Operator Controlled Mechanization











Phone: 412-331-1776 Fax: 412-331-0383

www.bugo.com

Bug-O Systems is committed to empowering our customers by providing operator controlled mechanized solutions for their welding, cutting and custom applications.

Why Choose a Mechanized Process?



Increase Production

The machine replaces the operator's hand to control the process. Continuous welding, no stopping and starting.

Improve Quality

Precise speed and path control improves appearance and quality. Decreases defects and costly repairs.



Reduce Material Handling

Take the machine to the work. Work in all positions.

Reduce Distortion

Regulate travel speed. Provide uniform heat input.



Reduce operator fatigue. Remove operator from welding/cutting fumes





Straight Line Cutting & Welding with Rails



GO-FER® IV

Straight line cutting machine for oxy-fuel or plasma, remote pendant option available 120 or 240 volt

Speed: 2.5-100 ipm

(63.5-2540 mm/min)

Weight: 37 lbs. (16.8 kg)



WELDING SUPPORT KIT FOR GO-FER® IV

Used with the Go-fer® IV for straight line semiautomatic welding



DC-IV

Rack and pinion drive with six speed ranges available. Runs on aluminum rigid and semi-flex rail. 42, 120 or 240 volt Weight: 18 lbs. (8 kg)



DC-IV-HD

Rack and Pinion tractor w/ Extra Heavy Duty torch support racking for Aluminum Rigid Rail 120, 240 or 42 volt Weight: 24 lbs. (10.9 kg)





MODULAR DRIVE SYSTEM

Stitch welding kit 110, 220 or 42 volt Adapts to all Bug-O rail Speed: 2-120 ipm (51-3048 mm/min) Weight (machine only):

Weight (machine only): 30 lbs. (13.61 kg)

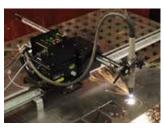


MODULAR DRIVE SYSTEM

Straight Line Cutting Kit 110, 220 or 42 volt Adapts to all Bug-O rail Speed: 2-120 ipm (51-3048 mm/min) Weight (machine only): 28 lbs. (12.7 kg)



Shape Cutting / Welding



MDS PROGRAMMABLE SHAPE KIT

2 axis portable programmable cutting/ welding machine 120, 240 and 42 volt Speed: 5-100 ipm

(127-2540 mm/min) Net Weight: 47 lbs. (21 kg)



Straight Line Welding with Oscillation



MODULAR DRIVE SYSTEM

Linear weaver kit 110, 220 or 42 volt Adapts to all Bug-O rail Speed: 2-120 ipm (51-3048 mm/min) Weight (machine only): 41 lbs. (18.6 kg)



MODULAR DRIVE SYSTEM

Pendulum weaver kit 110, 220 or 42 volt Adapts to all Bug-O rail Speed: 2-120 ipm (51-3048 mm/min) Weight (machine only): 40 lbs. (18.14 kg)



HIGH CAPACITY MODULAR DRIVE SYSTEM

Can carry up to 140 lbs. (64 kg) vertically, and is compatible with all standard MDS components

Speed: 2-120 ipm

(51-3048 mm/min)

Net Weight (w/carriage):

26 lbs. (11.8 kg)



UNIVERSAL BUG-O-MATIC

Compact drive and weaver combination.
Adapts to all Bug-O rail 120, 240 or 42 volts
Speed: 3-66 ipm

(70-1670 mm/min)

Weight: 22 lbs. (10.5 kg)



Pipe Welding/Cutting



PIPE WELDING SYSTEMS

Piper-Plus

- Self contained, digitally controlled - Produces excellent quality repeatable welds with high deposition rates
- Fully integrated with power sources - advanced process control available (STT, GMAW-P, etc)
- Pipe Diameter 12 inches and larger
- Air-cooled & Water-cooled options available
 120 or 240 volts

Speed: 0-80 ipm,

(0-2000 mm/m)



UNIVERSAL BUG-O-MATIC WITH AUTO HEIGHT CONTROL

An Excellent Choice for Pipe Welding for ease of operation. 120, 240 or 42 volts

Speed: 3-70 ipm

(75-1750 mm/min)

Weight: 36 lbs. (16 kg)



