# PROMOTECH®

### smart tools for heavy tasks



## **RAIL TUG** | TRACK 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, Rail Tug creates weld bead geometry which is exact to your specifications, reducing costly over welding and decreasing filler metal usage.

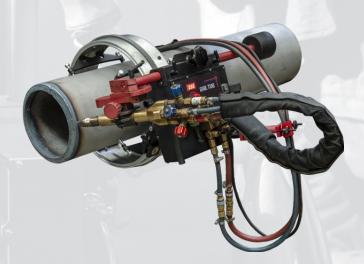
It can be used with semi-flexible tracks for plate and tank work with a minimum radius of 5 m (16 ft) or adapted to bent ring rail for pipe and tube applications.

Hi Flex tracks are suitable for variety of circumferential and irregular surface applications down to minimum radius of 750 mm (30")

Standard ring tracks are available for tube diameters from 200 mm (8") up to 3000 mm (10 ft).

Using a vacuum system allows the tracks 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



Continuous welding



Horizontal speed 10–200 cm/min



Vertical speed 10–200 cm/min

Min. path convex radius for semiflexible tracks is 5 m (16 ft)



Ring tracks from 200 mm (8") OD up to 3 m (10 ft) OD eccost of

Hi Flex Track min OD 1500 mm (59") 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.



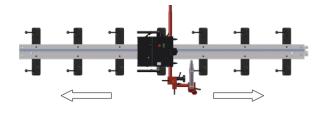




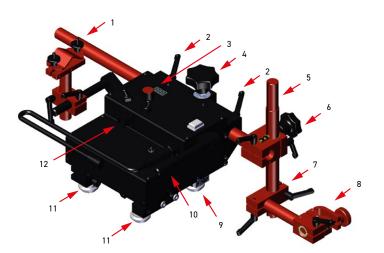














- 1. 540 mm (21") rack
- 2. Rack Locking Levers
- 3. Control panel
- 4. Rack adjustment knob
- 5. 300 mm (12") rack with 180 mm (7") adjustment
- 6. Rack holder

- 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
  - Hi-Flex tracks on diameters from 1500 mm (59") OD upwards
  - 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)



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



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



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



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



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



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



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



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

UCW-0475-08-00-00-0

adjustment

Precise Torch Holder with angle and height



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

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



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



Machine Barrel Torch Holder Ø 30 mm (1.18") UCW-0475-29-00-00-1

UCW-0475-61-00-00-0

RAM-0475-23-00-00-0

1000 mm (39.4") Geared Rack

203 mm (8") rod

KLM-0236-00-16-00-0



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



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



Machine Barrel Torch Holder

Ø 35 mm (1.38")



PWG-0475-10-00-00-0

Large Counterweight

2,6 kg (5,7lbs)

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

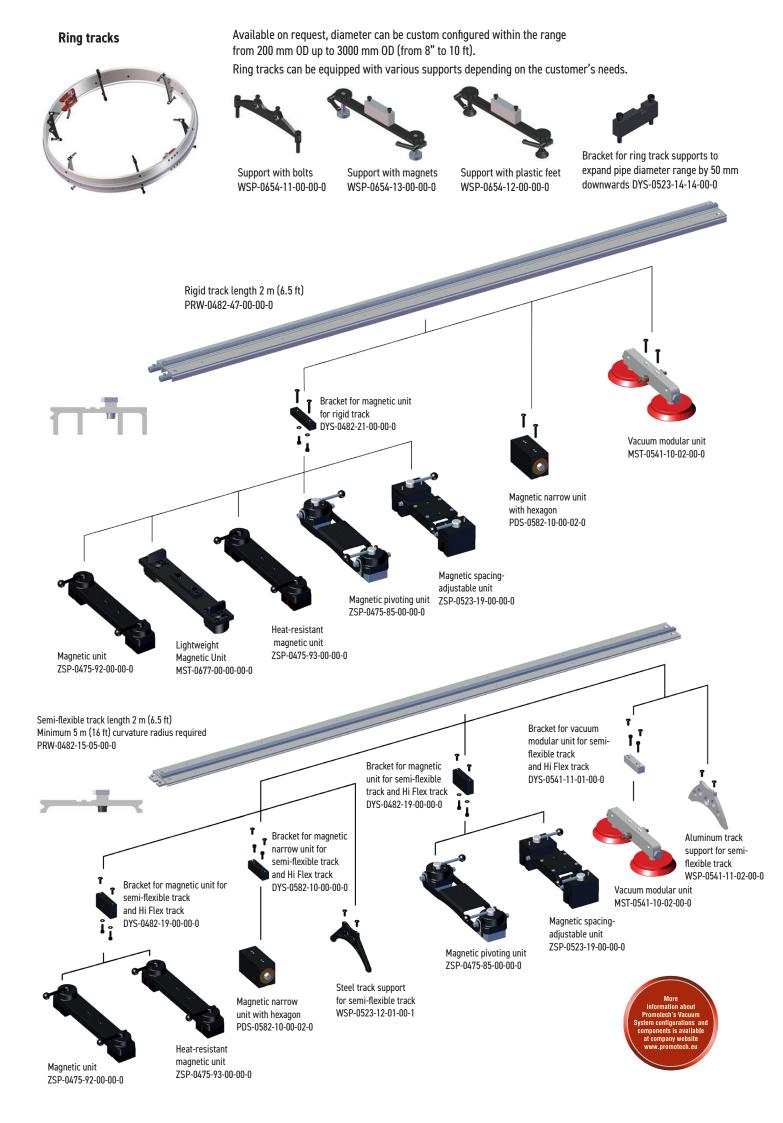
UCW-0475-42-00-00-1 Precise Machine Torch Holder Ø 35 mm (1.38")

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 with cut-off valve	RZD-0475-65-00-00-0	RZD-0475-70-00-00-0
Manifold 2/3 with cut-off valve	RZD-0475-66-00-00-0	RZD-0475-69-00-00-0
Manifold 3/3 with cut-off valve	RZD-0475-72-00-00-0	RZD-0475-71-00-00-0

Bracket for vacuum modu-Hi Flex Track min OD 1500 mm lar unit for semi-flexible track and Hi Flex track TRO-0673-00-00-00-0 Bracket for magnetic unit for DYS-0541-11-01-00-0 î semi-flexible track and Hi Flex 1 track DYS-0482-19-00-00-0 Bracket for magnetic narrow unit for semi-flexible 1 track and Hi Flex track 1 DYS-0582-10-00-00-0 1 Bracket for magnetic unit for semi-flexible track and Hi Flex track Vacuum modular unit DYS-0482-19-00-00-0 MST-0541-10-02-00-0 Magnetic spacing-adjustable unit ZSP-0523-19-00-00-0 Magnetic pivoting unit The regular rollers should be replaced with the optional ZSP-0475-85-00-00-0 Magnetic narrow Hi Flex track guiding rollers unit with hexagon PDS-0582-10-00-02-0 Heat-resistant Magnetic unit magnetic unit Set of Hi Flex Track Guiding Rollers (4 pcs) ZSP-0475-92-00-00-0 ZSP-0475-93-00-00-0 Product code: ZSP-0673-07-00-00-0





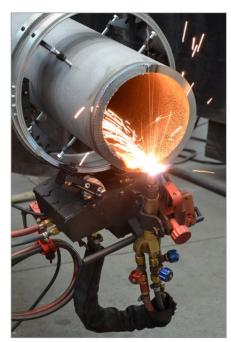


RAIL TUG Technical specification			
Voltage		1~ 115-230 V, 50-60 Hz	
Power		66 W	
Welding position (according to EN ISO 6947 and AWS/ASME)		PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G PG / 3F (contact your dealer)	
Fixing on pipes and round workpieces	Ring tracks	from 200 mm (8") 0D up to 3 m (10 ft) 0D	
	Hi Flex tracks	Minimum curvature radius of 750 mm (30")	
	Semi-flexible track	Minimum curvature radius of 5 m (16 ft)	
Torch type		MIG/MAG, SAW, Plasma, Oxy-fuel	
Torch diameter	MIG/MAG SAW, Plasma Oxy-fuel	16-22 mm (0.63-0.87") 28-35 mm (1.10-1.38") 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)		W0Z-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 <u>www.promotech.eu</u>







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