

## RAIL TUG | WELDING AND CUTTING TRACTOR

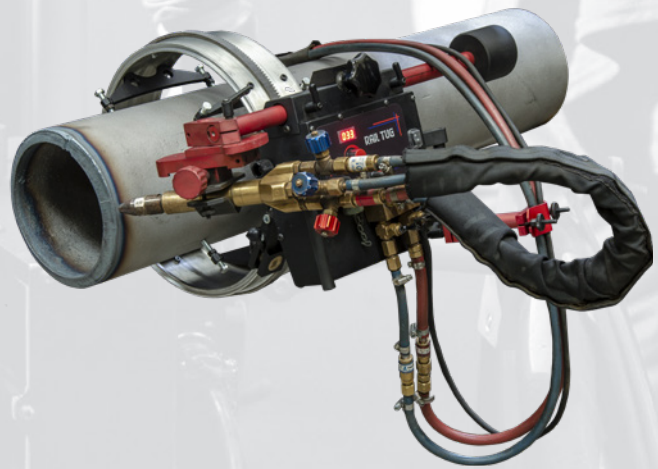
The Rail Tug is a digitally controlled tractor designed for the mechanization of welding and thermal cutting processes. Featuring a rack and pinion drive system with electronic speed control, the Rail Tug creates weld bead geometry which is exact to your specifications, reducing costly over welding and decreasing filler metal usage.

The Rail Tug can be used with semi-flexible track for plate and tank work with a minimum radius of 5 m (16 ft) or adapted to bent ring rail for pipe and tube applications.

Standard ring rails are available for tube diameters from 200 mm (8") up to 3000 mm (10 ft), whereas custom rolled tracks can be used for tube diameters between 3 m (10 ft) and 10 m (32 ft).

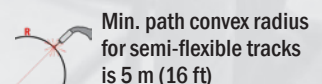
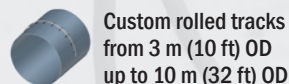
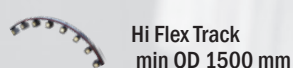
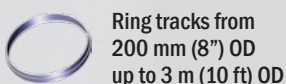
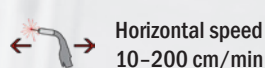
Using a vacuum system allows the track to be clamped to non-ferrous surfaces (stainless steel, aluminum etc.)

The Rail Tug economically meets a broad array of welding and cutting applications on flat or curved plate, tube and pipe.

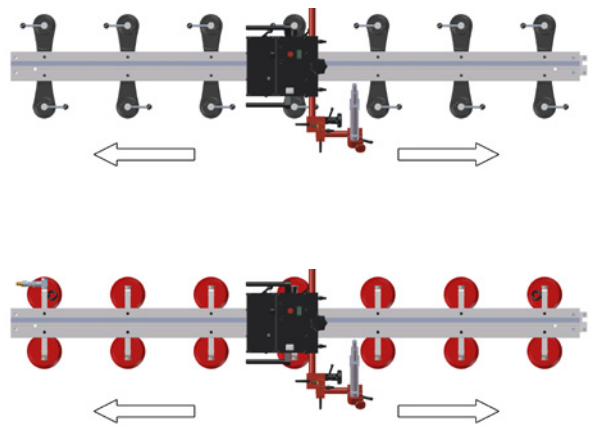
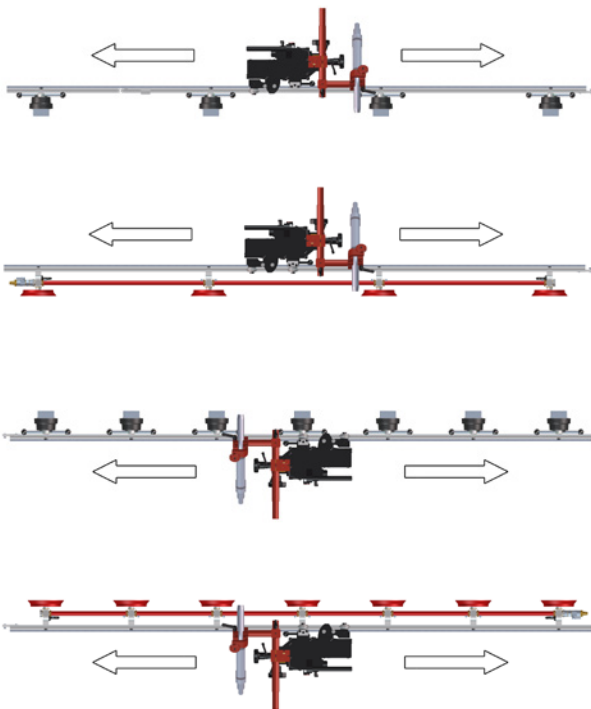
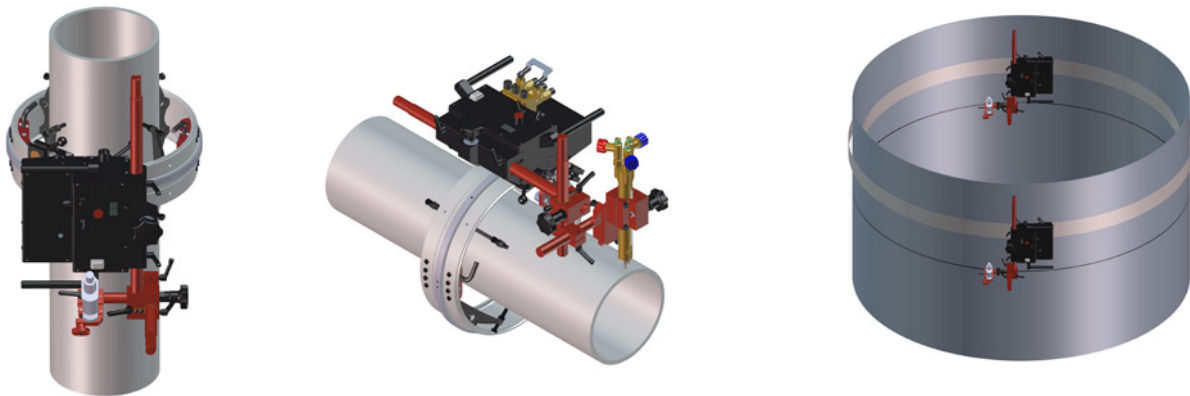


### Applications:

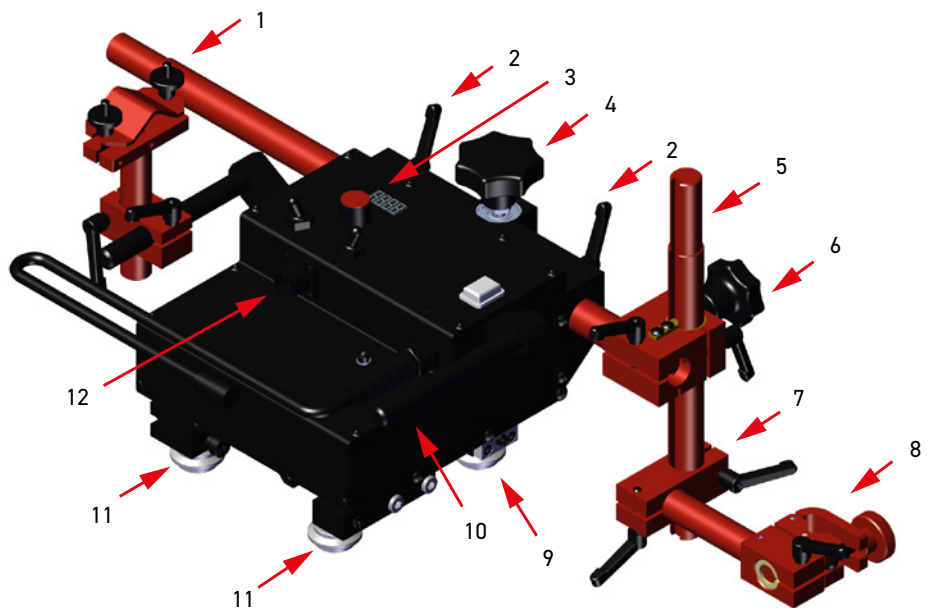
- Trailer manufacturing
- Truck tanks
- Oil tanks
- Water storage tanks
- Pressure vessels
- Bridge girders
- Structural steel
- Structural towers
- Panel welding
- Transformers
- Shipyards
- Any application demanding long continuous welds



Rail Tug can work in various welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.

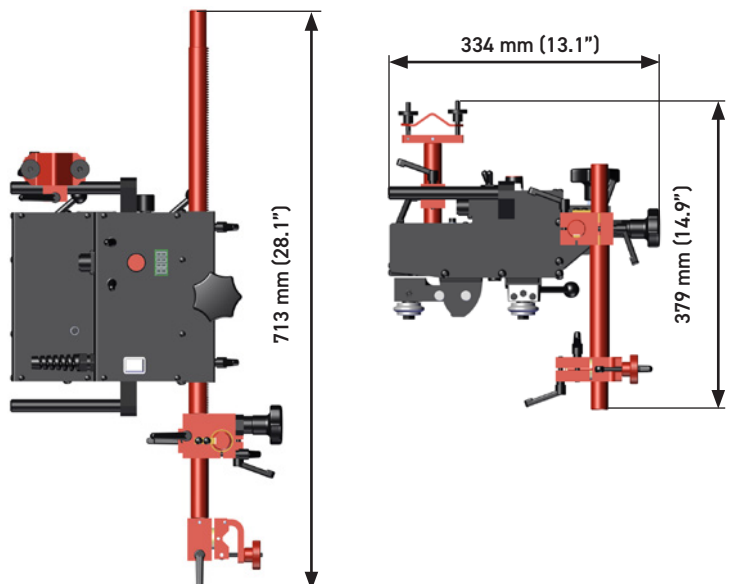
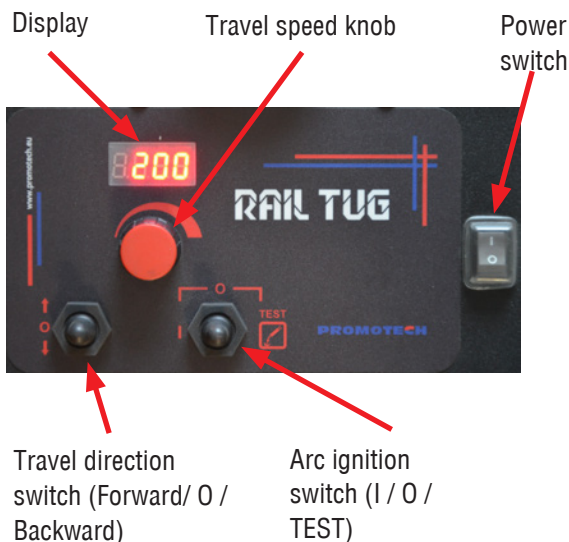
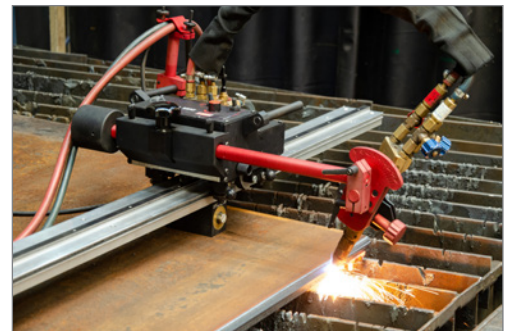
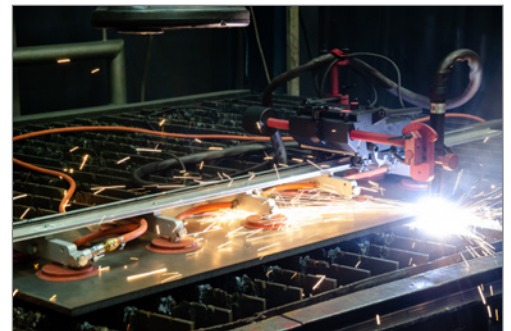


1. 540 mm (21") rack
2. Rack Locking Levers
3. Control panel
4. Rack adjustment knob
5. 300 mm (12") rack with 180 mm (7") adjustment
6. Rack holder
7. Clamping block with levers
8. Short rod torch holder with fits-all clamp
9. Guiding Roller
10. Carrying handle
11. Adjustable Roller
12. Arc ignition socket



## Primary features and benefits

- Compact, lightweight design
- Closed-loop speed control system based on electric motor with encoder – ensures increased accuracy of speed
- Rack and pinion drive
- Consistent heat input reduces distortion
- Reduces wasted filler metal – eliminates over welding
- Digital LED display for presetting of travel speed
- Automatic arc on/off initiates welding and travel simultaneously
- Oxy-fuel and plasma cutting possible with optional accessories
- 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 bended to minimum radius of 5 m (16 ft) without permanent deformation
- 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 with screw drive cross slide
- Convenient external 85-250 V power supply
- Improves working environment – removes operator from heat and fumes



