



You can't predict.
But you can
PREPARE.

Be prepared for any
emergency or outage with a
Miller® welder/generator.





You can't predict power loss due to severe weather, but you can be prepared when an emergency power situation occurs. No matter where you live, severe weather can leave you in the dark — but the power of a Miller welder/generator will keep your household or operation running. Plus, a Miller welder/generator can be used for repairs year-round — in the garage, on the farm or in the shop. So why buy a generator when you can buy a Miller welder/generator and be prepared for what Mother Nature might throw at you.





Q. How much power do I need for my home?

A. The amount of generator power you need depends on your power requirements — how many watts the items you plan to power require. Generally, a higher-wattage generator lets you power more items at once.

Keeping household essentials running — lights, furnace, refrigerator, well pump, stove, microwave, TV and/or air conditioner — requires at least 5,000 to 8,000 watts. Under this type of load, a welder/generator with a 12-gallon gas tank will run more than 10 hours.

Gas welder/generators provide outputs that range from 4,500 watts to 12,000 watts, which may be sufficient to run an average-sized house. To determine how much power you need, use this [Reference Wattage Guide](#) for common tools and appliances and complete the [Generator Power Worksheet](#) to determine your power requirements. Additional information on topics like safety, grounding your generator, selecting the proper length of extension cords, and more is accessible in our [Generator Power Application Guide](#).

Q. Why should I choose a welder/generator over a standalone generator?

A. Emergency power demands at home often require industrial-strength generator solutions. Comparing welder/generators to standalone generators with engines of similar quality and horsepower, Miller® welder/generators provide equal or better generator power capabilities at a comparable price.

Consider the following when deciding between a welder/generator and a standalone generator. A Miller welder/generator:

- Includes a welder to do your own welding repairs
- Features fuel-efficient engines and 12-gallon tanks for longer run time
- Generates up to 12,000 watts of Accu-Rated™ — not inflated — generator power
- Built to the highest standards and has a three-year warranty





Q. How much does a welder/generator cost?

A. Gas welder/generators typically retail for \$2,000 to \$5,000. That's very comparable to an equivalent generator-only unit. Visit the [Welder/Generator](#) page of MillerWelds.com for pricing and comparisons of different units ideal for your needs.

Q. How long can a welder/generator run?

A. Welder/generators feature large fuel tanks, so they can run throughout the day or night without refueling. For example, the [Miller Bobcat™ 250 welder/generator](#) holds 12 gallons of gas and can run for 14 hours under a continuous load of 4,000 watts.

Q. Will extreme weather conditions degrade generator performance?

A. Due to the nature of electricity, a generator's output power declines as temperature increases. Miller rates the output of all of its welder/generators at 104° F (40° C). Even in hot summer conditions, they deliver all of the power promised.

Q. Does a welder/generator provide enough power to start and run all of my appliances?

A. Some electrical loads require three to seven times more power to start than to run. Some generators may boast a high starting (or “peak”) power, but their peak power duration is so short that it cannot start a motor. To create a standard, Miller developed the Accu-Rated™ system, which guarantees that its generators will deliver usable peak power for a minimum of 30 seconds. That power is ideal for maximum generator loads, such as starting the motor of a central air conditioner or sump pump.

When examining a machine’s capabilities, be sure to look for both “peak” and “continuous” ratings to understand starting and run power outputs. With Miller welder/generators, peak and run power are relatively close. For example, the [Bobcat™ 225 welder/generator](#) has a peak output of 11,000 watts and continuous rating of 9,500 watts.

Q. Will voltage drop under heavy loads?

A. Because they are designed to run industrial tools and motors, Miller welder/generators with Accu-Rated™ power provide a “stiff voltage output” that won’t droop under rated loads. Comparatively, the voltage of most generators and competitive welder/generators droops under medium and heavy loads. Instead of a 120 V output, they may only be able to deliver 110 or 105 V. Unfortunately, appliances run off total power, which is **voltage X amperage**. If voltage droops, amperage may increase, which could generate more heat. Heat can reduce the life of some appliances and impede performance.

Q. Are Miller welder/generators suitable for electronics or appliances that are sensitive to voltage variations?

A. Miller welder/generators, especially the Bobcat Series, deliver smooth power, not the “spiked” power of some other units. This means that Miller machines can run electronics sensitive to voltage variations, which may include furnace and A/C controls.

Q. What if I need to run my welder/generator for days or weeks at a time?

A. Miller designs its welder/generators with rugged, heavy-duty components so they can continuously operate at rated loads, stopping only for refueling and scheduled maintenance. In situations that cause other generators to overheat and burn out, Miller welder/generators keep on running.



Q. I have a welder/generator — now how do I get plugged in?

A. You can plug tools and appliances directly into a welder/generator's 120/240 VAC outlets. Generally try to limit the load to 90 percent of generator output. Always start non-resistive (motor) loads in order from largest to smallest, and add resistive loads (water heater, lights, stove, etc.) last. If a motor does not start within five seconds, turn off the power to prevent motor damage. The motor requires more power than the generator can supply.

You also can connect a welder/generator into your house, garage, barn or work shed's electrical supply. For safety reasons, a qualified person should perform this task. Be sure to comply with code and license requirements, too. For example, the National Electrical Code (NEC) advises that the only legal and safe way to wire standby generator power to your home is through a three-position transfer switch. Also for safety reasons, never keep a running generator in a garage or enclosed area where the fumes could harm people or livestock.



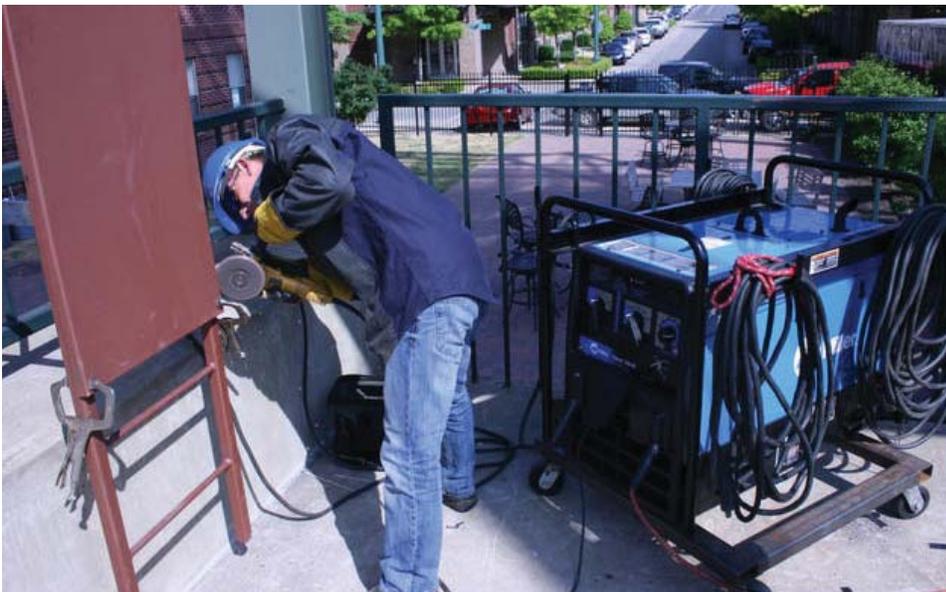
Q. How do I know which welder/generator is right for me?

A. Be sure to test the capabilities of any welder/generator since there is a huge performance difference between models. For instance, some welder/generators actually have a starting wattage that is less than their total output, where others are designed to better manage the “over current” that occur briefly when starting motors.

Ideal for a homeowner, the [Bobcat™ 225 welder/generator](#) (Bobcat Series available in a 225 amp model or a 250 amp model) provides good motor-starting capabilities. The unit delivers 11,000 watts peak and 9,500 watts continuous Accu-Rated™ generator power, and provides long run times with a 12-gallon tank. The [Bobcat™ 250 welder/generator](#), available with electronic fuel injection, is the industry’s best-selling engine-driven welder/generator. Rated at 104 degrees Fahrenheit, the machine offers 11,000 watts peak and 9,500 watts continuous power, or 12,000 watts peak and 10,500 watts continuous power when selecting the EFI option.

Another option is the durable and lightweight [Blue Star 185 welder/generator](#) - great for standalone generator power, general maintenance/repair, and farm and ranch applications. This machine provides 6,500 watts of usable peak generator power and 6,200 continuous. With its large 6.25 gallon fuel capacity, the Blue Star welder/generator is best in its class.

Visit MillerWelds.com/products/generators/ for more information on your options, or visit your welding supply distributor.



Q. What kind of welding can I do with a welder/generator?

A. If you're like most folks who buy a welder/generator, you'll probably use the generator power more than you think. However, you'll definitely value the welding capabilities it provides.

Most welder/generators provide DC output suitable for Stick welding. This lets you weld just about anything made of mild steel, stainless steel and cast iron. Most of these machines also let you weld steel and stainless with the DC TIG process (GTAW or "heli-arc"). For welding aluminum, you need a machine with AC TIG output or constant voltage (CV) output for MIG welding (a wire welding process).

Machines with CV output (Bobcat Series) also work better for Flux-Cored welding. Flux-Core welding is advantageous in high volume outdoor applications, because it is more efficient and has higher deposition rates. There is also less chance of contamination when compared to solid wire (MIG) welding applications where the wind has the potential to blow away its shielding gas. These benefits increase productivity and lower operational costs.

Note that some machines cannot provide good generator power and welding power simultaneously. However, some models offer independent welding and generator power, while others offer enough generator power so that interference is not a concern. Interference with the welding arc leads to reduced penetration, an unacceptable compromise in many situations.

Q. Where can I find more information and/or purchase a welder/generator?

A. Interested homeowners, small business owners and farmers are directed to call 1-800-4-A-MILLER (800-426-4553) or go to MillerWelds.com to find their local welding supply distributor for more information or to better discuss their power needs.

Determining which welder/generator is right for you.

Step 1: Identify the items you wish to power at the same time using the Wattage Reference Guide below.

Step 2: Determine total watts needed using the [Complete Generator Power Worksheet \(pdf\)](#).

Step 3: Use the Selector Guide to determine which Miller welder/generator fits your needs.

To select a generator that has enough power output in watts, add the wattage for the items you want to simultaneously run. Tools and appliances with induction motors may require 3–7 times the listed wattage when starting. All data listed is approximate — check your tool/appliance for specific wattage requirements.

Appliance/Tool/Machine	Starting Watts	Running Watts
Electric Range 6-inch element	0	1,500
Radio	0	50–200
Lights	0	As Indicated
Submersible Pump 400 gph	600	200
Clothes Dryer - Electric	700	5,750
Microwave Oven 625 Watts	800	625
Centrifugal Pump 900 gph	900	500
Wet Dry Vac 2.7 HP	900	900
Furnace Fan, gas or fuel oil 1/4 HP	1,000	600
Garage Door Opener 1/4 HP	1,100	550
Flood Lights Vapor	1,250	1,000
Sump Pump	1,300	800
Dishwasher Cool Dry	1,400	700
Well Pump 1/3 HP	1,400	750
Clothes Dryer - Gas	1,800	1,800
Refrigerator or Freezer	2,200	700
Automatic Washer	2,300	1,150
Farm Duty Motors (e.g. Conveyors, Feed Augers, Air Compressors, etc.) 1-1/2 HP	8,200	2,200
Central Air Conditional 20,000 BTU	3,300	2,500
Portable Conveyor 1/2 HP	3,400	1,000
Washer (Farm) 2 gal./min.	4,500	1,400
Millermatic® 212 MIG Welder 30-210 A, 230 V	6,500	6,500
Spectrum® 625 X-TREME™ Plasma Cutter 30 A, 230 V, 1/2 in cut	6,900	6,900
Air Compressor 1-1/2 HP	8,200	2,200
Milker - Vacuum Pump 5 HP	10,500	2,800
Barn Cleaner 5 HP	11,600	3,000
Silo Unloader 5 HP	12,200	4,300

Welder/Generator Selection Guide

	Blue Star® 185	Bobcat™ 225/250	Trailblazer® 275/325
			
PRODUCT DESCRIPTION	Lightweight, portable, and reliable. Designed for maintenance and repair.	Compact, durable, and cost effective. The most popular welder/generator in the industry.	The independent welder and generator power system makes this perfect for repair operations.
GENERATOR			
Watts	6,000 Watts Peak 5,500 Continuous	11,000 Watts Peak 9,500 Continuous	12,000 Watts Peak 10,500 Continuous
WELDER			
Processes	<ul style="list-style-type: none"> • Stick (SMAW) • DC TIG (GTAW) • Air Plasma Cutting and Gouging (with optional Spectrum models) 	<ul style="list-style-type: none"> • Stick (SMAW) • Flux-Cored (FCAW) • MIG (GMAW) • DC TIG (GTAW) • Non-Critical AC TIG (GTAW) • Air Carbon Arc and Gouging 	<ul style="list-style-type: none"> • Stick (SMAW) • Flux-Cored (FCAW) • MIG (GMAW) • DC TIG/Pulsed TIG (GTAW/GTAW-P) • Air Carbon Arc and Gouging (with optional Spectrum models)
Welding Power	185	225 Amps/250 Amps	275 Amps/325 Amps
KEY FEATURES			
Fuel Capacity	5 gallons	12 gallons	12 gallons
Minimum Average Run Time	7 hours	13 hours	14.5 hours
Warranty	3 years	3 years	3 years