

# 20 Series

## Quick Specs

### Industrial Applications

Heavy- or light-duty fabrication shops  
Trailer manufacturers  
Furniture manufacturers  
Automotive products  
Educational institutions

### Processes

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

**Input Power** 24 VAC, 7 A, 50/60 Hz

### Wire Diameter Capacity

**22A:** .023–5/64 in. (0.6–2.0 mm)  
**24A:** .023–3/32 in. (0.6–2.4 mm)

**Wire Feed Speed** 75–750 ipm (1.9–19 m/min.)

**Net Weight** **22A:** 36 lb. (15.4 kg) **24A:** 40 lb. (18 kg)

**Models:** **22A:** Two gear-driven drive rolls  
**24A:** Four gear-driven drive rolls



Models include Bernard™ BTB Gun 300 A, .035/.045-inch drive rolls and Centerfire™ contact tips! For more options, visit [MillerWelds.com/equiptoweld](http://MillerWelds.com/equiptoweld).

**Wire feed speed range** is 75–750 ipm! This offers a wider operating range than the competition.

**Trigger hold control** allows operator to make long extended welds without having to hold gun trigger.

**Gear-driven drive rolls** offer smooth, positive and accurate wire feed with long, uninterrupted service life. 24A has four drive rolls for larger wire diameters.

**On-board burnback and motor ramp control** offers unmatched starting and stopping performance on a variety of power sources. This helps to ensure positive arc starting performance.

**16-gauge sheet metal housing** is robust in rough service applications and less prone to damage.

**Remote voltage control** is standard on 24A. Parameter adjustments can be made in weld cell or at a remote location. Optional for 22A.

**Adjustable run-in control** is standard on 24A for better arc-starting performance on a variety of wires. Optional for 22A.



Wire feeder is warranted for three years, parts and labor.



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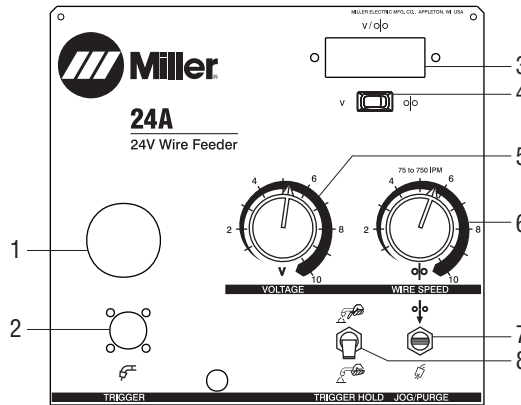
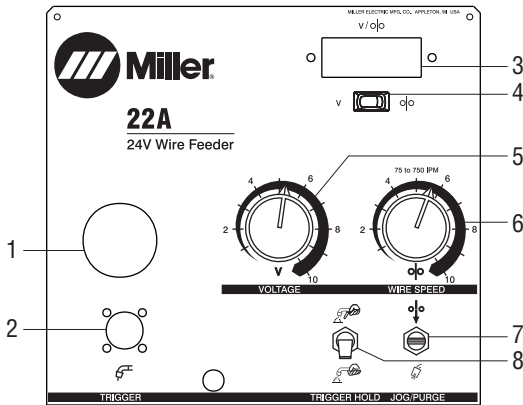
# Specifications (Subject to change without notice.)

**CV DC** (Use with CV, DC power sources.)

Model	Input Power	Wire Feed Speed	Wire Diameter Capacity	Dimensions	Net Weight
22A	24 VAC, 7 A, 50/60 Hz	75–750 ipm (1.9–19 m/min.)	.023–5/64 in. (0.6–2.0 mm)	H: 11 in. (279 mm) W: 10.75 in. (273 mm) D: 23.5 in. (597 mm)	36 lb. (15.4 kg)
24A			.023–3/32 in. (0.6–2.4 mm)		40 lb. (18 kg)

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

## Control Panels



1. Gun Connection
  2. Trigger Receptacle
  3. Voltage/Wire Speed Meter\*
  4. Meter Selection Switch\*
  5. Remote Voltage Control\*\*
  6. Wire Speed Control
  7. Jog/Purge
  8. Trigger Hold (On/Off)
- Power On/Off (on rear panel)

\*Optional  
\*\*Optional on 22A,  
standard on 24A

## Drive Roll Kits and Guides (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include the necessary guides and feature an anti-wear sleeve for inlet guide.

Wire Size	"V" groove for hard wire		"U" groove for soft wire or soft-shelled cored wires		"V" knurled for hard-shelled cored wires		"U" clogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types)	
	22A 2-Roll Kit	24A 4-Roll Kit	22A 2-Roll Kit	24A 4-Roll Kit	22A 2-Roll Kit	24A 4-Roll Kit	22A 2-Roll Kit	24A 4-Roll Kit
.023/.025 in. (0.6 mm)	087131	—	—	—	—	—	—	—
.030 in. (0.8 mm)	079594	046780	—	—	—	—	—	—
.035 in. (0.9 mm)	079595	046781	044749	044750	079606	046792	—	—
.040 in. (1.0 mm)	—	161190	—	—	—	—	—	—
.045 in. (1.1/1.2 mm)	079596	046782	079599*	046785	079607	046793	083318	—
.052 in. (1.3/1.4 mm)	079597	046783	—	046786	079608	046794	—	—
1/16 in. (1.6 mm)	079598	046784	079601	046787	079609	046795	079614	046800
.068/.072 in. (1.8 mm)	—	—	—	—	089984	—	—	—
5/64 in. (2.0 mm)	—	—	—	046788	079610	046796	—	—
3/32 in. (2.4 mm)	—	—	—	—	—	046797**	—	—

\*Accommodates .045 and .047 in. (3/64 mm) wire. \*\*3/32 in. inlet guide 194264 is required when using 3/32 in. drive rolls.

## Nylon Wire Guides for Feeding Aluminum Wire

Wire Size	Inlet Guide
.035–.047 in. (1.2 mm)	151203
1/16 in. (1.6 mm)	151205

Note: "U" groove drive rolls are recommended when feeding aluminum wire.

## Genuine Miller® Options and Accessories

**Digital Display V/WFS 186498** Field  
Dual-function, back-lit LCD digital meter with selector switch. The digital meter allows the wire feed speed to be preset in inches per minute or meters per minute. The voltage function, if used with a current Miller-manufactured, electronically controlled, constant-voltage power source, allows the arc voltage to be preset and monitored on the digital display. When used with voltage control **194211**.

**Voltage Control 194211** Field  
Standard on 24A. Installs in front panel of the feeder to allow remote voltage control of most Miller, electronically controlled CV or CC/CV power sources.

*Note: The field kit voltage control includes a 10-foot (3 m) cord that replaces the standard cord supplied with the feeder.*

**Run-In Control 193391** Field  
Standard on 24A. A separate wire feed speed adjustment to control wire speed prior to arc initiation. This control may be beneficial to aid arc starting with certain types of power sources.

**Preflow/Postflow and Spot Control 186496** Field  
Installs inside feeder under an easy access hinged cover. Provides up to 5 seconds of spot weld time and has adjustable timers (0.25 to 5 seconds) for controlling gas flow prior to arc initiation and after completion of weld.



**Carrying Cart 056301**  
A utility cart for the wire feeder and other miscellaneous welding supplies. Height: 34 inches (863 mm). Lower tray height: 9 inches (228 mm). Shipped disassembled.



**Feeder Cart 142382**  
A low-profile, creeper cart which allows the operator to easily move the feeder around the work area. Shipped disassembled.

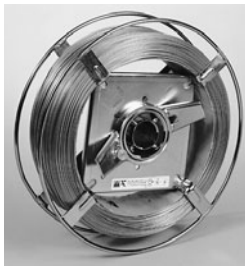
**Turntable Assembly 146236**  
Allows rotation of the feeder as operator changes work positions. This reduces strain and bending on gun cable.

**Hanging Bail (Electrically Isolated) 058435**  
Used for suspending feeder over work area.



**Spool Cover 057607**  
For 12-inch (305 mm) spool.

**Spool Adapter 047141**  
For use with 14-pound (6.4 kg) spool of Lincoln self-shielding wire.



**Wire Reel Assembly 108008**  
For 60-pound (27 kg) coil of wire.

**Reel Cover 195412**  
For 60-pound (27 kg) coil. Helps to protect the welding wire from dust and other contaminants.



**PSA-2 Control 141604**  
Required when using the 22A wire feeder with power sources having only 115 VAC available. The PSA-2 control can be conveniently mounted on the wire feeder or positioned at the power source. The control is equipped with a 14-pin receptacle for direct connection of the wire feeder control cord. A short cord with a four-pin amp plug is hard wired to the control. A 10-foot (3 m) interconnecting cord with a four-pin amp for connection to the PSA-2 and Hubbell connectors for older-style Miller CV power sources is included. The PSA-2 control can also be used with competitive power sources requiring a contact closure for contactor control.

### Extension Cables for 14-Pin Plugs to 14-Pin Sockets\*

**242208025** 25 ft. (7.6 m)

**242208050** 50 ft. (15.2 m)

**242208080** 80 ft. (24.4 m)

Provides 14-pin, 24 VAC, contactor and voltage control. Add to the standard 10-foot (3 m) feeder cable to extend feeder farther from power source.

*\*For additional lengths visit [MillerWelds.com/equiptoweld](http://MillerWelds.com/equiptoweld).*

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
<b>22A</b>	<b>951190</b>			
	<b>951191</b>	With run-in control		
	<b>951192</b>	With digital display and voltage control		
<b>24A</b>	<b>951193</b>			
	<b>951194</b>	With digital display		
Digital Display Meter	<b>186498</b>	Field		
Voltage Control	<b>194211</b>	Field. Standard on 24A		
Run-In Control	<b>193391</b>	Field. Standard on 24A		
Preflow/Postflow and Spot Control	<b>186496</b>	Field		
<b>Power Sources</b>				
CP-302		22A only. See literature DC/13.0		
Deltaweld® Series		See literature DC/16.2		
Dimension™ 650		See literature DC/19.3		
XMT® 304/350/450		See literature DC/18.8, DC/18.93 and DC/18.94		
Invision™ 352 MPa and 450 MPa		See literature DC/23.6		
<b>Accessories</b>				
Drive Roll Kits		See page 2		
Carrying Cart	<b>056301</b>			
Feeder Cart	<b>142382</b>			
Turntable Assembly	<b>146236</b>			
Hanging Bail	<b>058435</b>			
Spool Cover	<b>057607</b>			
Spool Adapter	<b>047141</b>			
Wire Reel Assembly	<b>108008</b>			
Reel Cover	<b>195412</b>			
PSA-2 Control	<b>141604</b>			
Extension Cables	<b>242208025</b>	25 ft. (7.6 m)		
	<b>242208050</b>	50 ft. (15.2 m)		
	<b>242208080</b>	80 ft. (24.4 m)		
Bernard™ BTB Guns				
<b>Miscellaneous</b>				
Primary Power Cable				
Secondary Weld Cable				
Work Cable with Work Clamp				
Gas Cylinder				
Gas Hose with Fittings				
Flowmeter Regulator				
Welding Wire				
Helmet				
Welding Gloves				

Date:

Total Quoted Price:

Distributed by:

