



# Dimension™ 1000/1250

## 3-Phase DC Multiprocess Industrial Arc Welding Power Source



Miller's Dimension™ 1000/1250 provides outstanding versatility, plus the endurance and high amperage output to handle the biggest industrial applications. This unit is engineered to provide exceptional performance across the whole spectrum of arc welding processes.

### Applications

- Heavy manufacturing
- Pressure tank/vessel fabrication
- Pipe welding
- Shipbuilding
- Foundries
- MRO—maintenance/repair
- Railcar manufacturing
- Earth moving equipment manufacturing

### Processes



**Submerged Arc (SAW) Welding**



**Air Carbon Arc (CAC-A) Cutting and Gouging**



**Gas Metal Arc or MIG (GMAW) Welding**



**Flux Cored Arc (FCAW) Welding**



**Shielded Metal Arc or Stick (SMAW) Welding**

### Description



### Miller Electric Mfg. Co.

An Illinois Tool Works Company  
1635 West Spencer Street  
Appleton, WI 54914 USA

#### International Headquarters—USA

USA Phone: 920-735-4505  
USA FAX: 920-735-4134  
Canadian FAX: 920-735-4169  
International FAX: 920-735-4125

Web Site—www.MillerWelds.com



### Features

### Benefits

<b>Multiprocess capabilities</b>	Versatility and outstanding arc welding performance in both CV and CC modes.
<b>1000 amps @ 100% duty cycle</b>	Capable of the most demanding applications.
<b>Internal digital voltage control (DVC)</b>	Enables you to preset weld voltage in the CV mode before initiating an arc. Simplifies set-up.
<b>Built-in arc control</b>	Lets you get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.
<b>Hot Start™</b>	Increases the output amperage at the start of a weld. This feature works in CC mode especially well with E-6010 and E-7018 electrodes.
<b>Simple control panel</b>	Single range amperage/voltage adjustment. Provides easy, efficient operation.
<b>Large meters</b>	Digital voltmeter and ammeter are easy to read, even at 30 ft (9.2 m).
<b>Line voltage compensation</b>	Keeps output power constant even if primary input power varies by ±10%.
<b>Power efficient</b>	Exceptional value and return on your investment. Reduces power cost.
<b>Power cord strain relief</b>	Provided for your convenience
<b>Remote control capabilities</b>	Allows operator to turn your power source on/off from a distance.
<b>Remote voltage control</b>	Allows operator to change voltage from feeder.
<b>Fan-On-Demand™</b>	Cooling fan only operates when needed. In dusty or dirty conditions, this feature reduces the amount of airborne contaminants pulled through the machine. Reduces noise in the workplace and enhances electrical efficiency, because fan doesn't run constantly.
<b>14-pin receptacle</b>	14-pin receptacles provides quick, direct connection to Miller wire feeders and accessories.
<b>115 V duplex receptacle</b>	115 V duplex receptacle provides 15 amps of auxiliary power.
<b>PC board protection</b>	Composite enclosures protect internal circuit boards from dust and dirt, resulting in longer service life and less down time.
<b>Protected circuit boards</b>	Prevents the wire feed power or other stray voltages (less than 115 VAC) from harming the power source PC board.
<b>Thermal overload protection</b>	Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked. Light indicates power shutdown.

### Ordering Information

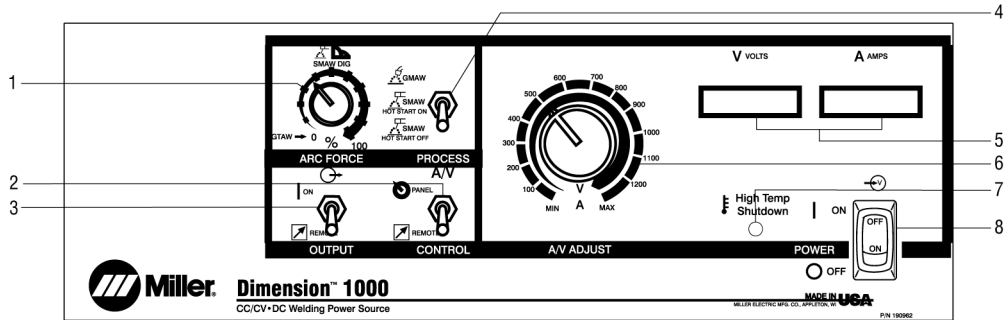
<b>Dimension™ 1000</b>	230/460/575 V, 60 Hz	<b>#903 650</b>
<b>Dimension™ 1250</b>	380/400/440 V, 50/60 Hz	<b>#903 691</b>
<b>Dimension™ 1250</b>	380/400/440 V, 50/60 Hz, CE	<b>#903 691-011</b>

**Specifications** (Subject to change without notice.)



Rated Output	Amperage/Voltage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, Three-Phase, 50/ 60 Hz								KVA	KW	Dimensions	Net Weight
			230 V	380 V	400 V	440 V	460 V	575 V						
1000 A at 44 VDC, 100% Duty Cycle	100–1250 A in CC mode	65 VDC in CC mode	180	109	104	94	90	72	72	54			H: 27-1/4 in (692 mm) W: 22-1/4 in (565 mm) D: 36 in (914 mm)	644 lb (292 kg)
1250A at 44 VDC, 60% Duty Cycle	10–60 V in CV mode	38 VDC in CV mode												

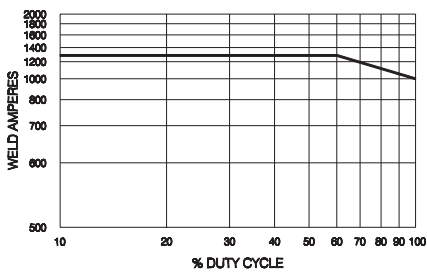
**Control Panel**



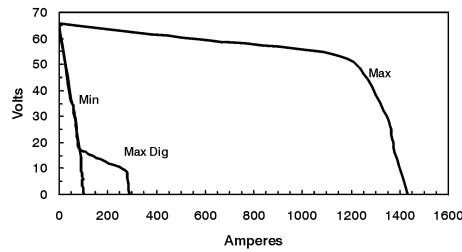
- 1. Arc Force (DIG) Control
- 2. Remote Amperage/Voltage Control Switch
- 3. Output Switch (Contactor)
- 4. Process Switch
- 5. Digital Meters
- 6. Amperage/Voltage Adjustment Control
- 7. High Temperature Shutdown Light
- 8. Power Switch with Indicator Light

**Performance Data**

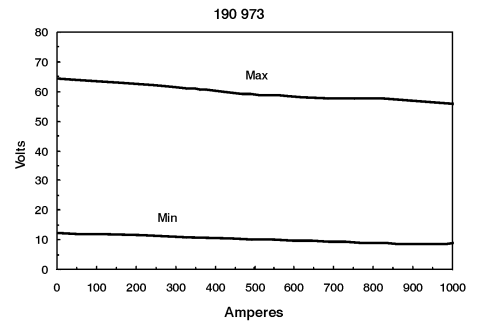
**DUTY CYCLE CHART**



**VOLT/AMP CURVE CC**



**VOLT/AMP CURVE CV**



## Accessories

### Remote On/Off Control #042 869

Allows you to turn your Dimension on or off from a distance of 20 ft (6 m). This is especially useful if your power source is located up in a mezzanine. Connects to the power source's terminal strip.

### Ground Current Sensor

#043 146 Field

Disables power source if weld current is present on primary ground.

### International Cable Adapter

#168 077 Female, Qty. 1

Dinse brand insulated female twistlock connector installs on output stud, providing quick disconnect of secondary weld cables.

#042 418 Male, Qty. 1

Cable mounted Dinse brand insulated male twistlock connector accepts #1 or #2 AWG cable sizes.



### Standard Running Gear #042 886

The large 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source around and over cables and cracks. Very easy to install. Handles double as weld cable holder.

### Standard Cylinder Rack #042 887

Holds two cylinders. Capable with standard running gear only #042 886.



(Note: Both sides lift independently as shown.)

### Cylinder Rack/Lift #043 005

Miller's cylinder rack features a lift which moves the cylinders up onto the rack and into position without manual lifting! The rack accommodates two cylinder bottles, and can be attached directly to the running gear.



### Rough Terrain Running Gear #043 043

This two-wheel running gear features pneumatic tires for extra mobility. Handles double as a cable holder. (Not compatible with any cylinder rack.)

### Air Filter Kit #042 939 Field

Protect your Dimension from dusty, dirty environments with this reusable air filter that easily attaches and detaches from the front of the power source.

## Wire Feeders



### Super S-32P Series Wire Feeder #159 928

A compact, portable, voltage-sensing wire feeder for .035 – 5/64 in (0.6–2.0 mm) flux cored wire. See literature, Index No. M/6.26.



### 60 Series Wire Feeders

Heavy-duty, industrial, constant-speed 24 VAC semiautomatic wire feeders in dual or single models, with available digital meters. Ideal for high-duty-cycle MIG and Flux Cored welding. Accommodates a wide variety of wire sizes and types. See literature, Index No. M/2.0.

# System Checklist and Quotation Sheet

Power Source and Options	Stock No.	Description	Qty.	Price
Dimension 1000	#903 650	230/460/575 Volt, 60 Hz		
Dimension 1250	#903 691	380/400/440 Volt, 50/60 Hz		
Dimension 1250	#903 691-011	380/400/440 Volt, 50/60 Hz, CE		
<b>Wire Feeders</b>				
Super S-32P		See Lit. Index No. M/6.26		
60 Series		See Lit. Index No. M/2.0		
<b>Accessories</b>				
MIGmatic Guns		See Lit. Index No. M/10.0		
MIG Hook-up Kit	#173 856			
Remote On/Off Control	#042 869			
Ground Current Sensor	#043 146	Field		
International Cable Adapter	#168 077	Female		
International Cable Adapter	#042 418	Male		
Std. Running Gear	#042 886			
Standard Cylinder Rack	#042 887			
Cylinder Rack/Lift	#043 005			
Rough Terrain Running Gear	#043 043			
Air Filter Kit	#042 939			
Primary power cord				
Secondary/weld cable				
Work cable and clamp				
<b>Date:</b>			<b>Total Quoted Price:</b>	



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