

# Big Blue® 400X Pro

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**Diesel Engine-Driven  
Welder/AC Generator**



## Quick Specs



### Heavy Industrial Applications

Mechanical contractors  
Structural steelwork  
Fabrication  
Maintenance  
Repair  
Rental  
Construction  
Pipe welding

### Processes

Stick (SMAW)  
MIG (GMAW)\*  
Flux-cored (FCAW)\*  
RMD\*\*\*  
Pulsed MIG (GMAW-P)\*\*  
DC TIG (GTAW)  
Air carbon arc (CAC-A)  
Rated: 4.8 mm (3/16 in.) carbons  
Capable: 6.4 mm (1/4 in.) carbons

**Output Range** DC stick 20–400 A  
MIG/flux-cored 14–40 V  
DC TIG 20–400 A

**Generator Output Rated at 40°C (104°F)**  
12,000 watts peak, 10,000 watts continuous

**Accu-Rated™ – Not Inflated  
Generator Power**

\*With wire feeder.

\*\*ArcReach models only with ArcReach Smart Feeder.

## The professional welder's choice –

designed with the professional in mind, the Big Blue 400X Pro is the best for ease of use, reliability and fuel economy.

**Kubota**

Heavy duty low-speed industrial diesel engine KUBOTA

## Dynamic DIG™ technology



**Ultra-adaptive arc control.** Unlike conventional DIG that provides a preset amount of short-clearing current, Miller-exclusive Dynamic DIG technology works on a time-based algorithm that automatically adjusts the amount of current required to clear a short. Delivers a smoother more consistent arc that can be tailored to match application, material, fit-up and welder technique.



**Durable and built to last in harsh industrial environments.**



**Superior arc performance.**



**CE compliant.**

## ArcReach® technology (option)

**ArcReach®** Parameter control at the wire feeder or pendant without needing a control cord.

An ArcReach system allows you to change weld settings from your ArcReach feeder or Stick/TIG remote, saving a trip to the power supply. ArcReach technology uses the existing weld cable to communicate welding control information between the feeder or Stick/TIG remote and the power source. This technology eliminates the need for control cords, and their associated problems and costs.

ArcReach-equipped power sources work with non-ArcReach accessories; however the ArcReach benefit is only realized with the complete ArcReach system. This includes an ArcReach-equipped machine and one or more of the following accessories:

- ArcReach SuitCase feeder
- ArcReach Smart Feeder
- ArcReach Stick/TIG Remote



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



**International Headquarters  
Miller Electric Mfg. LLC**  
An Illinois Tool Works Company  
1635 W. Spencer Street  
Appleton, WI 54914 USA

[MillerWelds.com/europe](http://MillerWelds.com/europe)

**ITW WELDING Products BV**  
Edisonstraat 10  
P.O. Box 1551  
NL-3261 LD Oud-Beijerland  
The Netherlands  
Tel.: +31 186 641 444  
[sales.NL@ITWwelding.com](mailto:sales.NL@ITWwelding.com)

**ITW WELDING Sales Office UK**  
77 New Court Way  
Ormskirk, Lancashire L39 2YT  
United Kingdom  
Tel.: +44 1695 585 910  
[sales.UK@ITWwelding.com](mailto:sales.UK@ITWwelding.com)

# Big Blue® 400X Pro Features and Controls

**Digital meters** with SunVision™ technology enable welding parameters to be viewed with greater clarity than analog meters – at virtually any angle. Meters can be seen clearly even in direct sunlight.

