



Flexible Automation of Cutting & Welding Applications

**Flexible Automation von
Schweiß- und Schneidarbeiten**

**Automatización flexible para
corte y soldadura**

**Automatisation Flexible
d'applications de Soudure et
de Coupe**



Plug in a Bug-O

For more detailed information on any product, visit our website where you can download a full product brochure.



Phone: 1-412-331-1776
Fax: 1-412-331-0383

www.bugo.com



Six Ways Automating Your Welding & Cutting Can Save You Money!



Increase Production

The machine replaces the operator's hand to control the process.

Improve Quality

Precise speed and path control improve appearance and quality.



Reduce Material Handling

Take the small light-weight machine to the work. Work in all positions.

Reduce Distortion

Provides uniform heat input, puts the right amount of weld in the right place.

Improve Worker's Environment

Keeps the worker further away from the arc and reduces operator fatigue.



Adaptable

Flexible Modular Construction that adapts to your job.



Trackless Mechanization for Cutting & Welding



MINI VERT III

Compact Fillet Welder
Battery Powered
4 Wheel Drive
110 or 220 volt charger
Speed: 100-990 mm/min.
3.9-39 ipm
Weight: 7.2 kg, 16 lbs.



BUG-GY-VERT III Fillet Welder with Oscillation

Battery Powered
4 Wheel Drive
110 or 220 volt charger
Welds in all Positions
Speed: 60-1250 mm/min.
2.5-50 ipm
Weight: 20 kg, 43 lbs.



FILL-O-MATIC

4 Wheel Drive
110 or 220 volt
Can perform continuous,
stitch or weave welds
Speed: up to 1905 mm/min
up to 75 ipm
Weight: 9.75 kg,
21.5 lbs.



BUG-GY

Fillet Welder with
Programmable Stitch
Welding and Reverse
Crater Fill
Optional Dual Torch
Attachment Available
110, 220 or 42 volt
Speed: 101-1524 mm/min.
4-60 ipm
Weight: 18 kg, 40 lbs.



Trackless Mechanization for Cutting & Welding



UNI-BUG III

Programmable Stitch Welder. Runs Directly on the Work Piece. Carriage Options for the following structural profiles:

- Flat Bar
- Bulb Angle
- T Profiles
- L Profiles

110, 220 or 42 volt

Speed: 102-1905 mm/min.
4-75 ipm

Weight: 8.2 kg, 18 lbs.



STIFFENER WELDER (STW-3000)

Dual Sided Fillet Welder with Wire Feeders and Programmable Stitch Function

Stiffener Capacities:

102-457mm, 4"-18" High

102-305mm, 4"-12" Wide

Speed: 0-900 mm/min.

0-36 ipm

Weight: 113 kg, 250 lbs.



SUB-ARC TRACTOR

Heavy Duty Submerged-arc tractor for fillet and butt joints. Optional flux recovery unit is available.

4 Wheel Drive

Speed: 127-2,540 mm/min.

5-100 ipm

Weight: 116 kg, 255 lbs.



Straight Line Cutting & Welding with Rails



GO-FER CUTTING KIT-PLASMA

Straight Line Cutting and
Beveling Machine for
Plasma

120, 240 or 42 volt

Speed: infinitely variable
from 200-2500 mm/min.

8-100 ipm

Weight: 17.7 kg, 39 lbs.



GO-FER CUTTING KIT-OXY-FUEL

Straight Line Cutting and
Beveling for Oxy-Fuel

120, 240 or 42 volt

Speed: infinitely variable
from 200-2500 mm/min.

8-100 ipm

Weight: 17.7 kg, 39 lbs.



GO-FER WELDING KIT

Straight Line Semi-
Automatic Welding

120, 240 or 42 volt

Speed: infinitely variable
from 50-1250 mm/min.

2-50 ipm

Weight: 17.7 kg, 39 lbs.



Straight Line Cutting & Welding with Rails



TRAC-BUG OXY-FUEL

Straight Line Track
Burning Machine for
Oxy-Fuel
120, 240 or 42 volt
Speed: infinitely variable
from 100-1800 mm/min.
4-72 ipm
Weight: 15 kg, 33 lbs.



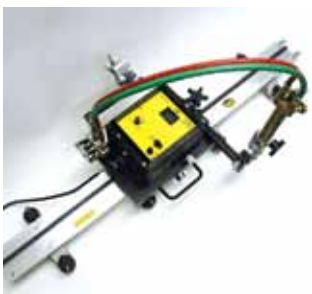
TRAC-BUG-PLASMA

Straight Line Track
Burning Machine for
Plasma
120, 240 or 42 volt
Speed: infinitely variable
from 100-1800 mm/min.
4-72 ipm
Weight: 15 kg, 33 lbs.



MODULAR DRIVE SYSTEM

Stitch Welding Kit
110, 220 or 42 volt
Runs on all types of
Bug-O Rail
Speed: 51-3048 mm/min
2-120 ipm
Weight (machine only):
13.61 kg, 30 lbs.



MODULAR DRIVE SYSTEM

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



Straight Line Welding with Oscillation



UNIVERSAL BUG-O-MATIC

Compact Drive and
Weaver Combination.
Adapts to all Bug-O Rail.
120, 240 or 42 Volts
Speed: 70-1670 mm/min.
3-66 ipm
Weight: 10.5 kg, 22 lbs.



MODULAR DRIVE SYSTEM

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

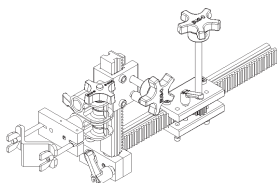


MODULAR DRIVE SYSTEM

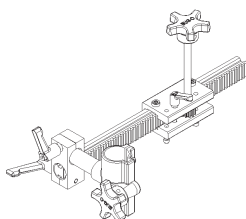
Pendulum Weaver Kit
110, 220 or 42 Volt
Adapts to all Bug-O Rail
Speed: 51-3048 mm/min
2-120 ipm
Weight (machine only):
18.14 kg, 40 lbs.



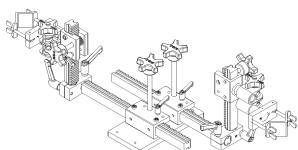
Supports & Accessories



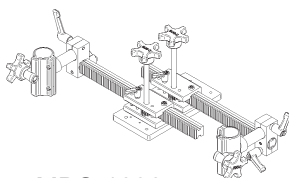
MDS-1040
Machined Rack
Welding Group



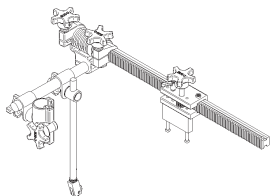
MDS-1050
Machined Rack
Cutting Group



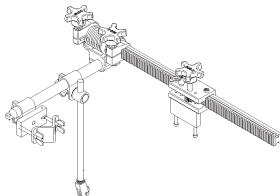
MDS-1075
Dual Torch Welding
Group



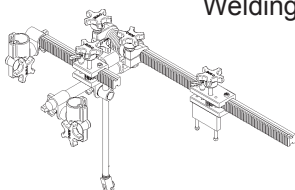
MDS-1090
Dual Torch Cutting
Group



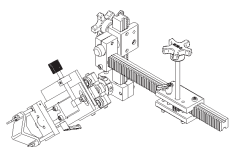
PAN-1000
Panograph
Torch Floater



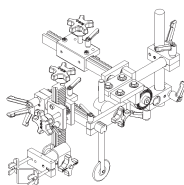
PAN-1008
Welding Panograph



PAN-1072
Double Torch
Panograph



PAN-2145-L, R
Mechanical Corner
Follower



PAN-2160
Mechanical Seam
Follower



Welding with Auto Height Control



MODULAR DRIVE SYSTEM

With Auto Height Control
110, 220 or 42 volt
Runs on all types of
Bug-O Rail
Speed: 51-3048 mm/min
2-120 ipm
Weight: 20kg, 45 lbs.



UNIVERSAL BUG-O-MATIC WITH AUTO HEIGHT CONTROL

Same as Universal Bug-o-matic but with additional amperage sensing automatic torch height adjuster
120, 240 or 42 Volts
Speed: 100-2500 mm/min., 4-100 ipm
Weight: 16 kg, 36 lbs.



FREESTANDING TORCH SUPPORT WITH AUTO HEIGHT CONTROL

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



Pipe Welding/Cutting



Piper-Bug Pipe Welding System

Self contained, digitally controlled system - producing high deposition rates with excellent weld quality.

120, 240 Volts

Speed: 0-2000 mm/m
(0-80 ipm), +/-1%

Weight: 17.1 Kg (37.7 lbs.)

Spool on Head

(Optional)

16.4 Kg (36.1 lbs.)

Spool on Floor



MODULAR DRIVE SYSTEM

A versatile machine that can readily be customized for Pipe Welding.

110, 220 or 42 Volt

Adapts to all Bug-O Rail

Speed: 51-3048 mm/min

2-120 ipm

Weight: 17.5 kg, 39 lbs.

UNIVERSAL BUG-O-MATIC WITH AUTO HEIGHT CONTROL

Economical choice for Pipe Welding.

120, 240 or 42 Volts

Speed: 100-2500 mm/min.

4-100 ipm

Weight: 16 kg, 36 lbs.



PIPE-BUG

Chain Driven Pipe

Cutting Machine

Manually Driven or

Motorized, 110 or 220 volt

Pipe Capacities: 76mm+

3"+

Weight:

(Manual) 16 kg, 34 lbs

(Motorized) 26 kg, 56 lbs





Horizontal and Vertical Girth Welders



SINGLE SIDED HORIZONTAL GIRTH WELDERS

Self-propelled submerged arc welding system.

Applicable for bottom-up or jack-up constructed single or double wall storage tanks.

Speed: 10-290 cm/min.
4-114 ipm



DOUBLE SIDED HORIZONTAL GIRTH WELDERS

Double Sided self-propelled submerged arc welding system.

Applicable for bottom-up or jack-up constructed single or double wall storage tanks.

Speed: 10-290 cm/min.
4-114 ipm



VERTICAL SEAM WELDER

Similar design to BGW.

Performs vertical seam welds. Includes elevating platform for operator.

Speed: 10-290 cm/min.
4-114 ipm



Bug-O/Magswitch Magnets and Accessories



WELDING CLAMPS

Switchable magnetic welding clamps allow for quick setup. Ground clamps available include: 200, 300 and 600 amp.



MAGSQUARES

Multiplane work holding when positioning steel.

Breakaway weights (on 1/4" thick steel):
68 kg., 150 lb.
182 kg., 400 lb.
273 kg., 600 lb.
455 kg., 1000 lb.



Accessory:

A hook accessory is available to attach the magsquare for use as a medium-duty lifter.



HEAVY-DUTY LIFTERS

Pick up and move heavy, cumbersome objects with ease.

safe lifting wt./rtg. on 1/4":
218/155 kg, 600/440 lbs.
327/200 kg, 900/600 lbs.



HAND LIFTER CORDLESS, ELECTRIC

Push button electric on/off magnetic hand lifter with 4 volt rechargeable battery. Up to 90 kg, 200 lb of grip.

Safe working load:
27 kg, 60 lbs.



Bug-O/Magswitch Magnets and Accessories



HANGING HOOK

Hang tools, lights, welding lines and more.

Max. safety rated hold:

11 kg, 25 lb

42 kg, 90 lb

Breakaway wt:

42 kg, 90 lb

114 kg, 250 lb



BOOMERANGLES

Versatile adjustable angle holds.

Holding force - each axis:

68 kg, 150 lb

273 kg, 600 lb



EXTEND-A-LIFTER

Turn magnet on and off with a half turn of a handle. Move heavy, objects with ease.

Holding force:

273 kg, 600 lb

Max. safety hold:

32 kg, 70 lb



90-DEGREE ANGLES

Versatile adjustable angle

Holding force - each axis:

68 kg, 150 lbs.

273 kg, 600 lbs.



MAG-PRY

Switchable magnetic

Mag-Pry turns magnetic

power on and off with a

half turn of a handle.

Holding force:

500 kg, 1,100 lb.



Special Units



PORTABLE PLATE BEVELING MACHINE

Bevels angles on plate

120 or 220 volt

Chamfering capacity up to
3/4" (20 mm)

Adj. bevels from 30° to 60°

Weight: 19 kg, 42 lbs.



PITBULL AUTOMATIC BEVELING MACHINE

Bevels plates in auto feed mode.

240 volt

Beveling Width: 0.1.37"
(35 mm)

Angle Range: 0° to 60°

Weight: 55 kg, 121 lbs.



AUTOMATIC GOUGING SYSTEM

Suited for long seams or
out of position work

120 or 240 volt

Speed: 5-304 cm/min
2-120 ipm

Net Weight: 43 kg, 95 lbs.



Special Units



MDS PROGRAMMABLE SHAPE KIT

MDS-4500

2 Axis Portable
Programmable Cutting
Machine.

120, 240 and 42 volt
Speed: (127-2540 mm/
min), 5-100 ipm
Net Weight: 21 kg, 47 lbs.



PROGRAMMABLE SHAPE MACHINE

2 Axis Portable
Programmable Cutting
and Welding Machine

120, 240 and 42 volt
Speed: 63-1250 mm/min
2.5-50 ipm
Net Weight: 17 kg, 37 lbs.



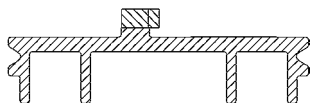
PROGRAMMABLE GANTRY SYSTEM

2 Axis Cutting Machine
120 or 240 Volt

Available in 2451 mm
(97"), 3048 mm (120"),
3632 mm (143") widths
Process: Oxyfuel or Plasma
Speed: 100-2000 mm/min
4-80 ipm



Carriages - Rails - Magnet Bars - Vacuum Support

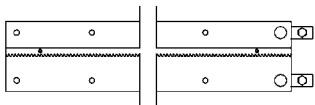


Rigid Rails

Heavy Duty

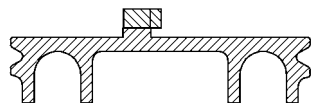
ARR-1080

2.37 m, 8' long sections



ARR-1085

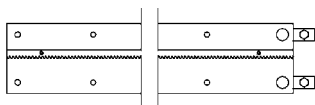
1.18 m, 4' long sections



Extra Heavy Duty

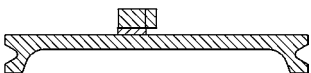
ARR-1250

2.37 m, 8' long sections



ARR-1200

1.18 m, 4' long sections

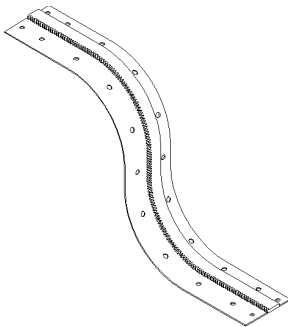


Semi-Flex

Flexes to 5 m, 15' Radius

AFR-3000

2.4 m, 8' long sections

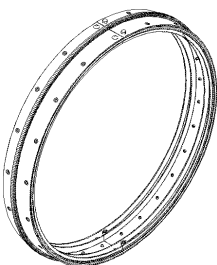


Hi-Flex

Flexes to 760 mm, 30"
Radius

FMD-1050

1.47 m, 57.7" long
sections

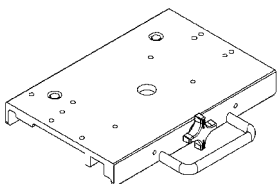


Ring Rails

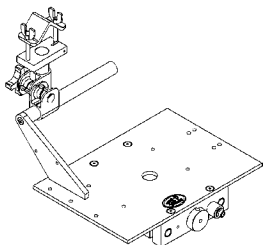
Minimum Work Diameter
of 230 mm, 9"



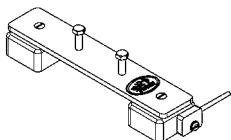
Carriages - Rails - Magnet Bars - Vacuum Support



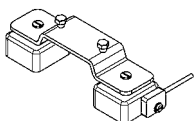
Releasable Carriage
MPD-1065



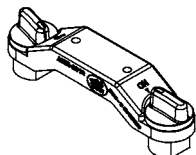
Hi-Flex Carriage
FMD-1105



Swivel Magnet
For Rigid Rail
ARM-2325



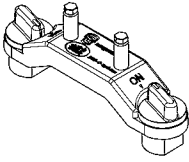
Magnet w/Release
For Semi-Flex Rail
ARM-2425



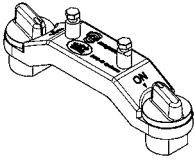
On/Off Magnet
For Aluminum Rigid Rail
ARM-2010



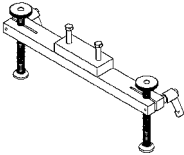
Carriages - Rails - Magnet Bars - Vacuum Support



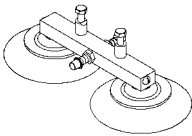
On/Off Magnet
For Hi-Flex Rail
FMD-2010



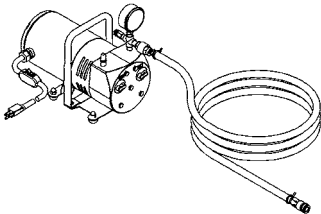
On/Off Magnet
For Semi-Flex Rail
AFR-2010



**Screw Feet
Assemblies**
For Bent Rail
ARM-2380



**Vacuum Bar
Assembly**
For Nonferrous Material
ARV-1036



Vacuum Pump Kit
ARV-2020
110 Volt/50-60 Hz

ARV-2030
220 Volt/50-60 Hz



Hole & Circle Cutters



DC HOB-O HOLE BORER

Lightweight Precision Hole Borer, Beveler and Welder.
120, 240 and 42 Volt
Cutting Diameter:
25-1200 mm, 1"-47"
Weight: 13.6 kg, 30 lbs.



CIR-O

Precision Circle Burner, Beveler and Welder.
120, 240 and 42 Volt

CIR-O III

Cutting Diameter:
75-1422 mm, 3"-56"
Weight: 48 kg, 106 lbs.

CIR-O IV

Cutting Diameter:
75-1626 mm, 3"-64"
Weight: 65 kg, 143 lbs.

CIR-O V

Cutting Diameter:
75-1830 mm, 3"-72"
Weight: 90 kg, 198 lbs.



CON-O

Precision Contour Saddle Cutter
120, 240 and 42 Volt

CON-O III

Cutting Diameter:
10-1000 mm, 3"-14"
Weight: 37.6 kg, 83 lbs

CON-O IV

Cutting Diameter:
23-1000 mm, 10"-22"
Weight: 44.5 kg, 98 lbs

CON-O V

Cutting Diameter:
32-1050 mm, 18"-30"
Weight: 59 kg, 130 lbs



Cypress Circle Cutters and Welders



CB-1P

Plasma Circle Burner
For Cutting Beveled
Holes 11-300 mm,
1/2"-12" in Pipe up to
7 mm, 3/8" Wall
Thickness
Includes Plasma Power
Source. 60% Duty Cycle
Rise and Fall Cam:
127 mm, 5"
Speed: .2-11 rpm
Weight: 77 kg, 170 lbs.



CB-2

Circle Burner with
Magnetic Base
Cutting Diameter:
40-1066 mm, 1.5"-42"
beveled holes
100-1220 mm, 4"-48"
square cut
Process: Oxyfuel
Rise and Fall Cam:
0-175 mm, 0-7"
Weight: 102 kg, 225 lbs.



CIRCLE WELDERS

Nozzle Welding Units
Available for MIG/MAG
and Submerged Arc.
Multiple Versions Available
for Nozzle Diameters of
25-1270 mm, 1"-50". For
Multi-pass and Multi-layer
Welding.



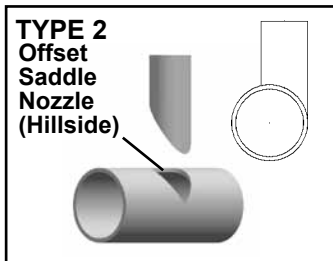
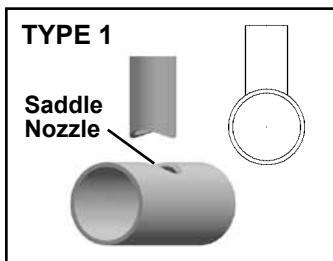
Programmable Circle Cutters & Welders for Offset Nozzles

All Circle Cutters and Welders are available in programmable versions.

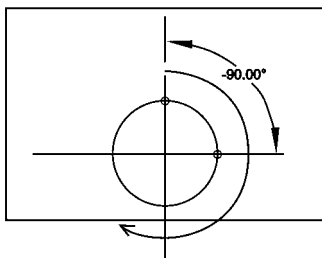
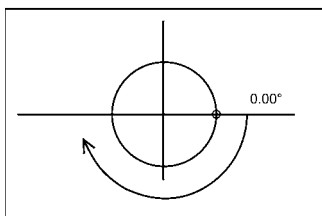


DATA REQUIRED FOR PROGRAM:

1. Small diameter (nozzle size)
2. Large diameter (main pipe)



3. Offset distance between centerlines of main pipe and nozzle, if any
4. Overlap Angle (additional rotation after 1 or more complete passes)
5. Start Angle : to specify the start point angle around the joint

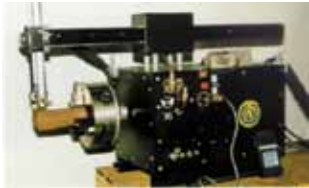




Cypress Pipe Cutting & End Preparation Units



SE-2 PTD
PROGRAMMABLE
PIPE CUTTER / PASS
THROUGH
Pass Through Pipe
Cutting Diameters
25-100 mm, 1"-4"
External Chuck of 100-
355 mm, 4"-14"
120 or 220 VAC
Process: Oxyfuel or
Plasma
Net Weight: 157 kg,
346 lbs.



