

Trailblazer® 275 and 325 Gas or LP Engine-Driven Welder/AC Generator

Quick Specs

Industrial Applications

Fabrication
Maintenance
Repair
Structural steel work
Sheet metal
Pipe

Processes (X-ray Quality)

Stick (SMAW)
MIG (GMAW)
Flux-cored (FCAW)
DC TIG/pulsed TIG (GTAW/GTAW-P)
Air carbon arc (CAC-A) cutting and gouging
Rated: 3/16-inch carbons,
Capable: 1/4-inch carbons*
Air plasma cutting and gouging with optional Spectrum® models
Rated: 5/8-inch mild steel

**Available for 325 models only*

Output Range

	275	325
DC stick	30–275 A	30–325 A
MIG/flux-cored	10–35 V	10–35 V
DC TIG/pulsed TIG	10–275 A	10–325 A

Generator Power Output Rated at 104°F (40°C)

Peak: 12,000 W — Continuous: 10,500 W

Excel™ Power (325 EFI option)

2,400 W (120 V, 20 A) 60 Hz pure sine power at all speeds

Electronic Fuel Injection (EFI) (325 option)

Uses up to 42 percent less fuel

Battery Charge/Jump Start (325 EFI option)

Battery charge: 12/24 V, 75 A

Battery jump start: 12/24 V, 350 A

Trailblazer welder/generators deliver unbeatable arc performance providing the smoothest, most stable arc in the industry.

The Trailblazer exclusive technologies — Auto-Speed™ and optional Excel™ power — deliver superior runtimes, increased fuel efficiency, and improved welder/generator performance.

No other compact machine in the 300-amp class delivers more welding power or more auxiliary power with better fuel efficiency and less noise — for productive, profitable, quieter jobsites.



Trailblazer 325 EFI with optional battery charge/jump start shown.



Welder/generator is warranted for three years, parts and labor.
Engine is warranted separately by the engine manufacturer.



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Unbeatable arc performance

Wide amperage output with better welding deposition rates means you can get jobs done faster, saving time and money. The Trailblazer also has precise arc control, which allows you to fine-tune the arc to match your

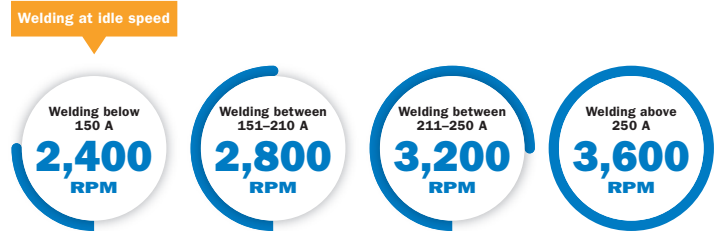
personal preferences and quickly dial in the perfect parameters to optimize weld quality and maximize productivity across a variety of applications and welding processes.

Auto-Speed™ technology

Matches engine speed to load — a Miller exclusive. Get the welding power you need — plus reduced fuel consumption and lower noise levels for a more-profitable, safer jobsite.

Unlike competitive machines that operate at 3,600 rpm (max) under any load, Miller-exclusive Auto-Speed technology responds to weld requirements by automatically adjusting engine speed to one of four rpm levels so the engine never works harder than necessary.

Refueling time and operating costs are reduced, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered.

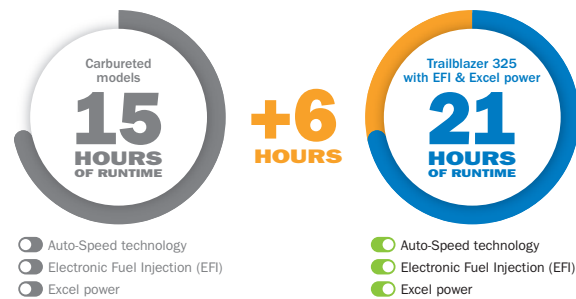


Auto-Speed in XX18 mode.

Electronic fuel injection (EFI) (option)

Improve fuel efficiency for maximum productivity and profitability. Adding EFI to your Trailblazer welder/generator adds multiple benefits. With EFI, you'll get faster, more-reliable starts in any weather — no choke adjustments needed. EFI-equipped Trailblazer machines are also up to 42 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity.

Add Excel power to your Trailblazer with EFI, and you'll have the most fuel-efficient compact welder/generator available.



Based on typical usage — 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

Excel™ power (option)

Power at idle — a Miller exclusive. Unlike competitive machines that provide auxiliary power only at 3,600 rpm (max), Excel power delivers a full 2,400 watts (20 A) of 120-volt inverter-based, pure sine wave power at all speeds, including idle. With Excel power you can operate jobsite tools like grinders at quiet, fuel-saving speeds.

Refueling time and operating costs are reduced with Excel power, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered. Excel power — available only from Miller.



UP TO **52%**
MORE FUEL EFFICIENT
WITH EXCEL POWER

Based on generator-only use for total runtime.

Battery charge/jump start (option)

Reduce downtime with battery charge/jump start capability. Designed and recommended for mechanics or anyone else responsible for a fleet of trucks or equipment. By using your Trailblazer to charge dead batteries or

jump a stubborn engine, you'll keep your crew working and the fleet up and running.

Note: Battery charge/jump cables (300422) must be ordered separately.

Trailblazer® Benefits

Fewer refueling trips

No other gas welder/generator in the 300-amp class lets your crews spend more time working and less time refueling — because only Trailblazer welder/generators provide Auto-Speed™ technology, plus Excel™ power and electronic fuel injection (EFI) options, to deliver maximum runtime.

Maximum cost savings

Less money spent on fuel means more profit for you. Every Trailblazer welder/generator has fuel-saving Auto-Speed technology; add optional Excel power and EFI to save even more on fuel costs and enjoy a combination of advanced, profit-enhancing features that are only available on a Trailblazer welder/generator.

ADD EFI & EXCEL POWER

ANNUAL FUEL SAVINGS
OVER LEADING COMPETITIVE MACHINE

\$571

DELIVERS PAYBACK IN 2.5 YEARS

Estimate based on fuel cost of \$2.00 per gallon with machine operating for 25 hours per week for 50 weeks per year under typical usage – 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

Safer, more productive jobsites

Quieter jobsites are safer and more productive because work crews can communicate easier, and work can start earlier and end later — even in noise-sensitive areas. If your jobsite needs a welder/generator, it needs a Trailblazer welder/generator — because no other gas-fueled choice is as quiet.



IT WOULD TAKE
7 TRAILBLAZERS
TO EQUAL THE
SOUND OUTPUT OF
1 COMPETITOR
MACHINE.

More portable, uses less truck space

Trailblazer welder/generators are up to 17 percent smaller and 10 percent lighter than competitive machines — which means moving them is faster and easier, for maximum productivity. And because they take up less space, Trailblazer welder/generators let work trucks carry more equipment and gear — so your work crews can be ready for anything.



17%
LESS CUBIC SPACE
THAN THE COMPETITION

Cleaner and stronger generator power

Combined with a 25-horsepower engine, Trailblazer welder/generators offer 12,000 watts of clean, truly usable generator power that is Accu-Rated™, not inflated: tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

An independent welder and generator power system ensures no interaction between jobsite tools and the welding arc, while advanced generator technology virtually eliminates power spikes and other electrical imperfections — so welds are cleaner and jobsite tools can run without interruption, maximizing quality, productivity and profit.

Runs cooler while operating

Exclusive engine and generator packaging design operates cooler and more efficiently. The engine is rotated towards the front to create more efficient airflow. More efficient airflow and exclusive engine location are significant contributors to reduced sound level and size reduction. Hot air recirculation is eliminated when machine is mounted in tight spots, and internal parts are kept cool for optimal performance.



Specifications (Subject to change without notice.)



Model	Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 104°F (40°C)*	Single-Phase Generator Power	Sound Levels at 7 m (23 ft.)	Dimensions	Net Weight**
Trailblazer 275	CC/DC	Stick/TIG	10–275 A	275 A at 28 V, 100% duty cycle	Peak 12,000 watts 11,000 watts with LP Continuous 10,500 watts Excel™ power (optional) 2,400 watts, 20 A at 120 V, 60 Hz pure generator power at idle speed and while welding	Weld 150 A load: 65 dB (90 Lwa), 325 A load: 73.5 dB (98.5 Lwa) Generator power Excel power: 65 dB (90 Lwa), 12 kW standard power: 73.5 dB (98.5 Lwa)	H: 28 in. (711 mm) H: 32.75 in. (832 mm) <i>(to top of exhaust)</i> W: 20 in. (508 mm) D: 40.5 in. (1,029 mm)	275 model 459 lb. (208 kg) 325 model 460 lb. (209 kg)
	CV/DC	MIG/FCAW	10–35 V	275 A at 28 V, 100% duty cycle				
Trailblazer 325	CC/DC	Stick/TIG	10–325 A	325 A at 28 V, 100% duty cycle	Peak 12,000 watts 11,000 watts with LP Continuous 10,500 watts Excel™ power (optional) 2,400 watts, 20 A at 120 V, 60 Hz pure generator power at idle speed and while welding	Weld 150 A load: 65 dB (90 Lwa), 325 A load: 73.5 dB (98.5 Lwa) Generator power Excel power: 65 dB (90 Lwa), 12 kW standard power: 73.5 dB (98.5 Lwa)	H: 28 in. (711 mm) H: 32.75 in. (832 mm) <i>(to top of exhaust)</i> W: 20 in. (508 mm) D: 40.5 in. (1,029 mm)	275 model 459 lb. (208 kg) 325 model 460 lb. (209 kg)
	CV/DC	MIG/FCAW	10–35 V	325 A at 28 V, 100% duty cycle				
	Battery charge/jump start (optional)		12/24 V	Charge: 75 A jump start: 350 A				

*Rated at sea level. **Net weight without fuel.



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

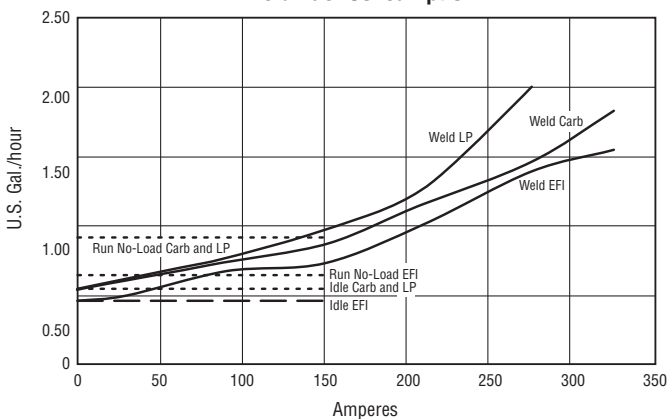
Engine Specifications (Engines warranted separately by the engine manufacturer.)

Model	Engine Brand and Warranty	Horsepower (HP)	Type	Weld Speed	Idle Speed	Fuel Capacity	Oil Capacity	Standard Shutdowns
Trailblazer 275 and 325	Kohler CH730, 3-year warranty	Gas: 23.5 hp at 3,600 rpm LP: 21 hp at 3,600 rpm	Twin-cylinder, four-cycle overhead valve, industrial air-cooled, gasoline* (carburetor or EFI) or LP	Auto-Speed™ 2,400, 2,800, 3,200 or 3,600 rpm	2,400 rpm	12 gal. (45 L)	1.5 qt. (1.4 L)	Low oil pressure
Trailblazer 325 EFI	Kohler ECH730, 3-year warranty	23 hp at 3,600 rpm						

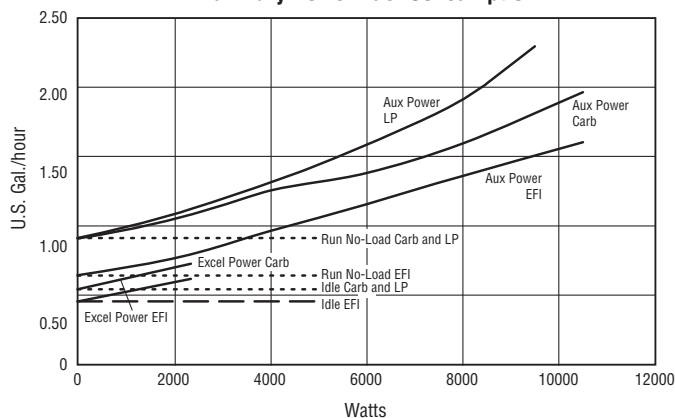
*Fuel stabilizer is recommended for gas engines that are used infrequently.

Performance Data

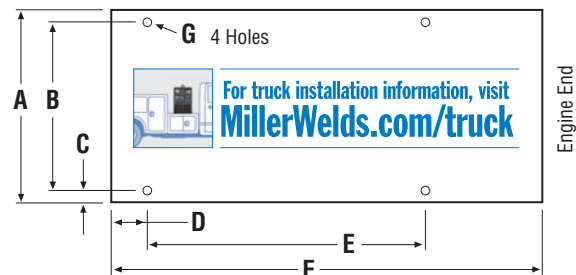
Weld Fuel Consumption



Auxiliary Power Fuel Consumption



Mounting Specifications



- A. 20 in. (508 mm)
- B. 16.5 in. (419 mm)
- C. 1.75 in. (44.5 mm)
- D. 5.12 in. (130 mm)
- E. 22.3 in. (566 mm)
- F. 40.32 in. (1,024 mm)
- G. .406 in. (10.3 mm) diameter

Function and Benefit Guide

1. Weld process switch

Two wire modes — solid and flux-core

- Solid: Arc characteristics optimized for steel wires which most commonly use the short circuit transfer. Turn arc control (#3) to “soft” for stainless wires and to “stiff” for aluminum.
- Flux-core: Arc characteristics optimized for wires commonly used in construction and hard facing applications.