**Meters display**

- Process settings for quick and easy setup
- Preset and actual amperage

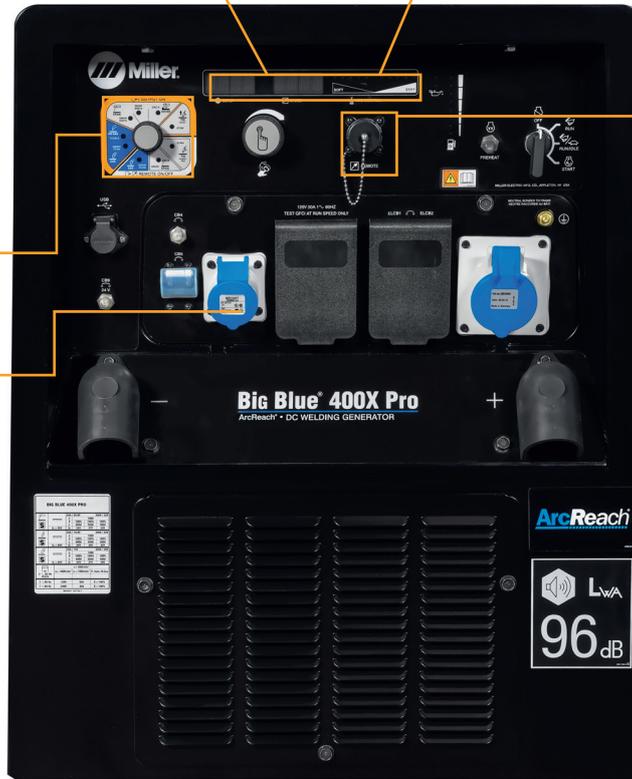
**Simple-to-set controls** require no elaborate procedure – just select process and weld.

**10.000 watts of pure generator power.** Plug in an extra Miller® inverter-based power source for a second welding arc.

**Industrial USB port.** Quickly upload the latest software and download machine and log files.



**Thermal overload protection** prevents machine damage if the duty cycle is exceeded or airflow is blocked.



**Arc control** is beneficial when welding with stick and solid wires for easier fine-tuning of tough-to-weld materials and out-of-position applications.

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

**Low OCV stick (VRD)**, when enabled, reduces the open-circuit voltage to 30 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

**HD powder coat** with zinc-rich primer protects sheet metal from rust and corrosion.

**Standard features include** adjustable Hot Start™, output contactor control, automatic idle, 120-volt block heater and Dynamic DIG™.

# Big Blue® 400X Pro Benefits

## Easily update technology



With the industrial USB port, you can easily upload the latest software and download machine log files to retrieve in-depth information from your machine such as diagnostics and statistics.

Visit [MillerWelds.com/support](http://MillerWelds.com/support) to download the latest software updates.

## Less noise



Quieter jobsites are safer and more productive because work crews can communicate easier. The Big Blue 400X Pro is only 71.6 decibels (96 Lwa) under a full load, allowing for easier jobsite

communication. Optional wireless interface control makes it easier to shut off your machine when it's not in use, so you can lower jobsite noise levels and hear what's going on around you.

## Jobsite safety



Reduce the need to walk back to or climb into the truck bed to make process and parameter changes, or turn your machine on/off. ArcReach® technology provides parameter control at the wire

feeder or Stick/TIG remote and optional wireless interface control provides full front panel control in the palm of your hand, so you can lower the risk of encountering potential jobsite hazards.

## Specifications (Subject to change without notice.)



| Weld Mode/<br>Process | Weld<br>Output<br>Range | Weld Output Rated<br>at 100% Duty Cycle<br>at 40°C (104°F) | Max. Open-<br>Circuit<br>Voltage | Generator Power Output<br>Rated at 40°C (104°F)                                   | Sound Levels<br>at Rated Output,<br>7 m (23 ft.) | Dimensions   | Net Weight<br>(without fuel)** |
|-----------------------|-------------------------|--|----------------------------------|---|--|--|--------------------------------|
| CC/DC<br>(TIG)        | 20–400 A                | 300 A at 32 VDC<br>350 A at 27 VDC<br>400 A at 24 VDC      | 85 VDC<br>30 VDC*                | 12,000 watts peak,<br>10,000 watts continuous<br>1-phase, 84/42 A,<br>120/240 VAC | Idle: 66 dB (91 Lwa)<br>Weld: 71.6 dB (96 Lwa)   | H: 813 mm<br>(32 in.)<br>W: 667 mm<br>(26.25 in.)<br>D: 1,422 mm<br>(56 in.) | 431 kg (950 lb.)               |
| CC/DC<br>(Stick)      | 20–400 A                |  |                                  |   |  |  |                                |
| CV/DC<br>(FCAW/MIG)   | 14–40 V                 |  |                                  |   |  |  |                                |

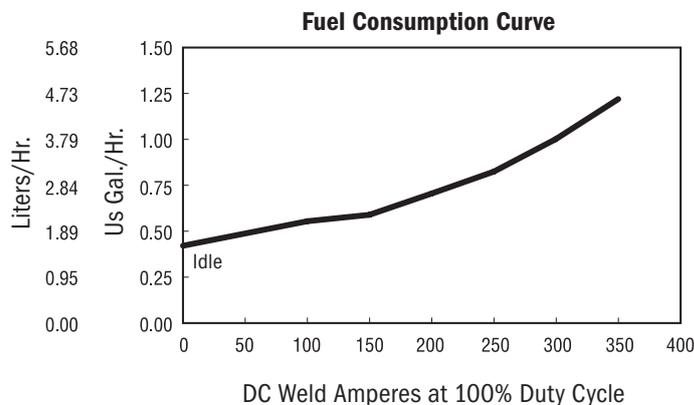
\* Sense voltage for Lift-Arc™ TIG and stick with VRD on.

\*\* Additional 37 kg (82 lb.) when fuel tank is full.

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

| Engine Brand | Features     | HP   | Type  | Engine Speeds                      | Capacities   | Automatic Engine<br>Shutdown                                     |
|--------------|--------------|------|---|------------------------------------|--|--|
| Kubota V1505 | CE compliant | 20.2 | Four-cylinder, liquid-cooled<br>industrial diesel | Idle: 1,500 rpm<br>Weld: 1,800 rpm | Fuel: 43.5 l (11.5 gal.)<br>Oil: 5.7 l (6 qt.)<br>Coolant: 5.7 l (6 qt.) | Low oil pressure,<br>high coolant temperature,<br>low fuel level |

## Performance Data



### Simultaneous Welding and Power

| Weld Amperes | Total Aux. Power Available (Watts) |
|--------------|------------------------------------|
| 25 A         | 10,000                             |
| 75 A         | 10,000                             |
| 125 A        | 10,000                             |
| 175 A        | 9,000                              |
| 225 A        | 7,500                              |
| 300 A        | 4,500                              |
| 350 A        | 1,000                              |