MODULAR DRIVE SYSTEM

A versatile machine that can be customized for pipe welding

110, 220 or 42 volt Adapts to all Bug-O rail Speed: 2-120 ipm

(51-3048 mm/min)

Weight: 39 lbs. (17.5 kg)



Welding with Automatic Height Control



MODULAR DRIVE SYSTEM WITH AUTOMATIC HEIGHT CONTROL

Available for straight-line or linear & pendulum weaving systems

110, 220 or 42 volt Adapts to all Bug-O rail Speed: 2-120 ipm

(51-3048 mm/min)

Weight: 45 lbs. (20 kg)



UNIVERSAL BUG-O-MATIC WITH AUTOMATIC HEIGHT CONTROL

Same as Universal Bug-O-Matic but with additional amperage sensing automatic torch height adjuster Adapts to all Bug-O rail 120, 240 or 42 volts

Speed: 3-70 ipm (75-1750 mm/min)

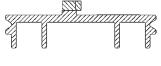
Weight: 36 lbs. (16 kg)



FREESTANDING TORCH SUPPORT WITH AUTOMATIC HEIGHT CONTROL

110 or 220 volts Total Vertical Adjustment: 25" (635 mm) Total Horizontal Adjustment: 25" (635 mm) Weight: 41 lbs. (19 kg)





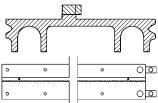


RIGID RAILS

Heavy Duty ARR-1080 8' (2.37 m) Long sections



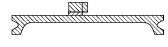
ARR-1085 4' (1.18 m) Long sections



Extra Heavy Duty ARR-1250 8' (2.37 m) Long sections

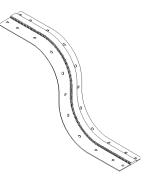
ARR-1200 4' (1.18 m) Long sections

Hard coat rails available upon request for above.



SEMI-FLEX RAIL

Flexes to 15' (5 m) radius AFR-3000 8' (2.37 m) Long sections

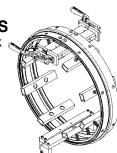


HI-FLEX RAIL

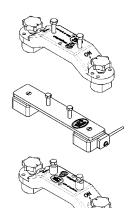
Flexes to 30" (760 mm) Radius FMD-1050 57.7" (1.47 m) Long sections



RING RAILS Minimum work diameter of 9" (230 mm)







ARM-2010-HH SWIVEL MAGNET For Aluminum Rigid Rail

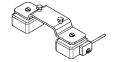
ARM-2010

R.E. ON/OFF MAGNET For Aluminum Rigid Rail

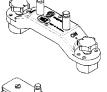
High Heat Applications*



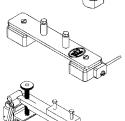
AFR-2010 High Heat Applications* AFR-2010-HH



MAGNET W/ RELEASE For Semi-Flex Rail ARM-2425



R.E. ON/OFF MAGNET For Hi-Flex Rail FMD-2010 High Heat Applications* FMD-2010-HH



MAGNET W/ RELEASE For Hi-Flex FMD-2325

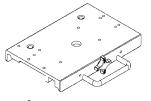


Support Bar w/ Screw Feet For Bent Rail 4.5" (114.3 mm) of adjustment ARM-2380

^{*} High Heat App.= Rated @ 180°C (356°F) Standard Heat= Rated @ 80°C (176°F)

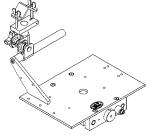


Carriages - Vacuum Support



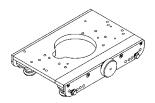
RELEASABLE CARRIAGE

For Rigid & Semi-Flex Rail MPD-1065



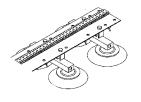
HI-FLEX CARRIAGE

For Hi-Flex Rail FMD-1105



SPLIT CARRIAGE

Releasable from Rail For Bent Rigid Rail BUG-5910



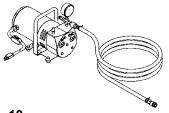
VACUUM BAR ASSEMBLY

For non-ferrous material For Hi-Flex Rail (sold separately) FMD-1036



VACUUM BAR ASSEMBLY

For non-ferrous material For Rigid & Semi-Flex Rails (sold separately) ARV-1036



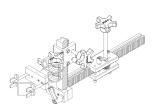
VACUUM PUMP KIT

ARV-2020 110 volt/50-60 Hz

ARV-2030 220 volt/50-60 Hz



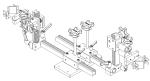
Supports & Accessories



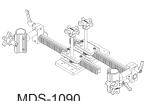
MDS-1040 Machined Rack Welding Group



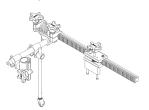
MDS-1050 Machined Rack Cutting Group



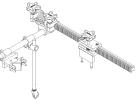
MDS-1075 Dual Torch Welding Group



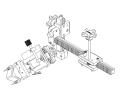
MDS-1090 Dual Torch Cutting Group



PAN-1000 Panograph Torch Floater



PAN-1008 Welding Panograph



PAN-2145-L, R Mechanical Corner Follower



PAN-2160 Mechanical Seam Follower



Hole Cutter & Circle Welders



HOB-O ALL-POSITION HOLE BORER

Lightweight precision hole borer, beveler and welder. 120, 240 and 42 volt Cutting Diameter: 1"-48" (25-1220 mm)

1"-48" (25-1220 mm) Weight: 30 lbs. (13.6 kg)

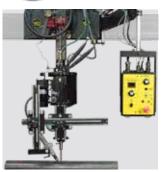


CIRCLE WELDERS

Nozzle welding units Available for MIG/MAG and submerged Arc. Multiple versions available for nozzle diameters of 1"-50" (25-1270 mm) For multi-pass and multi-layer welding.



Circle Cutters



CB-1PR

Plasma circle burner with remote control for cutting beveled holes 1/2"-12" (13-305 mm) in Pipe up to 3/8" (7 mm) wall thickness includes plasma power source. 60% Duty cycle Rise and Fall Cam: 5" (127 mm) Speed: 0.2-11 rpm

Speed: 0.2-11 rpm Weight: 170 lbs. (77 kg)

Circle burner with



CB-2

magnetic base process: Oxy-fuel Cutting Diameter: 1.5"-42" (40-1066 mm) beveled holes 4"-48" (100-1220 mm) square cut Rise and Fall Cam: 0-7" (0-175 mm), Weight: 225 lbs. (102 kg)



Bug-O Advanced Process Circle Welders



DCW-5

Equipped with Lincoln Electric® Power Feed 84® or OTC-DAIHEN AF-4012 wire feeder.

Can weld 1-12" (25.4-304.8 mm) diameters



DCW-18-L

Equipped with Lincoln Electric® MAXsa® 10 Controller for Power Wave® AC/DC 1000® wire feeder or Miller® Digital interface for use with Miller® Digital series power sources.

Can weld 10-50" (254-1,270 mm) diameters



Shape Cutting / Welding



MDS PROGRAMMABLE SHAPE KIT

2 axis portable programmable cutting/ welding machine 120, 240 and 42 volt Speed: 5-100 ipm

(127-2540 mm/min)

Net Weight: 47 lbs. (21 kg)



Pipe Cutting & End Preparation Units



SE-2 PTD

Programmable pipe cutter with 5" (127 mm) pipe pass through capability Process: Oxy-fuel or Plasma 120 or 220 volts

Diameters: 1" - 4" (25-100 mm) External Chuck: 4"-14" (100-355 mm) Net Weight: 346 lbs. (157 kg)



SE-4PD

Programmable pipe cutter Process: Oxy-fuel or Plasma 115 or 220 volts Cutting Diameters: 1"-12" (25-300 mm) Maximum Pipe Length: 18" (450 mm)

Weight: 201 lbs. (91 kg)



SE-4PTD

Programmable pipe cutter with 13" (330 mm) pipe pass through capability Process: Oxy-fuel or Plasma 120 or 220 volts Pass Through Pipe Cutting Diameters:

4" to 12-3/4" (100-325 mm) External Chuck up to 20" (500 mm) Weight: 705 lbs. (320 kg)



PCC-1

Pipe Coupon Cutter is a single axis machine for cutting or beveling the edge of a pipe Process: Oxy-fuel or Plasma 120 or 220 volts 0-8" O.D. and 3-11" I.D. pipe Weight: 180 lbs. (82 kg)

Pipe Cutting & End Preparation Units



MM1

Programmable pipe cutter with pipe bed
Process: Oxy-fuel or Plasma
120 or 220 volts
Cutting Diameters
4"-16" (100-400 mm) O.D.
Pipe Length Capacity
up to 30' (9.14 m)
24" (600 mm) Diameter
Capacity Available

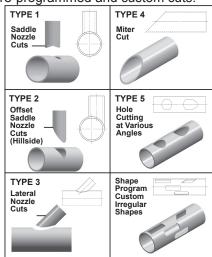


MM5

Programmable pipe cutter with pipe bed Process: Oxy-fuel or Plasma 120 or 220 volts Cutting Diameters 4"-39.375" (10-100 cm) O.D.

Pipe Length Capacity up to 8' (2.44 m) Additional pipe bed extensions of 8' (2.44 m) can be added

Capabilities of Bug-O Pipe cutting & end preparation units. Pre-programmed and custom cuts.





Trackless Mechanization for Cutting & Welding



UNI-BUG® III

Programmable stitch welder. Runs directly on the work piece. Carriage options for the following structural profiles:

- Bulb Angle
- T Profiles L Profiles 110, 220 or 42 volt Speed: 4-75 ipm

(102-1905 mm/min)

Weight: 18 lbs. (8.2 kg)



STIFFENER WELDERS

Mechanizes two wire feeders to weld various types of stiffeners. Available with Lincoln® Flex Feed 84 feeder or Miller® S74 feeder 120 or 240 volt

Speed: 3-44 ipm

(75-1100 mm/min)



Four Wheel Drive Trackless Mechanization for Fillet Welding



K-BUG 1200

Fillet welder with continuous and programmable stitch 42, 120 or 240 volt Speed: 0.3-.37 in/min

(0.1-95 cm/min) Weight: 13 lbs. (5.9 kg)



K-BUG 1200-BAT

Cordless, battery operated fillet welder with continuous and programmable stitch 120 or 240 volt

Speed: 1.5-37 in/min (3-95 cm/min)

Weight: 17 lbs. (7.71 kg)



K-BUG 2000

Dual Torch Fillet Welder 120 or 240 volt

Speed: 0.3-37 in/min (0.1-95 cm/min)

Weight: 23.2 lbs. (10.5 kg)



K-BUG 3000 WITH OSCILLATION

Welds in all Positions Includes wireless remote 120 or 240 volt

Speed: 1.18-35 in/min

(3.0-88 cm/min)

Weight: 20.2 lbs. (9.2 kg)



Four Wheel Drive Trackless Mechanization for Fillet Welding



K-BUG 3000-BAT WITH OSCILLATION

Cordless, battery operated, welds in all Positions Includes wireless remote 120 or 240 volt

Speed: 1.18-35 in/min (3.0-88 cm/min)

Weight: 26 lbs. (11.8 kg)



K-BUG 4000

Wall following continuous and stitch fillet welder 120 or 240 volt Speed: 0-77 in/min

(0-196 cm/min)

Weight: 17 lbs. (7.5 kg)



Girth Welders



UNIVERSAL GIRTH WELDERS

These girth welders are convertible for both bottom up and top down construction. They are also capable of being used as a pair to construct a dual sided girth welder.

Special models can be built per customer's request.



VERTICAL SEAM WELDER

Similar design to BGW. Performs vertical seam welds. Includes elevating platform for operator.



MINI PORTABLE AUTOMATIC GIRTH WELDER

Produces 2G horizontal sub-arc welds. Runs on a steel band support located anywhere on the work piece.



ZIPPER WELDER

The Bug-O Zipper Welder is designed to weld vertical seams on field storage tanks. The system hooks on the top edge of the tank. It manually rolls to the next joint.



Bug-O Weavers



KBUG-5050

Digital, compact pendulum weave welder 120 or 240 volt

Speed: 0 to 247 in/min (6274 cm/min)

Weight: 10 lbs. (4.5 kg)



KBUG-6050

Digital, compact linear weave welder 120 or 240 volt Speed: 0 to 188 in/min

(477 cm/min)

Weight: 14 lbs. (6.3 kg)



Custom Application Solutions



OVERLAY SYSTEM

Custom configured system for rebuilding and resurfacing material such as vessel walls and boiler tubes. 110, 220 or 42 volt Travel Speed: 2-120 ipm, (50-3000 mm)

Available in programmable or manual indexing versions and working envelopes