## Standard accessories:



Power cord 3 m (9,7 ft)  
 PWD-0466-18-00-00-0 (230 V CEE)  
 PWD-0466-16-00-00-0 (115 V USA)  
 PWD-0466-23-00-00-0 (230 V UK)



Dual arc ignition cable 6.5 m (21 ft)  
 KBL-0466-17-00-00-0



540 mm (21") Geared Rack  
 RAM-0525-07-00-00-0



Cable anchor  
 UCW-0523-05-01-00-0



Rackholder  
 ZSP-0475-62-00-00-0



300 mm (12") rack  
 with 180 mm (7") adjustment  
 RAM-0523-17-00-00-0



Clamping block with levers  
 KST-0525-11-00-00-0



Short rod torch holder with fits-all clamp  
 UCW-0476-20-00-00-0

## Optional accessories:



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



RAM-0475-07-03-00-0  
 700 mm (39.4")  
 Geared Rack



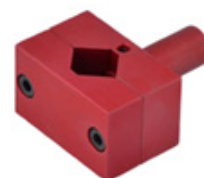
PWG-0475-09-00-00-0  
 Counterweight  
 1.3 kg (2.9 lbs)



RAM-0475-23-00-00-0  
 1000 mm (39.4")  
 Geared Rack



PWG-0475-10-00-00-0  
 Large Counterweight  
 2,6 kg (5,7lbs)



ZCS-0476-06-01-00-0  
 16-22 mm Torch Clip



ZRZ-0466-19-00-00-0  
 22-35 mm Torch Clamp



ZCS-0475-28-10-00-0  
 Standard Torch Holder 28-35  
 mm (1.10-1.38")



203 mm (8") rod  
 KLM-0236-00-16-00-0



UCW-0475-28-00-00-0  
 Standard Torch Holder with angle  
 adjustment



UCW-0475-08-00-00-0  
 Precise Torch Holder with angle and height  
 adjustment



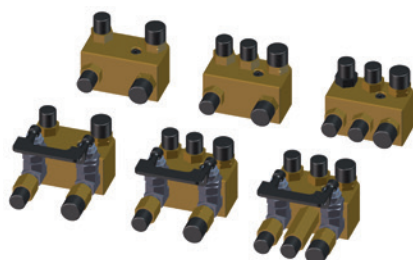
UCW-0475-61-00-00-0  
 Machine Barrel Torch Holder  
 Ø 30 mm (1.18")

UCW-0475-29-00-00-1  
 Machine Barrel Torch Holder  
 Ø 35 mm (1.38")



UCW-0475-59-00-00-0  
 Precise Machine Torch Holder  
 Ø 30 mm (1.18")

UCW-0475-42-00-00-1  
 Precise Machine Torch Holder  
 Ø 35 mm (1.38")



| Gas Manifold type                  | Metric              | Imperial            |
|------------------------------------|---------------------|---------------------|
| Manifold 2x2                       | RZD-0475-64-00-00-0 | RZD-0475-68-00-00-0 |
| Manifold 2x3                       | RZD-0475-63-00-00-0 | RZD-0475-67-00-00-0 |
| Manifold 3/3                       | RZD-0475-74-00-00-0 | RZD-0475-73-00-00-0 |
| Manifold 2x2<br>with cut-off valve | RZD-0475-65-00-00-0 | RZD-0475-70-00-00-0 |
| Manifold 2/3<br>with cut-off valve | RZD-0475-66-00-00-0 | RZD-0475-69-00-00-0 |
| Manifold 3/3<br>with cut-off valve | RZD-0475-72-00-00-0 | RZD-0475-71-00-00-0 |

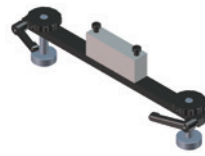
## Ring tracks

Available on request, diameter can be custom configured within the range from 200 mm OD up to 3000 mm OD (from 8" to 10 ft).

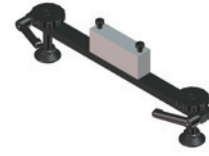
Ring tracks can be equipped with various supports depending on the customer's needs.