SE-4PD
PROGRAMMABLE PIPE
CUTTER
Cutting Diameters:
25-300 mm. 1"-12"
Maximum Pipe Length:
450 mm, 18"
115 VAC
Process: Oxyfuel or
Plasma
Weight: 91 kg, 201 lbs.



SE-4PTD
PROGRAMMABLE
PIPE CUTTER / PASS
THROUGH
Pass Through Pipe
Cutting Diameters:
100-325 mm, 4" to 12-3/4"
External Chuck up to
500 mm, 20"
120 or 220 VAC
Process: Oxyfuel or
Plasma
Weight: 320 kg, 705 lbs.



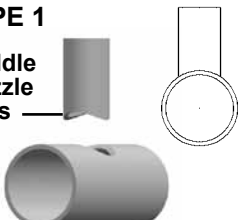
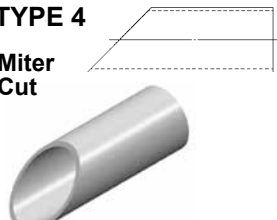
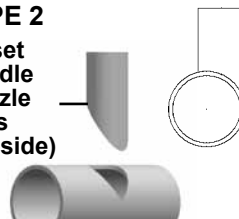
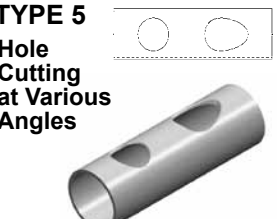
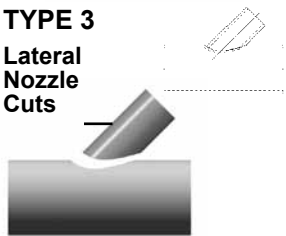
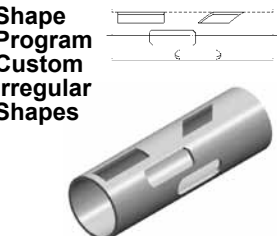
Cypress Pipe Cutting & End Preparation Units



MM1

Programmable Pipe Cutter
With Pipe Bed
120 or 220 VAC
Cutting Diameters
100-400 mm, 4"-16" O.D.
Pipe Length Capacity
up to 9.14 m, 30'
600 mm, 24" Diam. Capacity
available
Process: Oxyfuel or
Plasma

Capabilities of Cypress Pipe Cutting & End Preparation Units. Pre-programmed and Custom Cuts.

<p>TYPE 1</p> <p>Saddle Nozzle Cuts</p> 	<p>TYPE 4</p> <p>Miter Cut</p> 
<p>TYPE 2</p> <p>Offset Saddle Nozzle Cuts (Hillside)</p> 	<p>TYPE 5</p> <p>Hole Cutting at Various Angles</p> 
<p>TYPE 3</p> <p>Lateral Nozzle Cuts</p> 	<p>Shape Program Custom Irregular Shapes</p> 



Fixture Building Equipment & Complete Fixtures



OVERLAY SYSTEM

Custom Configured System for Rebuilding and Resurfacing Material such as Vessel Walls and Boiler Tubes.

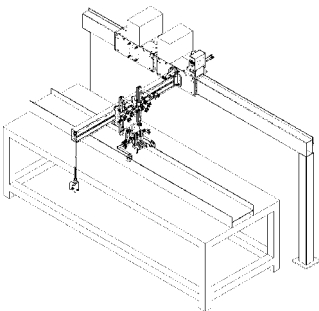
110, 220 or 42 volt
Travel Speed: 50-3000 mm,
2-120 ipm

Available in Programmable or Manual Indexing Versions and Working Envelopes.



BUG-O GANTRY WELDING SYSTEM

Custom Designed Systems for a Variety of Applications such as Seam Welding and Beam Fabrication.



BUG-O GANTRY SIDE BEAM CARRIAGE

Custom Designed Systems for a Variety of Applications such as Seam Welding and Beam Fabrication.

For more information visit our website at:
www.bugo.com

A QUALITY PRODUCT FROM BUG-O SYSTEMS

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ΧΡΙΣΤΟΣ ROM 1:16

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