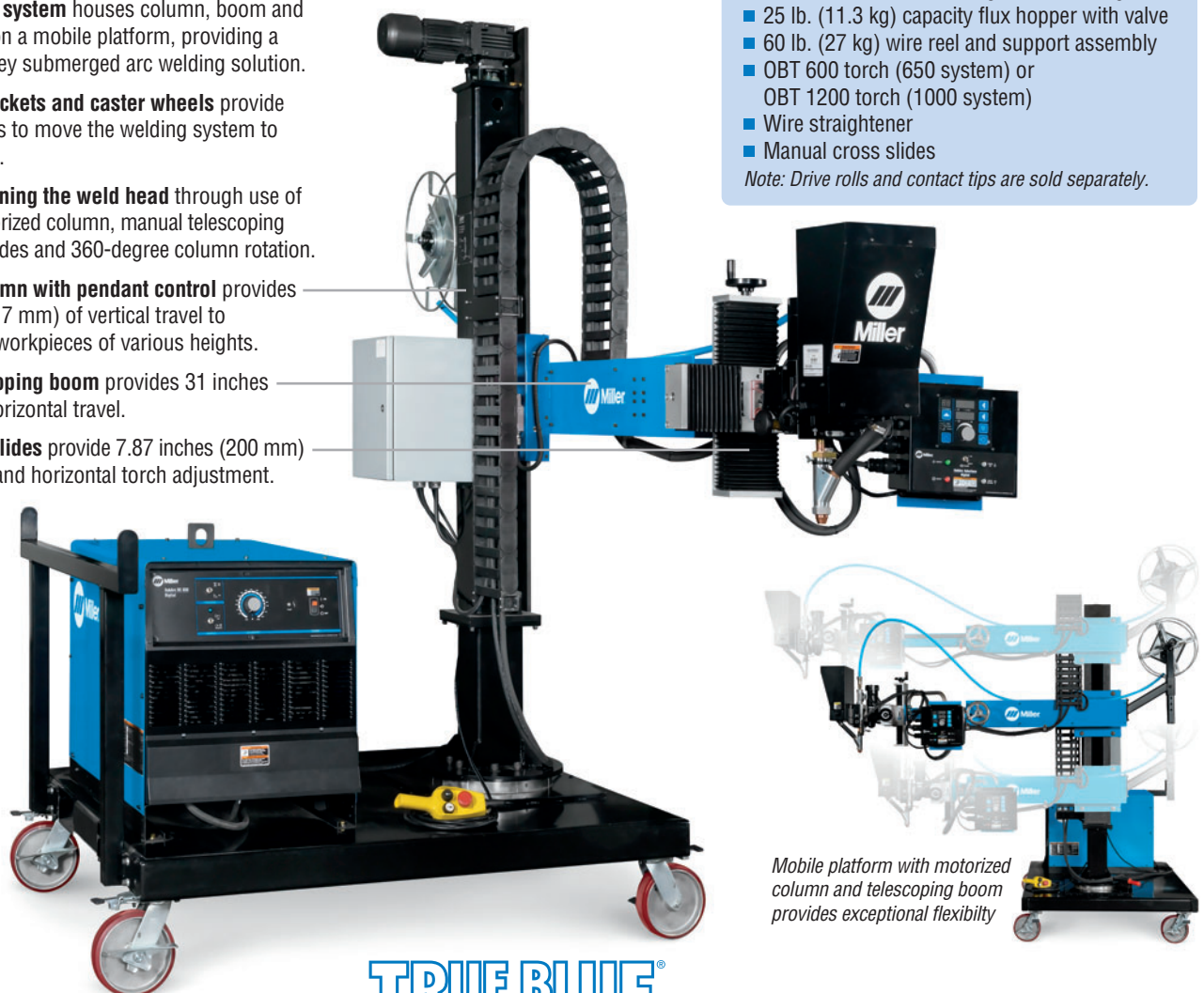
Manual telescoping boom provides 31 inches (787 mm) of horizontal travel.

Manual cross slides provide 7.87 inches (200 mm) of fine vertical and horizontal torch adjustment.

Packages include:

- Portable column and boom
- SubArc Digital power source
- SubArc Interface Digital and control cable
- SubArc Wire Drive 400 Digital Low Voltage
- 25 lb. (11.3 kg) capacity flux hopper with valve
- 60 lb. (27 kg) wire reel and support assembly
- OBT 600 torch (650 system) or OBT 1200 torch (1000 system)
- Wire straightener
- Manual cross slides

Note: Drive rolls and contact tips are sold separately.



Mobile platform with motorized column and telescoping boom provides exceptional flexibility



Portable Welding System structure is warranted for one year.
Power source is warranted for three years, parts and labor.
Original main power rectifier parts are warranted for five years.

Miller recommends



Miller Electric Mfg. LLC
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Portable Column and Boom Specifications (Subject to change without notice.)

1
Phase

Input Voltage	Column Stroke	Column Travel	Boom Stroke	Boom Travel	Base Rotation	Minimum Working Height	Maximum Working Height	Overall Height
120 V, 1-phase, 60 Hz	44 in. (1,117 mm)	Constant speed	31 in. (787 mm)	Manual	360°	DC 650: 33.5 in. (851 mm) DC 1000: 26.25 in. (667 mm)	DC 650: 77.5 in. (1,969 mm) DC 1000: 70.25 in. (1,784 mm)	102 in. (2,590 mm)

SubArc Digital Series Specifications (Subject to change without notice.)

CC
CV

DC

3
Phase

Model	Torch Included with Welding System	Amperage/Voltage Ranges	Rated Output	IP Rating	Amps Input at Rated Load Output, 60 Hz					Maximum Open-Circuit Voltage DC**
					230 V	460 V	575 V	KVA	KW	
SubArc DC 650 Digital	OBT 600	50–815 A in CC mode 20–44 V in sub arc mode	650 A at 44 V, 100% duty cycle 815 A at 44 V, 60% duty cycle	IP23	126 3.8*	63 1.9*	50.4 1.4*	50 1.52*	34.8 0.76*	75 Vpk
SubArc DC 1000 Digital	OBT 1200	100–1,250 A in CC mode 20–44 V in sub arc mode	1,000 A at 44 V, 100% duty cycle 1,250 A at 44 V, 60% duty cycle	IP23	180 5.8*	90 2.9*	72 2.4*	73 3.2*	53 0.5*	68 Vpk

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

 All SubArc Digital Series models are certified by Canadian Standards Association to both the Canadian and U.S. Standards.

 All SubArc Digital Series models are manufactured and certified in accordance with IEC-60974-1, -10.

Accessories

Drive Rolls

132955	1/16 in. (1.6 mm)
132960	5/64 in. (2.0 mm)
132961	3/32 in. (2.4 mm)
132962	7/64 in. (2.8 mm)
132963	1/8 in. (3.2 mm)
193700	5/32 in. (4.0 mm)
193701	3/16 in. (4.8 mm)

OBT Torch Contact Tips

OBT 600	OBT 1200	Wire Size
192700	192141	1/16 in. (1.6 mm)
192701	199026	5/64 in. (2.0 mm)
192702	192142	3/32 in. (2.4 mm)
192703	200771	7/64 in. (2.8 mm)
192704	192143	1/8 in. (3.2 mm)
192705	192144	5/32 in. (4.0 mm)
—	192136	3/16 in. (4.8 mm)



14-pin Insight Core™ Module 301072

Insight Core is a simplified, internet-based industrial welding information management solution that monitors and reports welding activity for basic productivity and quality metrics. Requires Insight Core to SubArc Digital Series Adapter (301295).

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
SubArc DC 650 Digital Portable Welding System	951675			
SubArc DC 1000 Digital Portable Welding System	951676			
Accessories				
Drive Rolls		See above. Order separately		
Contact Tips		See above. Order separately		
14-pin Insight Core™ Module	301072	Requires Insight Core to SubArc Digital Series Adapter (301295)		
Insight Core™ to SubArc Digital Series Adapter	301295			

Date:

Total Quoted Price:

Distributed by:

