



Bug-O Systems

Operator Controlled Mechanization

412-331-1776 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.

K-BUG 6100

**DIGITAL, COMPACT, ALL POSITION
LINEAR WEAVE WELDER**

**A Hi-Flex track guided travel carriage with
oscillation for welding in all positions.**

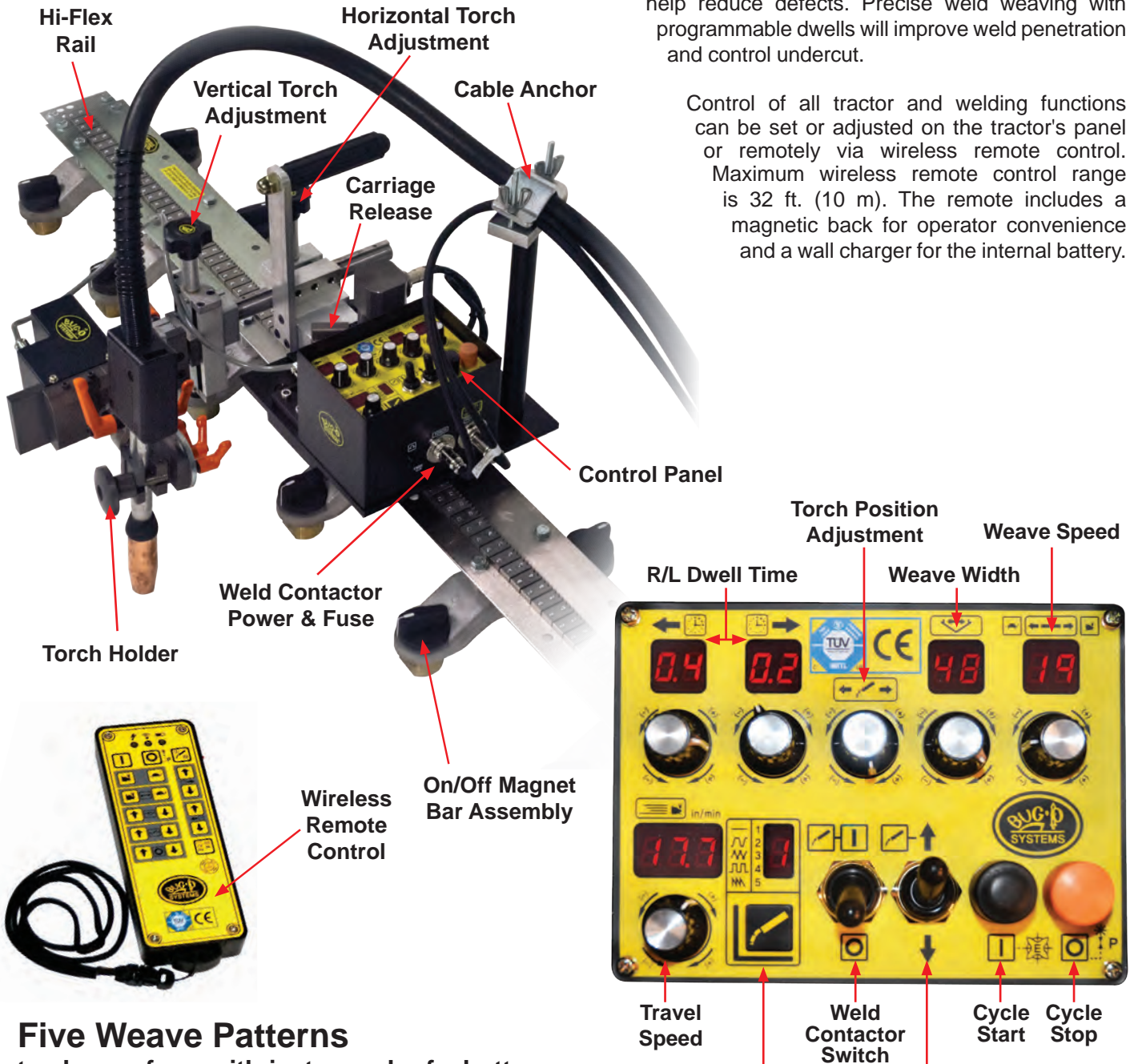
**Increases welding production, improves weld
quality and reduces operator fatigue.**



K-BUG 6100 DIGITAL, COMPACT, ALL POSITION LINEAR WEAVE WELDER

The **KBUG-6100** is a compact portable welding unit with an integrated linear weaver for all position welding. It runs on BUG-O Systems Hi-Flex Rail which attaches to the work surface via magnets or vacuum system in any position. Regulated travel speed without starting and stopping the welding process will eliminate excessive weld deposition and help reduce defects. Precise weld weaving with programmable dwells will improve weld penetration and control undercut.

Control of all tractor and welding functions can be set or adjusted on the tractor's panel or remotely via wireless remote control. Maximum wireless remote control range is 32 ft. (10 m). The remote includes a magnetic back for operator convenience and a wall charger for the internal battery.