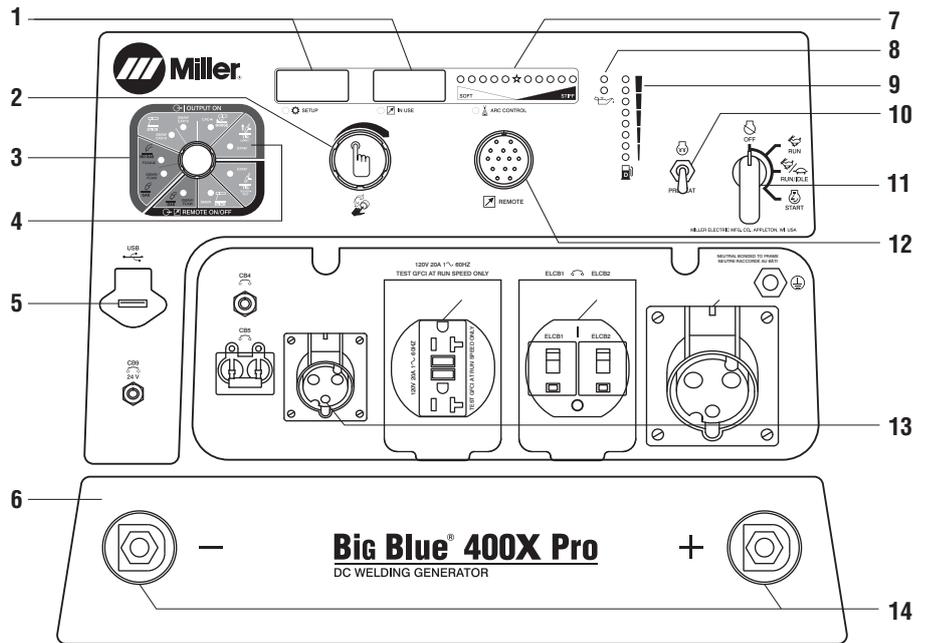
# Function Guide

- 1. Self-calibrating digital weld meters with fault code indication** display preset or actual weld parameters.
- 2. Pushbutton main control knob** used for adjusting amperage/voltage, adjusting arc control, and accessing the service menu.
- 3. LED process indicator.** Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source.

**4. Lift-Arc™ TIG with Auto-Stop™ and Auto-Crater™.**

- 5. USB port** allows software updates from a USB drive. A summary file of recorded data from the unit will be saved to a USB drive that is inserted.
- 6. Weatherproof Lexan® nameplate** is super durable and resists cracking and fading.
- 7. Adjustable arc control** adjusts DIG when process control is in stick mode and adjusts inductance when process control is in FCAW or MIG mode. The amount of DIG determines how much amperage (heat) varies with stick arc length. Inductance determines the “wetness” of the weld puddle.
- 8. Maintenance interval reminder.** Yellow and red indicator lights let an operator know when the machine is approaching and finally in need of routine maintenance.
- 9. Fuel indicator gauge.** Low fuel shutdown shuts engine off prior to running out of fuel to prevent loss of fuel in the system, and make restarts easy.
- 10. Glow plugs** assist in cold weather starting.
- 11. Engine control switch** is used to start the engine and then select between auto idle and high speed lock.
- 12. Standard 14-pin receptacle** for simple connection of remote controls and wire feeders. Includes Auto Remote Sense™ which automatically switches from panel to remote amperage/voltage (A/V) control with remote connected. Eliminates confusion of a panel/remote switch.

- 13. International receptacle panel with 16 A, 240 V receptacle, 20 A 120 V GFCI receptacle and 32 A, 240 V receptacle with circuit breakers.**
- 14. Weld output terminals**



### ARC START with Lift-Arc™

**Touch or scratch**

**Lift at any angle**

- Reduces or eliminates sticking
- Reduces or eliminates electrode/work contamination
- Low open-circuit voltage

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### ARC END with Auto-Stop™

**While welding**

**For Auto-Stop, lift up to terminate arc**

Move back down to maintain gas coverage

- Eliminates need for a remote control
- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Eliminates unwanted arc strikes outside the weld area

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### ARC END with Auto-Crater™

**While welding**

**To start Auto-Crater, press momentary contact switch**

Welding current ramps down

Maintain shielding gas coverage

- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Auto-Crater time allows for addition of filler
- Eliminates unwanted arc strikes outside the weld area

## Genuine Miller® Accessories

### Engine Filter Kits

**253901** Field. For Kubota (USA/Int'l)  
Includes all filters required for proper engine maintenance. Oil filter, primary and secondary fuel filter, and primary air filter.



### FA-1D Lockable Flame Arrestor Fuel Cap 043947

Field  
Fuel cap can be padlocked to prevent vandalism. A built-in flame arrestor prevents flames or sparks from entering the fuel tank.



### Protective Cover 195301

Field  
Blue water-resistant cover with Miller logo resists stains and mildew, and protects the finish of your welder.

## MIG (GMAW) or Flux-cored (FCAW)



### ArcReach® SuitCase® 8 301457 ArcReach® SuitCase® 12 301456

Portable feeder designed to run off of arc voltage. When paired with an ArcReach power source, provides remote control of the power source without a control cord – saving time and money. See literature M/6.55.



### ArcReach® Smart Feeder 301177

For use with ArcReach models only.

