

# Millermatic® 355

**MIG Power Source,  
Wire Feeder and Gun Package** 

## Quick Specs

### Industrial Applications

General manufacturing  
General fabrication  
Maintenance and repair

### Processes

MIG (GMAW)  
Pulsed MIG (GMAW-P)  
Flux-cored (FCAW)

**Input Power** 3- or 1-phase, 208/240/460/575 V, 50/60 Hz

**Rated Output** 310 A at 29.5 V, 60% duty cycle

**Amperage Range** 20–400 A (3-phase and 1-phase 460/575 V),  
20–350 A (1-phase, 208/240 V)

**Net Weight** Machine only: 99 lb. (45 kg)  
Machine with running gear: 163 lb. (74 kg)

Easy to Use. Versatility. Mobility.

**THINK SIMPLY. WELD SMARTER.**

The Millermatic 355 gives you power, precision, simplicity and versatility. It MIG and pulsed-MIG welds mild steel, aluminum or stainless in thicknesses from 22 gauge to 1/2 inch. Advanced features make it easy for welders of any skill level to be productive and get great results. And because the Millermatic 355 operates on either single-phase or three-phase AC input power, it can work anywhere you do.



Heavy-duty aluminum four-drive-roll system.



Millermatic 355 with MIG gun package shown.

**ITEM NUMBER: MI951926**



**Easy-to-use machine** addresses issues due to lack of skilled labor.



**Welds a variety of materials and thicknesses** to help increase productivity.



**Capable of welding in various conditions and workplaces,** to go anywhere you need it to weld.

ELIGIBLE FOR  
**\$300**  
MILLER  
REBATE  
GOOD THROUGH  
DECEMBER 31, 2022

**\$7999**

PER PACKAGE <sup>MSP</sup>  
BEFORE REBATE



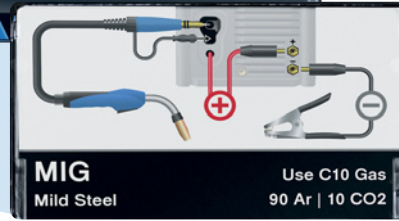
Power source is warranted for three years, parts and labor.  
Gun warranted for 90 days, parts only.

# Millermatic® 355 Features and Benefits

## Easy to Use



Pulsed MIG setup screen



Connection screen for MIG process using C10 gas

### Easy-to-understand interface with 7-inch color LCD display

ensures proper machine setup and parameter selection, reducing setup time and increasing weld time.

- Quick-access backlit Auto-Set and Pulse buttons above the LCD display illuminate when active.
- Soft-key buttons below the display change function depending on which screen is displayed. Makes setup or change quick, easy and intuitive.
- Large text for easier readability.
- Intuitive connection setup images.
- Full troubleshooting descriptions versus help errors and look up codes.

**Auto-Set™ Elite** offers predefined weld settings to increase ease of use and ensure that the job is done right for operators of all skill levels.



- Available for MIG and pulsed MIG processes with the ability to fine-tune your settings.
- Set weld parameters by selecting wire and gas type, wire diameter and material thickness.

**Program mode** allows easy save and recall of favorite weld settings.

- Delivers greater productivity by eliminating the need to manually set or change parameters.
- Deliver consistent quality by welders of all skill levels by using prequalified weld settings.
- Minimize supervisor need to intervene.



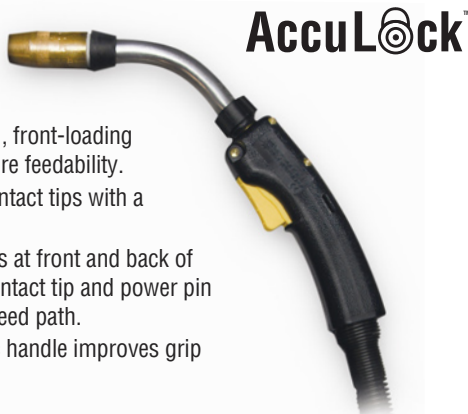
**Trigger program select** increases productivity by eliminating the need to go back to machine to change weld settings. Simply tap gun trigger to select the program.



### Bernard BTB Gun 300 A MIG gun with AccuLock™ S consumable system

features a dual-locked, front-loading liner that optimizes wire feedability.

- Install AccuLock contact tips with a single turn.
- AccuLock liner locks at front and back of gun to align with contact tip and power pin for a flawless wire feed path.
- Durable, ergonomic handle improves grip and comfort.



**Optional demo cable kit** (sold separately) powers the display through USB to train users in a quiet conference room or showroom versus connecting to shop power in a noisy work environment.



# Millermatic® 355 Features and Benefits

## Versatility



**Capabilities** include MIG, pulsed MIG and use of MIG, push-pull or spool guns.

**Compatible with push-pull MIG guns.** Increases productivity by allowing the use of 12-inch wire spools versus a spool gun's 4-inch spools. Reduces downtime changing wire spools.

**Auto-Gun Detect™** automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

**Single- or three-phase input power** provides versatility to utilize any North American power (208, 240, 460, 575 V).



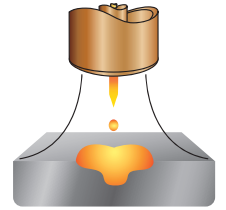
**Input voltage selection switch** located in the wire drive compartment provides the ability to manually switch input voltage. An error message will be displayed if the wrong input voltage is utilized.



**Generator compatible.** The Millermatic 355 will be able to operate and provide full output when powered by generators with 19,000-watt (19 kW) output or higher. Limited output will occur when used with smaller generators.