Support with bolts  
WSP-0523-14-02-00-0



Support with magnets  
WSP-0523-14-12-00-0

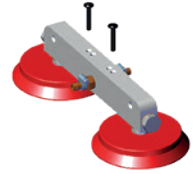


Support with plastic feet  
WSP-0523-14-11-00-0

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



Vacuum modular unit  
MST-0541-10-02-00-0



More information about Promotech's Vacuum System configurations and components is available at company website [www.promotech.eu](http://www.promotech.eu)

Magnetic narrow unit with hexagon  
PDS-0582-10-00-02-0

Magnetic spacing-adjustable unit  
ZSP-0523-19-00-00-0

Magnetic pivoting unit  
ZSP-0475-85-00-00-0

Magnetic unit  
ZSP-0475-44-00-00-0

Heat-resistant magnetic unit  
ZSP-0475-44-00-00-1

Semi-flexible track length 2 m (6.5 ft)  
Minimum 5 m (16 ft) curvature radius required  
PRW-0482-15-05-00-0

Semi-flexible tracks can be custom rolled permanently within the radius range from 1.5 m up to 5 m (5 ft up to 16 ft)



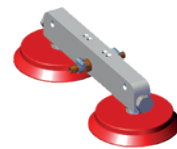
Bracket for magnetic unit  
for semi-flexible track  
and Hi Flex track  
DYS-0482-19-00-00-0



Bracket for magnetic  
narrow unit for semi-  
flexible track  
and Hi Flex track  
DYS-0582-10-00-00-0

Bracket for magnetic unit  
for semi-flexible track  
and Hi Flex track  
DYS-0482-19-00-00-0

Bracket for vacuum  
modular unit for semi-  
flexible track  
and Hi Flex track  
DYS-0541-11-01-00-0



Aluminum track support  
for semi-flexible track  
WSP-0541-11-02-00-0

Vacuum modular unit  
MST-0541-10-02-00-0

Magnetic spacing-adjustable unit  
ZSP-0523-19-00-00-0

Magnetic pivoting unit  
ZSP-0475-85-00-00-0

Magnetic unit  
ZSP-0475-44-00-00-0

Heat-resistant magnetic unit  
ZSP-0475-44-00-00-1

Magnetic narrow  
unit with hexagon  
PDS-0582-10-00-02-0

Steel track support for  
semi-flexible track  
WSP-0523-12-01-00-1



Hi Flex Track  
min OD 1500 mm

Hi Flex track can be equipped with magnetic and vacuum units as shown above.

| RAIL TUG Technical specification                            |  |   |
|---|--|---|
| Voltage   | 1~ 115–230 V, 50–60 Hz                                   |   |
| Power   | 66 W   |   |
| Welding position<br>(according to EN ISO 6947 and AWS/ASME) | PA / 1F / 1G<br>PB / 2F<br>PC / 2G<br>PD / 4F<br>PE / 4G |   |
|   | PG / 3F (contact your dealer)                            |   |
| Fixing on pipes and round workpieces                        | Ring tracks  | from 200 mm (8") OD up to 3 m (10ft) OD   |
|   | Custom rolled tracks                                     | from 3 m (10 ft) OD up to 10 m (32 ft) OD |
|   | Semi-flexible track                                      | Minimum curvature radius of 5 m (16 ft)   |
| Torch type  | MIG/MAG, SAW, Plasma, Oxy-fuel                           |   |
| Torch diameter  | MIG/MAG  | 16–22 mm (0.63–0.87")                     |
|   | SAW, Plasma  |   |
|   | Oxy-fuel   | up to 35 mm (1.38") option                |
| Horizontal pulling force                                    | 300 N  |   |
| Vertical pulling force                                      | 200 N  |   |
| Horizontal speed  | 10–200 cm/min (4–80 in/min)                              |   |
| Vertical speed  | 10–200 cm/min (4–80 in/min)                              |   |
| Weight  | 10 kg (22 lbs)   |   |
| Product Code (115–230 V, 50–60 Hz, plug EU)                 | WOZ-0570-10-20-00-0                                      |   |

#### Standard shipping set:

- Rail Tug tractor
- Cardboard box
- 300 mm (12") rack with 180 mm (7") adjustment
- Rack holder
- Clamping block with levers
- Short rod torch holder with clamp
- Cable anchor
- 6 mm hex wrench
- 6.5 m (21 ft) arc ignition cable
- 3 m (10 ft) power cord
- Operator's Manual



More information available at [www.promotech.eu](http://www.promotech.eu)



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