## TIG (GTAW) Welding and multiple operator welding

The Maxstar® or Dynasty® power sources can be run off the engine drive's generator to provide two arcs with only one engine.



### Maxstar® 210 (DC) Dynasty® 210 (AC)

For portable DC or AC/DC TIG welding.

## Stick/TIG Remote Controls



### ArcReach® Stick/TIG Remote 301325

When paired with an ArcReach power source, provides remote control of the power source without a control cord – saving time and money. See literature AY/14.5.



### RHC-14 Hand Control 242211020

Miniature hand control for remote current, voltage and contactor control. Dimensions: 102 x 102 x 82 mm (4 x 4 x 3.25 in.).

Includes 6 m (20 ft.) cord and 14-pin plug.



### Wireless Remote Hand Control 301582

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 91.4 m (300 ft.) operating range.

### Wireless Antenna Kit 300749

Recommended for improved reception.

## Trailers and Hitches (Note: Trailers are shipped unassembled.)



### HWY-225 301338

Trailer for field (not certified for roads), 1225 kg capacity trailer.



### Dual Hitch 301441

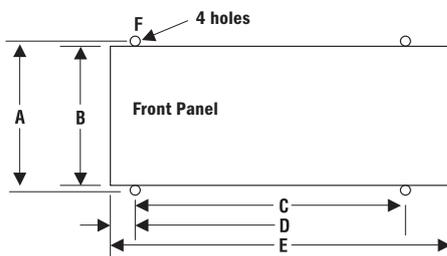
Combination 50 mm (2 in.) ball hitch and 76 mm (3 in.) lunette eye in one reversible assembly.



### Road trailer without brake:

for France only use 018035030

## Mounting Specifications



- A. 705 mm
- B. 667 mm
- C. 1,327 mm
- D. 51 mm
- E. 1,422 mm
- F. 14 mm diameter

**Height:** 813 mm  
**Width:** 667 mm  
**Depth:** 1,422 mm

## Ordering Information

| Equipment and Options                  | Stock No.        | Description   | Qty. | Price |
|--|------------------|---|------|-------|
| <b>Big Blue® 400X Pro (Int'l)</b>      | <b>907732011</b> | Kubota. International model with ArcReach®  |      |       |
| <b>Field Accessories</b>               |                  |   |      |       |
| Engine Filter Kits                     | <b>253901</b>    |   |      |       |
| FA-1D Lockable Flame Arrestor Fuel Cap | <b>043947</b>    | Field   |      |       |
| Protective Cover                       | <b>195301</b>    | Field   |      |       |
| <b>MIG/Flux-cored Welding</b>          |                  |   |      |       |
| Wire Feeders                           |                  | See page 5  |      |       |
| <b>TIG Welding</b>                     |                  |   |      |       |
|  |                  | See page 5  |      |       |
| <b>Multiple Operator Welding</b>       |                  |   |      |       |
|  |                  | See page 5  |      |       |
| <b>Stick/TIG Remote Controls</b>       |                  |   |      |       |
| ArcReach® Stick/TIG Remote             | <b>301325</b>    | For use with ArcReach models only   |      |       |
| RHC-14 Hand Control                    | <b>242211020</b> | Hand control with 6 m (20 ft.) cord   |      |       |
| Wireless Remote Hand Control           | <b>301582</b>    | Hand control with wireless 91.4 m (300 ft.) operating range                                   |      |       |
| Wireless Antenna Kit                   | <b>300749</b>    | Recommended for improved reception  |      |       |
| <b>Trailers and Hitches</b>            |                  |   |      |       |
| HWY-225                                | <b>301338</b>    | Trailer for field   |      |       |
| Trailer                                | <b>018035030</b> | Road trailer without brake  |      |       |
| Dual Hitch                             | <b>301441</b>    | Combination 50 mm (2 in.) ball hitch and 76 mm (3 in.) lunette eye in one reversible assembly |      |       |

Date:

Total Quoted Price:

Miller recommends *Elega* consumables

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