**Pulsed MIG** welding delivers higher quality welds for ALL welders.

- Lower heat input for less distortion on thin materials and better puddle control on out-of-position welds.
- Less spatter minimizes post weld grinding and rework allowing more welding time.
- Perform welding applications that couldn't be done in the past.
- Ideal for MIG welding aluminum and stainless steel.



Best For	Standard Spray	Pulsed MIG	Short Circuit
Gap Filling	D	B	A
Low Heat Input	D	B	A
Out-of-Position Welds		A	B
Low Spatter	A	A	C
Thick Metals	A	A	D
Thin Metals		B	A
Increased Travel Speed	A	A	B
Aluminum MIG Welding	C	A	C

**HOT** **COLD**

*Ratings A, B, C, and D are relative values. An "A" rating indicates a best fit between your performance needs and process. A "blank" rating indicates that the process is not recommended for that application.*

## Mobility



**Easy to maneuver or integrate** within the work cell.



## Millermatic® 355 Package

### Comes complete with:

- Power source with 9 ft. industrial power cord
- 15 ft. 300-amp Bernard® BTB MIG gun with Bernard® AccuLock™ S consumables for .035/.045 in. (0.9/1.2 mm) wire
- 10 ft. work cable with clamp and 50 mm Dinse-style connector Flow gauge regulator and gas hose for argon or AR/CO2 mix
- .035/.045 in. reversible drive rolls
- Extra .035 and .045 in. contact tips
- Material thickness gauge
- EZ-Latch™ single cylinder running gear
- Chain to secure gas cylinder

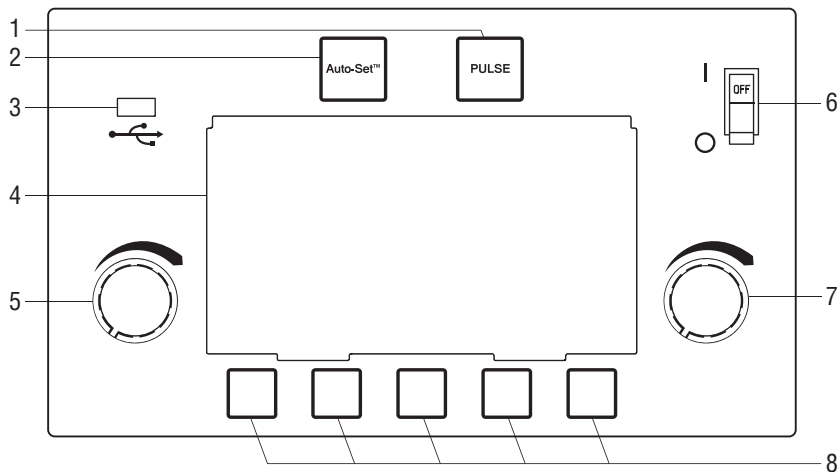
# Specifications (Subject to change without notice.)



Input Power	Voltage Range in CV Mode	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 208 V 240 V 460 V 575 V KVA KW	Max. Open-Circuit Voltage	Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight
3-phase	12–34 V	20–400 A	310 A at 29.5 V, 60% duty cycle	32.3 28.8 18.2 15.4 15.3 11.5	90 VDC	50–800 ipm (1.3–20.3 m/min.)	Steel: .035–.045 in. (0.9–1.2 mm) Stainless: .023–.045 in. (0.6–1.2 mm) Aluminum: .035–.047 in. (0.9–1.2 mm) Flux-cored: .035–.045 in. (0.9–1.2 mm) Metal core: .045–.052 in. (1.2–1.3 mm) Silicon bronze: .030–.035 in. (0.8–0.9 mm)	<b>Machine only</b> H: 19.25 in. (489 mm) W: 13.75 in. (349 mm) D: 26.25 in. (667 mm) <b>Machine with running gear</b> H: 32 in. (813 mm) W: 13.75 in. (349 mm) D: 45 in. (1,143 mm)	<b>Machine only</b> 99 lb. (45 kg) <b>Machine with running gear</b> 163 lb. (74 kg)
1-phase, 460 or 575 V	12–34 V	20–400 A	310 A at 29.5 V, 60% duty cycle	— — 35.6 32.3 15.0 11.1					
1-phase, 208 or 240 V	12–32 V	20–350 A	310 A at 29.5 V, 60% duty cycle	69.6 62.5 — — 15.0 11.1					

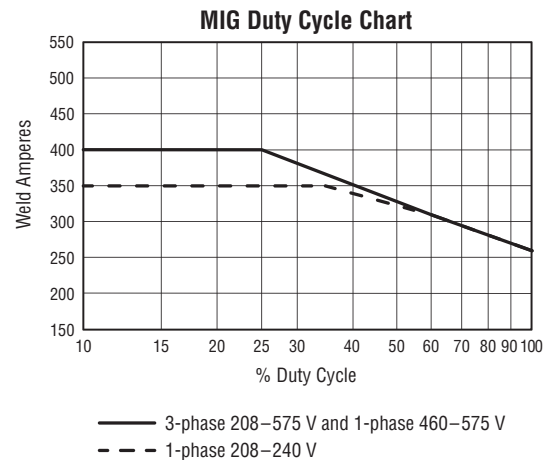
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

## Control Panel



1. Pulse Button
2. Auto-Set Button
3. USB Port
4. Color LCD Display
5. Left Adjustment Knob  
(Adjusts voltage, arc length or parameter values depending on mode.)
6. Power Switch
7. Right Adjustment Knob  
(Adjusts wire feed speed or parameter values depending on mode.)
8. Soft Keys  
(Multiple functions depending on screen displayed.)

## Performance Data



Houston  
832-467-5400

Austin  
512-717-3060

Chicago  
708-345-6660

Prescott Valley, AZ  
928-583-0998

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