Primary features and benefits:

- Fully modular mechanized travel carriage can be custom configured for a variety of welding, thermal cutting and gouging applications on flat or curved plate, tube and pipe
- Linear torch oscillator to produce weave welds
- Active compensation of torch position vertically and horizontally by means of modular automatic seam tracking system
- Programmable path of stitch welds
- Possibility to select one limit switch preset out of three presets available.
- Suitable for variety of circumferential and irregular surface applications down to minimum radius of 100 mm (4”)
  - Ring tracks on diameters from 200 mm (8”) OD up to 3 m (10 ft) OD
  - Custom rolled tracks on diameters from 3 m (10 ft) OD up to 10 m (32 ft) OD
  - Semi-flexible tracks can be flexed to minimum radius of 5 m (16 ft) without permanent deformation
- Ergonomic remote control pendant with simple and easy to find control knobs makes adjustments possible without lifting of the operators welding hood
- Magnetic adhesion of the pendant provides firm grip on ferromagnetic materials
- Suitable for all welding positions on both ferromagnetic and non-ferromagnetic materials thanks to rack and pinion drive and various tracks equipped with magnetic or vacuum units
- Rail Bull 2 produces consistent high quality welds and cuts in a fraction of the time required by manual operations
- High speed up to 3 m/min makes plasma cutting available
Continuous welding

Rail Bull 2 can work in all welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.
Features and benefits:

- Easy to upgrade modular design
- Continuous and programmable path of stitch welds (weld length, space between welds, backweld length, crater fill time)
- Linear torch oscillator to produce weave welds
- Three modes of automatic seam tracking (vertical, horizontal and both)
- Limit switch stops the arc and travels the tractor to the initial position
- Hand-held ergonomic control pendant (3 m cable included) with magnetic adhesion provides firm grip on ferromagnetic materials
- Multifunctional LED display with numeric representations for each motion parameter makes presetting and repeating of the optimum welding or cutting procedure simple and without guess work
- Intuitive software with user-friendly interface
- Automatic arc on/off initiates welding and travel simultaneously
- Rack and pinion drive
- Convenient external 230 V, 115 V or 42 V power supply
- Closed-loop position control system based on electric motor with encoder – ensures increased accuracy of speed and position
- Consistent heat input reduces distortion
- Reduces wasted filler metal – eliminates over welding
- Quick-clamping torch holder mechanism for different types of torches with diameters of 16–22 mm (0.63–0.87”); up to 35 mm (1.38”) option
- Precise torch adjustment
- Improves working environment – removes operator from heat and fumes
## RAIL BULL 2 Technical specification

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Voltage</strong></td>
<td>1~230 V, 50–60 Hz</td>
</tr>
<tr>
<td></td>
<td>1~115 V, 50–60 Hz</td>
</tr>
<tr>
<td></td>
<td>1~42 V, 50–60 Hz</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>120 W</td>
</tr>
<tr>
<td><strong>Welding position</strong></td>
<td>PA / 1F / 1G</td>
</tr>
<tr>
<td></td>
<td>PB / 2F</td>
</tr>
<tr>
<td></td>
<td>PC / 2G</td>
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<tr>
<td></td>
<td>PD / 4F</td>
</tr>
<tr>
<td></td>
<td>PE / 4G</td>
</tr>
<tr>
<td></td>
<td>PF / 3G (contact your dealer)</td>
</tr>
<tr>
<td></td>
<td>PG / 3G</td>
</tr>
<tr>
<td><strong>Fixing on pipes and round workpieces</strong></td>
<td>Ring tracks from 200 mm (8&quot;) OD up to 3 m (10ft) OD</td>
</tr>
<tr>
<td></td>
<td>Custom rolled tracks from 3 m (10 ft) OD up to 10 m (32 ft) OD</td>
</tr>
<tr>
<td></td>
<td>Semi-flexible track Minimum curvature radius of 5 m (16 ft)</td>
</tr>
<tr>
<td><strong>Torch type</strong></td>
<td>MIG/MAG, TIG, Plasma, Oxy-fuel</td>
</tr>
<tr>
<td><strong>Torch diameter</strong></td>
<td>16–22 mm (0.63–0.87&quot;)</td>
</tr>
<tr>
<td></td>
<td>up to 35 mm (1.38&quot;) option</td>
</tr>
<tr>
<td><strong>Horizontal pulling force</strong></td>
<td>400 N</td>
</tr>
<tr>
<td><strong>Vertical pulling force</strong></td>
<td>300 N</td>
</tr>
<tr>
<td><strong>Horizontal speed</strong></td>
<td>0–300 cm/min (0–120 in/min)</td>
</tr>
<tr>
<td><strong>Vertical speed</strong></td>
<td>0–300 cm/min (0–120 in/min)</td>
</tr>
<tr>
<td><strong>Oscillation type</strong></td>
<td>Linear</td>
</tr>
<tr>
<td><strong>Weld path</strong></td>
<td>Straight, triangle, trapezoid, square</td>
</tr>
<tr>
<td><strong>Oscillation width</strong></td>
<td>0.2–11.8 cm (0.1–4.5&quot;)</td>
</tr>
<tr>
<td><strong>Oscillation speed</strong></td>
<td>10–300 cm/min (5–120 in/min)</td>
</tr>
<tr>
<td><strong>Oscillation dwell time at center and on ends</strong></td>
<td>0–5 s</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>10 kg (22 lbs)</td>
</tr>
</tbody>
</table>

1. Cable anchor
2. Carrying handle
3. Torch rod holder
4. 300 mm (12") rod
5. 300 mm (12") rack with 180 mm (7") adjustment range
6. Rackholder
7. Clamping block with levers
8. Short rod torch holder with fits-all clamp
Weld paths:

I. Trapezoid  The carriage 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. Square  The carriage travels only during dwell and stops during oscillator cross travel. Only dwell time determines the weld path, and weave speed has no influence.

III. Triangle The carriage travels only during weaving. Both the carriage and oscillation stop during dwell mode.

IV. Straight The carriage travels continuously while oscillation is switched-off.

Standard accessories:

5 m (17 ft) power cable  PWD-0523-10-03-00-0
Remote control pendant  PNL-0523-03-00-00-0
3 m (10 ft) remote control cable  PWD-0523-10-01-00-0

6.5 m (21 ft) arc ignition cable  KBL-0466-17-00-00-0
300 mm (12'') rod  WSP-0523-16-00-00-0
Rackholder  ZSP-0475-62-00-00-0
300 mm (12'') rack  RAM-0523-17-00-00-0

Cable anchor  UCW-0523-05-01-00-0
Clamping block with levers  KST-0525-11-00-00-0
Short rod torch holder with fits-all clamp  UCW-0476-29-00-00-0
Contact block  ZDR-0523-76-00-00-0
Optional equipment:

Power supply
(3 voltage versions to choose from)
1 – 230 V, 50–60 Hz, ZSL-0523-09-00-00-0
1 – 115 V, 50–60 Hz, ZSL-0523-09-00-01-0
1 – 42 V, 50–60 Hz, ZSL-0523-97-00-02-0

Configuration with seam tracking horizontally and vertically requires an optional seem tracking attachment and a motorized vertical slide

Motorized vertical slide
OSK-0523-06-00-00-0

Seam tracking attachment
CZJ-0523-07-00-00-0

Active torch position control vertically and horizontally

Rod for sensor tips
WSP-0523-07-01-13-0

Sensor tip (rod required)
ADT-0506-43-00-00-0
ADT-0506-40-00-00-0
ADT-0506-41-00-00-0

Sensor tip (rod required)
WSP-0523-07-01-13-0
Ring tracks are available on request, with diameters custom-configured within the range from 200 mm OD up to 3000 mm OD (from 8” to 10 ft). They can be equipped with various supports depending on the customer’s needs.

Support options include:
- Support with bolts: WSP-0523-14-02-00-0
- Support with magnets: WSP-0523-14-12-00-0
- Support with plastic feet: WSP-0523-14-11-00-0

For semi-flexible tracks, which can be custom rolled permanently within the radius range from 1.5 m up to 5 m (5 ft up to 16 ft), supports include:
- Support with magnets: WSP-0523-14-12-00-0
- Support with plastic feet: WSP-0523-14-11-00-0

Vacuum modular units are also available for semi-flexible tracks.

Rigid tracks are available as follows:
- Rigid track length 2 m (6.5 ft): PRW-0482-47-00-00-0
- Bracket for magnetic unit for rigid track: DYS-0482-21-00-00-0
- Magnetic unit: ZSP-0475-44-00-00-0
- Magnetic pivoting unit: ZSP-0475-85-00-00-0
- Magnetic spacing-adjustable unit: ZSP-0523-19-00-00-0
- Magnetic narrow unit with hexagon: PDS-0582-10-00-02-0

Semi-flexible tracks are available as follows:
- Semi-flexible track length 2 m (6.5 ft): PRW-0482-15-05-00-0
- Bracket for magnetic unit for semi-flexible track: DYS-0482-19-00-00-0
- Magnetic unit: ZSP-0475-44-00-00-0
- Magnetic pivoting unit: ZSP-0475-85-00-00-0
- Magnetic spacing-adjustable unit: ZSP-0523-19-00-00-0
- Magnetic narrow unit with hexagon: PDS-0582-10-00-02-0

Steel track support for semi-flexible tracks is also available.

Aluminum track supports are available for both rigid and semi-flexible tracks.

For more information about Promcot’s range of system configurations and components, visit the company website at www.promcot.eu.
Rail Bull 2 is supplied in plastic box including:

- Tractor
- Power supply
- 5 m (17 ft) power cable
- Remote control pendant
- 3 m (10 ft) remote control cable
- 6.5 m (21 ft) arc ignition cable
- 300 mm (12”) rod
- 300 mm (12”) rack
- Rackholder
- Clamping block with levers
- Short rod torch holder with fits-all clamp
- Cable anchor
- Contact block
- 6 mm hex wrench
- Operator’s Manual

Applications:

- Trailer manufacturing
- Truck tanks
- Oil tanks
- Water storage tanks
- Pressure vessels
- Vessel overlay / hardfacing
- Bridge girders
- Structural steel
- Structural towers
- Panel welding
- Transformers
- Shipyards
- Any application demanding long continuous welds

More information available at www.promotech.eu