Five Weave Patterns to choose from with just a push of a button

- | | |
|--|--|
| | 1. NO WEAVE- Straight line |
| | 2. RUN- The tractor moves continuously during the weave and dwell |
| | 3. WEAVE- The tractor and weave both stop during dwells |
| | 4. STEP- The tractor is stationary during the weave and moves only during the dwell |
| | 5. TRACTOR STOP ON DWELL- When the weave moves away from tractor, the tractor is stationary
When weave moves towards tractor, the tractor also moves |



K-BUG 6100 DIGITAL, COMPACT, ALL POSITION LINEAR WEAVE WELDER

Features:

- High torque, low inertia motor for precise stops and starts
- Lightweight and easy to carry, weighing just 21.5 lbs. (9.75 kg.)
- Hi-Flex Rail with rack and pinion drive insures precise path and consistent speed
- Hi-Flex Rail flat or bent inside/outside to a radius of 30" (762 mm)
- Precision drive motor prevents unit from moving when power is off
- Weaver motor design prevents torch movement when power is off
- Closed loop speed and position control
- High speed motor for linear weaving
- Programmable puddle build and crater fill
- Independent control of linear weaving right and left dwell times
- Drive unit motor overload protection
- Closed loop speed control for adjustable and repeatable control
- Closed loop speed control prevents drift from center weld position
- Storage of welding parameters after power is turned off
- Carriage Travel and arc start in one switch
- Wireless Remote Control
- Cable Anchor
- Weld Contactor ON/OFF Switch

Rail Options:

The **K-BUG 6100** package is designed to run on Bug-O Systems Hi-Flex Rail (FMD) for uses in radius or straight line applications. Carriage wheels run on stainless steel rail that can be mounted with magnets or vacuum system.

Hi-Flex Rail FMD-1050



**R.E. On/Off Magnet, Hi-Flex
FMD-2010
FMD-2010-HH***
Holding Power
250 lb. (113 kg)



**Spacer Bar
FMD-2015**
Use with
FMD-2010

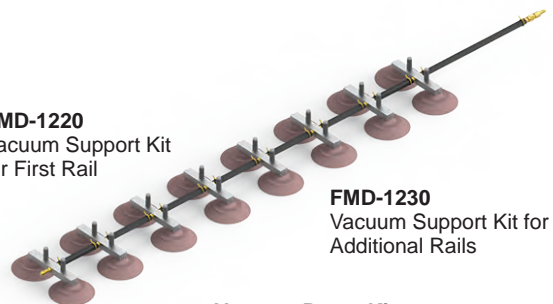


**Hi-Flex Magnet w/ Release
FMD-2325**
Holding Power
250 lbs. (113 kg)



*High Heat models are rated at 180°C (356°F) for high temperature applications.

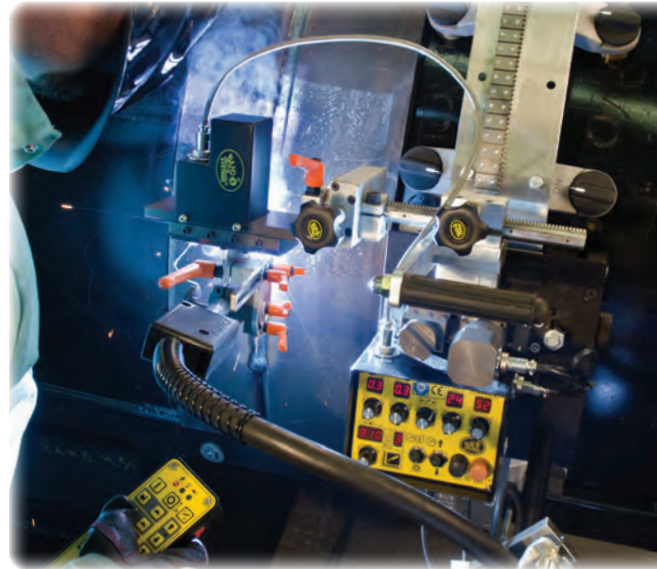
FMD-1220
Vacuum Support Kit
for First Rail



FMD-1230
Vacuum Support Kit
for Additional Rails

Vacuum Pump Kit
(Necessary for use w/vacuum cups)

ARV-2020 120 Volt/50-60 Hz or 100-1297-120 120 Volt/50-60 Hz
ARV-2030 240 Volt/50-60 Hz or 100-1297-240 240 Volt/50-60 Hz





K-BUG 6100 DIGITAL, COMPACT, ALL POSITION LINEAR WEAVE WELDER

Accessories:

All-In-One (AIO) Mechanized Guns for KBUGs

Choose from the options below to fit your application.

1 GUN



Each gun includes:

- 5X 100-0490 / 65-3103 EHD Retaining Head/Diffuser
- 10X 100-0489 / 65-1135 EHD Contact Tip 0.035"
- 10X 100-0488 / 65-1145 EHD Contact Tip 0.045"
- 2X 100-0635 / 65-2550 Nozzle, Copper 1/2" Bore, 1/8" Tip Recess
- 1X 100-0492 / 64-4515 0.045-1/16", 15 Ft., Coil Liner

- 100-1011-1-4.5-XX** 500 amp Lightning Auto Gun, 180 degree gooseneck with integrated cable management system
- 100-1011-1-4.5-T** Includes 100-0484 Tweco #4 Power Pin
- 100-1011-1-4.5-M** Includes 100-0485 Miller Power Pin
- 100-1011-1-4.5-L** Includes 100-0486 Lincoln Power Pin Old Style

Optional Torch Holders Available:



KBUG-2080-1
1" Torch Holder



KBUG-4089
Torch Holder (BUG-O Style)

2 BUG-O TRIGGER CABLE

Connects the contact cable in the torch to the contact trigger amphenol on the bug.



100-1012-3-0.15 KBUG-2T-F

3 AIO TO BUG POWER ADAPTER (Bug End)



100-1013-3-0.15 AC Power Cable, KBUG, 0.15M

4 WIRE FEEDER TRIGGER CABLES (Feeder End)

Required to choose 1

Connects the contact cable in the torch to the wire feeder.

100-1020-1-0.15 (two male spade connectors)



100-1020-3-0.15 5-P Lincoln



5 STANDARD POWER CORD (From Rear of Gun Cable to Power Input)

BUG-9454 120VAC



BUG-9454-240 240VAC



BUG-9454-42 42VAC



Contact American Torch Tip for other consumables: 800-342-8477



K-BUG 6100 DIGITAL, COMPACT, ALL POSITION LINEAR WEAVE WELDER

Technical Data:

Power Requirements:

KBUG-6100 120VAC/50-60Hz/1Ph
KBUG-6102 240VAC/50-60Hz/1Ph

Torch Support Adj.:

Y-Stroke: 0-4.7" (0-120 mm) ± 3%
Z-Stroke: 0-2.75" (0-70 mm) ± 3%

Net Weight: 21.5 lbs. (9.75 kg.)

Weaver Speed: 0 to 188 in/min (0-477 cm/min)

Shipping Weight: 25.5 lbs. (11.57 kg.)

Weave Width: 0 to 2" (0-51 mm)

Welding Position: All position

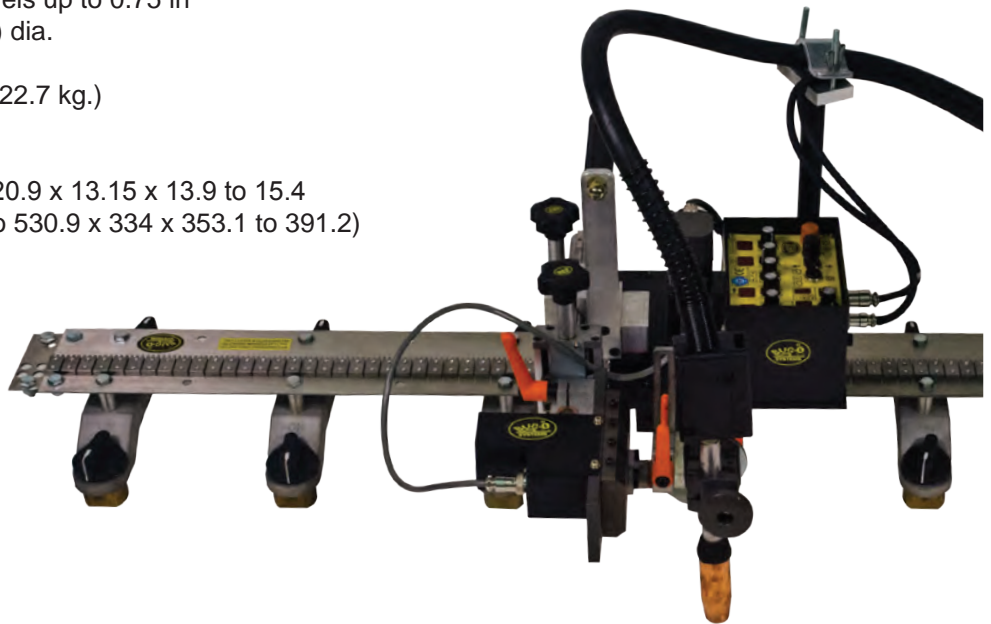
Digital LED Travel Speed Indicator: 1 to 34.7 ipm
 (2.54 to 88 cm/min)

Torch Holder: Fits barrels up to 0.75 in
 (19 mm) dia.

Vertical Lifting Power: 50 lbs. (22.7 kg.)

Tractor Dimensions:

(WxLxH) **inch:** 16.7 to 20.9 x 13.15 x 13.9 to 15.4
mm: (424.2 to 530.9 x 334 x 353.1 to 391.2)



Dimensions:

