

STEELBEAST®

UPDATED

RAIL BULL

TRACK WELDING TRACTOR WITH OSCILLATOR

42V AC VERSION AVAILABLE

JEI
Solutions
Built for Industry



RAIL BULL is a digitally controlled welding tractor with an integrated linear oscillator for straight-line and trapezoid weld paths. Its rack and pinion drive and electronic speed control deliver consistent travel for high-quality welds in flat, vertical and horizontal positions.

Rigid tracks support straight-line welding, while semi-flexible tracks follow curved and irregular surfaces with a minimum radius of 5 m.

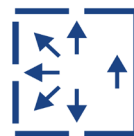
Tracks can be secured to ferrous materials using magnetic mounting units, or to non-ferrous materials using an optional vacuum mounting system with a vacuum pump and vacuum units.

PRIMARY FEATURES & BENEFITS:

- Encoder-based closed-loop control maintains accurate travel speed and positioning.
- Integrated linear oscillator for weave welding and weld overlay applications.
- Multifunction LCD displays process settings and warnings.
- Compact, lightweight design with a durable cast aluminium housing.
- Available in 115–230 V AC or 42 V AC versions, both operating at 50–60 Hz.
- Controlled, repeatable travel improves weld and cut consistency while reducing processing time.

APPLICATIONS:

- Trailer manufacturing
- Truck tanks
- Oil tanks
- Water storage tanks
- Pressure vessels
- Vessel overlay/Hard facing
- Panel Welding
- Transformers
- Shipyards
- Structural steel
- Structural towers
- Bridge girders
- Any application requiring a long, continuous fillet weld



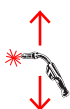
Continuous welding



Dual torch welding



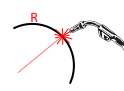
Horizontal speed
0–110 cm/min



Vertical speed
0–100 cm/min



Min. path
concave radius
5000 mm



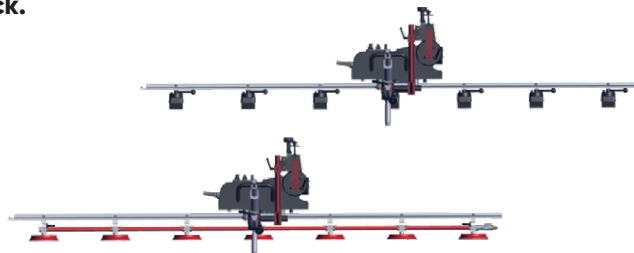
Min. path
convex radius
5000 mm



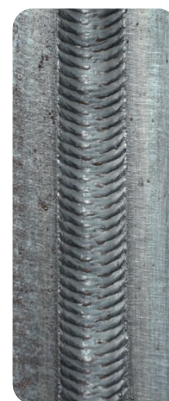
Weight 16.5 kg

MORE FEATURES AND BENEFITS:

- Quick-clamping holder accommodates MIG/MAG torches from 16–22 mm diameter, with an optional clamp for 22–35 mm torches.
- Screw-driven cross slide provides precise torch positioning
- Suitable for vertical and horizontal operation.
- Consistent heat input helps reduce distortion.
- Controlled weld deposition helps prevent over-welding and reduce filler metal waste.
- Automatic arc on/off synchronises welding with tractor travel.
- Reduces operator exposure to welding heat and fumes.
- Rack and pinion drive delivers positive, controlled travel along the track.



I



II

I. Trapezoid The tractor travels continuously even during dwell mode. Weld path is determined by weave speed and dwell time at center and on sides of the weld path.

II. Straight The tractor travels continuously while oscillation is switched-off.

STANDARD ACCESSORIES:



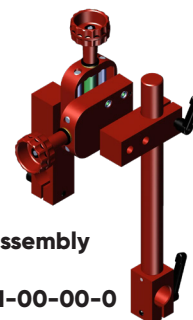
6.5 m Dual Arc
Ignition Cable
KBL-0466-17-00-00-0



Short rod torch holder
with clamp 16–22 mm
UCW-0754-07-00-00-0



Cable anchor
for RAIL BULL
WSP-0760-06-00-00-0



Cross-slide assembly
for RAIL BULL
PRW-0482-11-00-00-0

OPTIONAL ACCESSORIES:



Torch clamp 16–22 mm
ZRZ-0752-07-01-00-0



Torch clip 16–22 mm
ZCS-0476-06-01-00-0



Torch clamp 22–35 mm
ZRZ-0466-19-00-00-0



Short Rod Clamp
WLK-0476-20-01-00-0



Short rod torch holder
with clip 16–22 mm
UCW-0476-27-00-00-0



Long Rod Clamp
WLK-0466-04-10-00-0



Long rod torch holder
with clamp 16–22 mm
UCW-0752-07-00-00-0



Long rod torch holder
with clip 16–22 mm
UCW-0466-22-00-00-0



Short low rod torch holder
with clip 16–22 mm
UCW-0476-06-00-00-0



Extended cross-slide 0–76 mm
either up-down or left-right
ZSP-0466-46-00-00-1



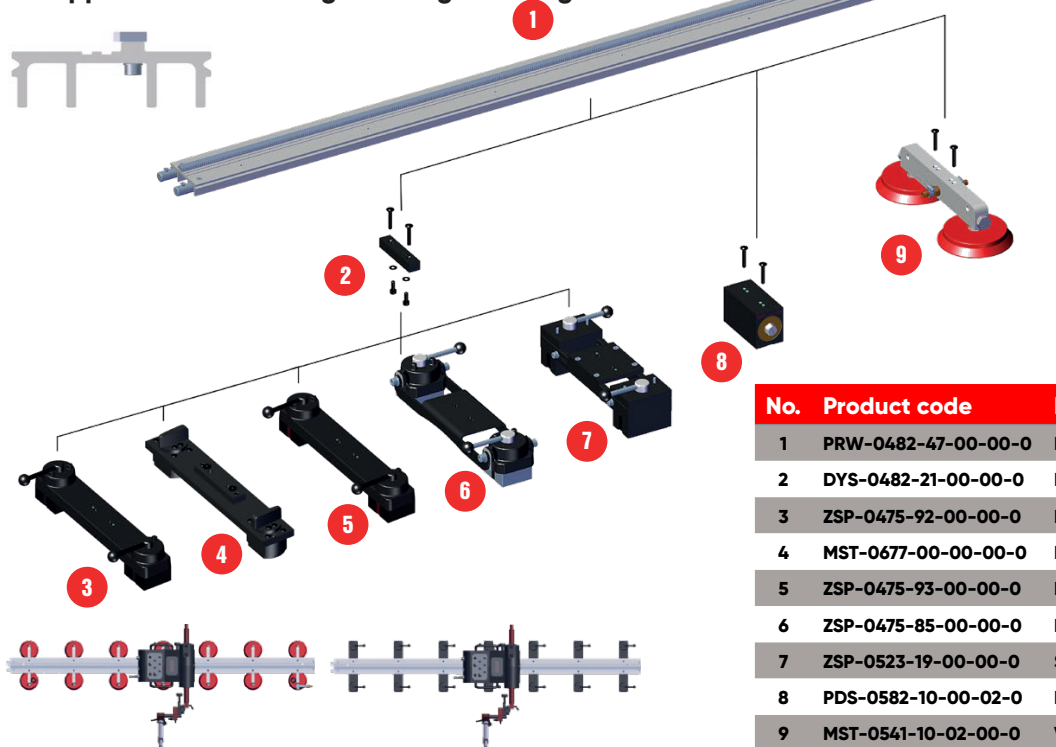
Gear Rack Adjustment Tool
PKT-0341-13-00-00-0



Transport attachment
for RAIL BULL
PEP-0760-10-00-00-0

RIGID TRACKS:

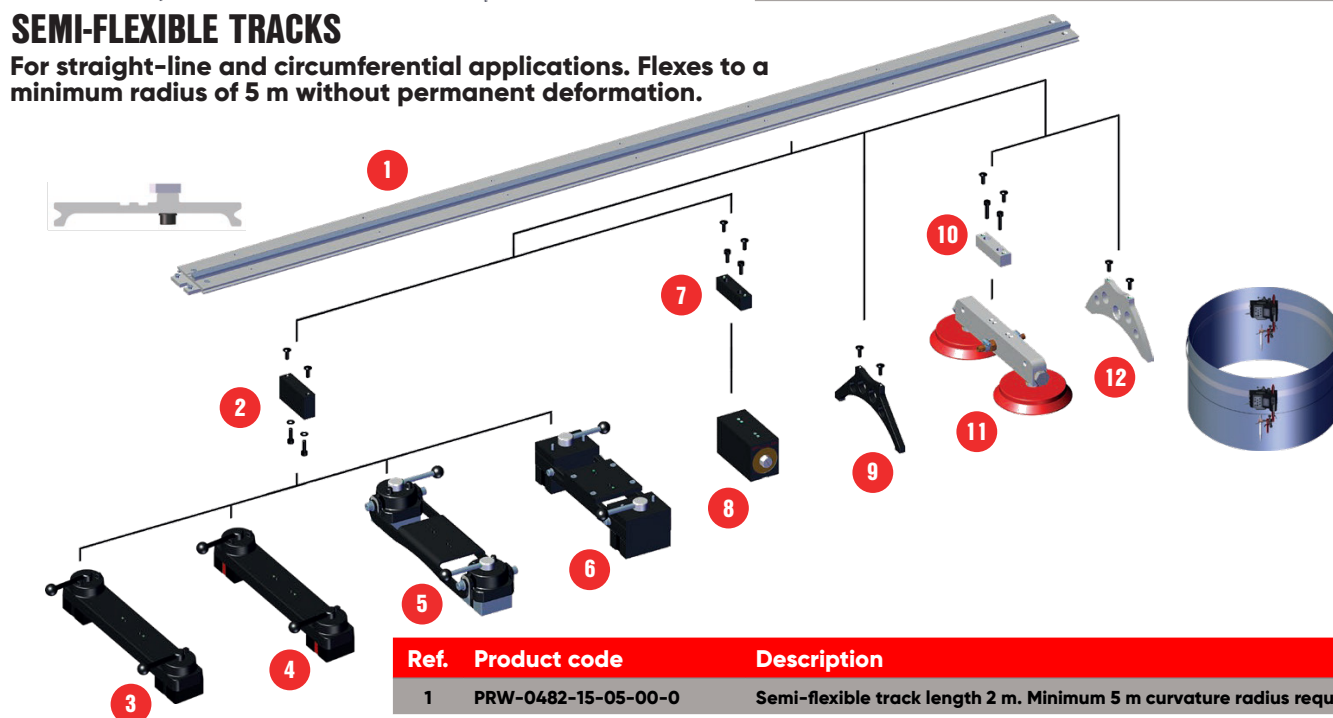
For straight-line applications. Extends beyond the workpiece to support continuous edge-to-edge welding.



No.	Product code	Description
1	PRW-0482-47-00-00-0	Rigid track length 2 m (6.5 ft)
2	DYS-0482-21-00-00-0	Bracket for magnetic units for rigid track
3	ZSP-0475-92-00-00-0	Magnetic unit
4	MST-0677-00-00-00-0	Lightweight Magnetic Unit
5	ZSP-0475-93-00-00-0	Heat-resistant magnetic unit
6	ZSP-0475-85-00-00-0	Pivoting magnetic unit
7	ZSP-0523-19-00-00-0	Spacing-adjustable magnetic unit
8	PDS-0582-10-00-02-0	Narrow magnetic unit with hexagon
9	MST-0541-10-02-00-0	Vacuum modular unit

SEMI-FLEXIBLE TRACKS

For straight-line and circumferential applications. Flexes to a minimum radius of 5 m without permanent deformation.



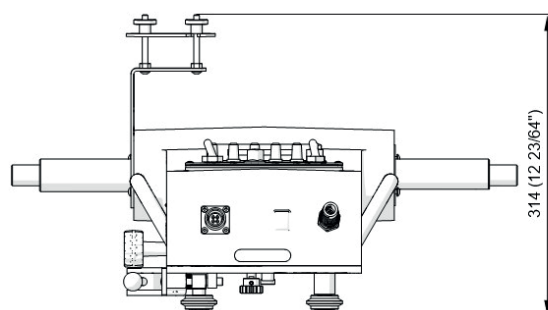
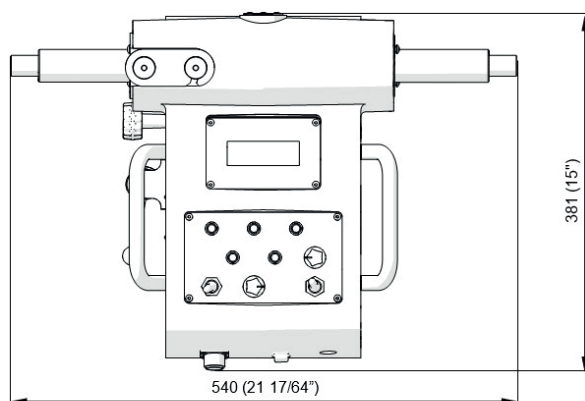
Ref.	Product code	Description
1	PRW-0482-15-05-00-0	Semi-flexible track length 2 m. Minimum 5 m curvature radius required
2	DYS-0482-19-00-00-0	Bracket for magnetic unit for semi-flexible track and Hi Flex track
3	ZSP-0475-92-00-00-0	Magnetic unit
4	ZSP-0475-93-00-00-0	Heat-resistant magnetic unit
5	ZSP-0475-85-00-00-0	Pivoting magnetic unit
6	ZSP-0523-19-00-00-0	Spacing-adjustable magnetic unit
7	DYS-0582-10-00-00-0	Bracket for narrow magnetic unit for semi-flexible track and Hi Flex track
8	PDS-0582-10-00-02-0	Narrow magnetic unit with hexagon
9	WSP-0523-12-01-00-1	Steel support for semi-flexible track
10	DYS-0541-11-01-00-0	Bracket for vacuum modular unit for semi-flexible track and Hi Flex track
11	MST-0541-10-02-00-0	Vacuum modular unit
12	WSP-0541-11-02-00-0	Aluminum track support for semi-flexible track



RAIL BULL TECHNICAL SPECIFICATION

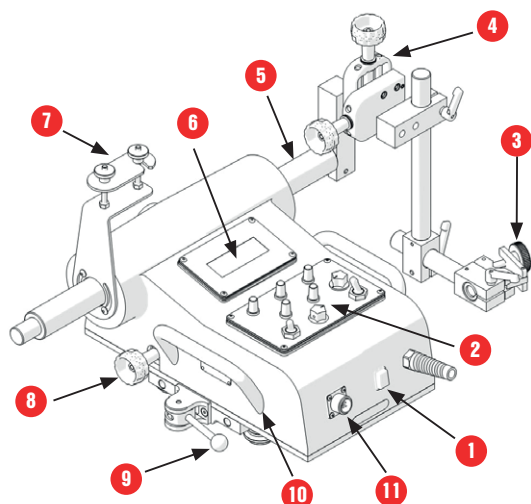
Voltage		1~ 115–230 V, 50–60 Hz 42 V, 50–60 Hz
Power		100 W
Welding position (according to EN ISO 6947 and AWS/ASME)	Horizontal	PA/1F/1G PB/2F PC/2G PD/4F PE/4G
	Vertical	PF/3G PG/3F (contact your dealer) PG/3G
Minimum curve radius of a semi flex track		5 m
Torch type		MIG/MAG
Torch diameter		16–22 mm up to 35 mm option
Minimum workpiece thickness for magnetic clamping		5 mm
Horizontal pulling force		350 N
Vertical pulling force		150 N
Cross slide adjustment range		0–35 mm (up-down, left-right)
Horizontal speed		0–120 cm/min
Vertical speed		0–110 cm/min
Oscillation type		Linear
Oscillation path		Trapezoid, straight line
Oscillation width		0–50 mm
Oscillation speed		0–1500 mm/min
Oscillation dwell time at center and on ends		0–5 s
Maximum oscillator pulling force		100 N
Weight		16.5 kg

DIMENSIONS:



STANDARD SHIPPING SET

- Tractor
- Carton box
- Cross slide assembly
- Short rod torch holder with clamp
- 6.5 m arc ignition cable
- 3 mm hex wrench
- 4 mm hex wrench
- Operator's Manual



1. Power switch
2. Control panel
3. Torch holder with clamp
4. Cross slide assembly
5. Oscillator arm
6. Display
7. Cable anchor
8. Drive clutch knob
9. Mounting lever
10. Carrying handle
11. Arc ignition socket

Explore the Rail Bull
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