

TANK FABRICATION

Automated Solutions for Your
Tank Fabrication Project



Bug-O Systems

Automated Cutting and

Welding Systems

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www.bugo.com

Bug-O Systems is guided by honesty, integrity and ethics in service to our customers and in all we do.





BUG-O ALL TIME GIRTH WELDER

Bug-O Systems offers the **Automatic Girth Welder** for tank fabrication applications. Unlike current girth welders on the market, the BGW (Bug-O Girth Welder) Series comes standard with a Dual Drive System. This self-propelled submerged arc welding system can reduce field storage tank welding time up to 40%. Weld defects are greatly reduced, saving tank erection costs. The Girth Welder is applicable for top down or bottom up constructed single or double wall storage tanks for inside and outside welding. There are four standard units, however our design allows us to offer custom built units for non-standard applications.



Dual Drive

Bug-O All Time exclusive dual AC motor design allows for constant travel across the entire tank circumference. When fit up is not quite perfect or there is an uneven surface for the machine to travel, the dual motors will power the machine across the imperfection. This design will reduce the amount of time required to repair weld defects and will decrease the overall tank erection costs. The dual motors are controlled by one easily programmable frequency inverter.



Heavy Duty Flux Recovery System with Flux Lifting Winch

The BGW series offers a flux recovery system that can hold 130lbs (60 kg) of flux for use on long plate. The BGW also offers the convenience of a Flux Lifting Winch for easy refilling of the main flux hopper. The winch can lift 350lbs. (159 kg) of flux up to 100 feet (30.5 m) off the ground.





BUG-O ALL TIME GIRTH WELDER



Rotating Flux Dam and Welding Head

The adjustable, rotating flux dam holds the flux in the weld joint and carries the flux to the heavy duty flux recovery vacuum. The flux dam can be adjusted both vertically and horizontally for easy positioning of the flux belt. The welding head has a fine adjustment with vertical and horizontal cross slides that gives 4" x 6" (102 x 152 mm) of adjustment. A laser pointer mounted on the welding head permits for simple positioning of the welding wire.

Welding Equipment and Power Source Storage

The BGW series comes complete with SAW equipment by Lincoln Electric®. The DC-600 with NA-3 control box and feeder comes standard on all models. Optional power sources and feeder combination are available. The



power source is stored in a weather proof container for protection. A single power input supplies electrical power to all the components of the system. The complete BGW series comes complete with 200' (61 m) of control cable and welding leads with a guide on the machine itself to keep the cable away from the plate.

Environmental Features

A series of fireproof and weather tight canvas covers provide protection for the operator. All models also include interior lighting and a spot light for the Flux Belt. Under the seat is the convenience of a storage area for wire spools, tools, or additional equipment the operator may need.





BUG-O ALL TIME GIRTH WELDER

Girth Welder Control Panel



Model	Application	Tank Diameter	Welding Thickness	Travel Speed	Min. - Max. Shell Plate Height	Wire	Approx. Weight
BGW-1500-NA3-600* Single Side Girth Welder	Conventional Storage Tanks	Min. 15' (4.5m)	5/16"-1 9/16" (8-40mm)	4-114 ipm (100-2900 mm/min)	6'-10' (1.8-3.0 m)	3/32" (2.4mm)	2,094 lbs. 950 kg
BGW-2000-NA3-600 Dual Sided Girth Welder						1/8" (3.2mm)	3,968 lbs. 1800 kg
BGW-3000-NA3-600** Dual Sided Girth Welder							
BGW-1000-LNG-NA3-600 Single Sided Girth Welder	Double Shell Cryogenic Storage Tanks	Min. 15' (4.5m)	5/16"-1 9/16" (8-40mm)	4-114 ipm (100-2900 mm/min)	7'-13' (2-4 m)	2 x 1/16" (2 x 1.6mm) (dual sided model)	1,984 lbs. 900 kg
BGW-1000-D-NA3-600 Single Sided Girth Welder	Top Down Constructed Storage Tanks				6'-10' (1.8-3.0m)	(TINYTWIN Arc) (dual sided model)	2,425 lbs. 1100 kg
BGW-5000-NA3-600 Universal Single Sided Girth Welder	Top Down or Bottom Up Constructed Tanks				6'-10' (1.8 - 3.0 m)	3/32" (2.4mm)	2,094 lbs. 950 kg
CGW-5000 Compact Single Sided Girth Welder	Top Down or Bottom Up	15' (4.5m) inside	7/32"-1 3/4" (5-45mm)			1/8" (3.2mm)	770 lbs. 350 kg