Three stick modes — EXX18, EXX10 and gouge

- EXX18: Optimized for the majority of stick welding applications.
- EXX10: Hot start and arc characteristics optimized for pipe applications.
- Gouge: Maximized output for air carbon arc cutting and gouging.

Three Lift-Arc™ TIG modes — Auto-Stop™, Auto-Crater™ and pulse

- Auto-Stop: No Auto-Crater allows full control on pipe welds with short or long arc length. Auto Stop feature allows arc to be broken without loss of shielding gas.

Note: Auto-Stop prevents arc flare when the arc breaks.

- Auto-Crater: Ideal for most DC TIG applications. Ramps down current at the end of the weld to “crater-out” without use of a remote control.
 - Pulse: Ideal for out of position, thin metals, and stainless steels where a lower amount of heat is desired while welding.
- Note for DC TIG Pulse: background amps = 25 percent of peak, peak time = 40 percent, at 100 pps.*

- 2. **Front panel fuel gauge** with six LEDs to indicate fuel level. The amber LED lights when fuel is low.

- 3. **Arc control** is active in the stick and solid wire processes. It allows the operator to customize arc characteristics to match preference, electrode and joint design from a softer arc with more fluid puddle to a stiffer arc with an often more controllable puddle. The star setting is optimized for most applications and pointing the control at soft or stiff is optimal for most of those arc preferences. Control is fully adjustable from 0 to 25 soft or 0 to 25 stiff.

4. Self-calibrating digital meters

- Preset and actual amperage/voltage
- Process settings
- Maintenance functions: hour meter, oil change interval, rpms

- 5. **Standard 14-pin receptacle with Auto Remote Sense™** for simple connection of remote controls and wire feeders.

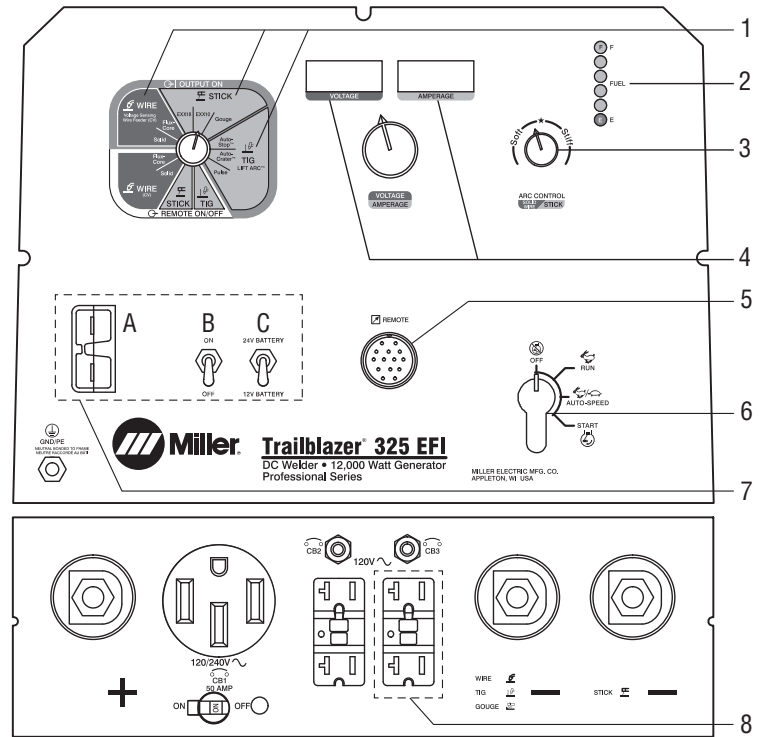
- 6. **Engine control:** Auto-Speed™ position adjusts engine to run at lower speeds depending on total power needed for welding.

7. Optional battery charge/jump start (factory option, see page 8)

- A. Receptacle: Provides connection to battery charge/jump start (12 or 24 volt)
- B. On/off switch: Provides simple control of the battery
- C. Voltage switch: Provides simple selection of battery voltage

8. Optional Excel™ power (factory option, see page 8) provides pure generator power at idle speed and while welding.

Note: If Trailblazer is ordered without Excel power option, unit is shipped with two standard duplex receptacles.



Easier maintenance

- 1 Oil checks that can be performed from the top by the front panel
- 2 Toolless panels that allow for quick access
- 3 Single-side fuel fill and oil drain/filter