*can be converted to dual sided units

**can be used as two single sided units

Note: All units are available with DC-1000 Power Source



BUG-O ALL TIME GIRTH WELDER

Girth Welder Application Photos

BGW-5000-NA3-600



Bottom Up



Top Down



CGW-5000 Mini Portable Automatic Girth Welder

The NEW **CGW-5000** (Compact Girth Welder) from Bug-O All Time is designed to produce 2G horizontal sub-arc welds for a variety of applications including: Storage Tank, wind tower and piling construction. The machine runs on a simple steel band support that can be easily fabricated and located anywhere on the work piece eliminated the need to run a top edge.





VERTICAL WELDER



BVW-1000-LN10-600MDS Multi Pass Vertical Welder

The BVW-1000-LN10-600MDS Vertical Welder is designed for welding the vertical seams on field storage tanks in an enclosed environment. The frame of the Vertical Welder is covered by Aluminum panels to provide a weather tight seal. With the motorized drives and permanently mounted rails, setup time and cost is reduced between the vertical weld seams. This unit is designed to run on any wire feeder/welding power supply combination. A powered elevating platform allows the operator to follow the Bug-O drive carriage up the seam. An exhaust fan helps to keep the interior free from welding fumes. A fume extractor can be added for additional fume removal. The BVW-1000-LN10-600MDS Vertical Welder utilizes many of the same features that the Bug-O Girth Welder BGW Series has; including dual drive motors, welding power supply storage container and tool box.

Service Platforms

BGW-1300 (single sided) and BGW-1350 (dual sided) manually operated service platforms are available. These can be used for grinding, preparation work and weld inspection. The framework is foldable for easy transport. Call factory for more information.





ADDITIONAL COMPLIMENTING PRODUCT RECOMMENDATIONS

Modular Drive System

The Modular Drive System helps to make the vertical seam welds with increased precision and repeatability. By incorporating the Linear Weaver, the Bug-O Modular Drive System can help to increase your overall fabrication productivity.

For more detailed information please see our Modular Drive Brochure.



Universal Bug-O-Matic with Auto Height Control

The Universal Bug-O-Matic with Auto Height Control combines a powerful drive and precision oscillator all in one housing. It also features amperage sensing automatic torch height adjuster which maintains constant torch to work distance. The Auto Height Control features a motorized slide which provides a total of 2" (51 mm) of vertical travel. The Universal Bug-O-Matic works in all positions and can be used for vertical and overhead welds.

- BUG-6550 120 Volt**
- BUG-6552 240 Volt**
- BUG-6554 42 Volt**

For more detailed information please see our Universal Bug-O-Matic Brochure.

Go-fer III

The straight line Go-fer III can be used to cut, bevel and weld the floor plates. The Go-fer's low cost and high reliability make it a great fit for many tank fabrication applications including repair work.

- GOF-3250-OX 120 Volt**
- GOF-3252-OX 240 Volt**

For more detailed information please see our Go-fer III Brochure.





ADDITIONAL COMPLIMENTING PRODUCT RECOMMENDATIONS



K-BUG 1000 Digital Compact Fillet Welder

The **K-BUG 1000** digital, compact fillet welder is a compact portable straight line travel carriage. Creating continuous or intermittent “stitch” welds at a constant travel speed produces high quality, uniform welds in a fraction of the time required for manual welding. Regulated travel speed eliminates excessive weld deposition and reduces defects. Precise control with programmable dwells improves weld penetration and controls undercut.

For more detailed information please see our K-BUG 1000 Brochure.



Continuous Weld



Stitch Weld

K-BUG 3000 Digital Compact Heavy Duty Fillet Welder

The new **K-BUG 3000** digital compact heavy duty fillet welder with oscillation is designed for welding fillet joints. A lightweight, portable carriage utilizing powerful magnets and guide wheel clamps and tracks directly to the work piece. The **K-BUG 3000** features programmable control of weave parameters that include tractor speed, weave speed and weave width. This K-BUG also has independent settings for left / right dwell. The **K-BUG 3000** has the capability to perform in all positions.

For more detailed information please see our K-BUG 3000 Brochure.

