



## 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.

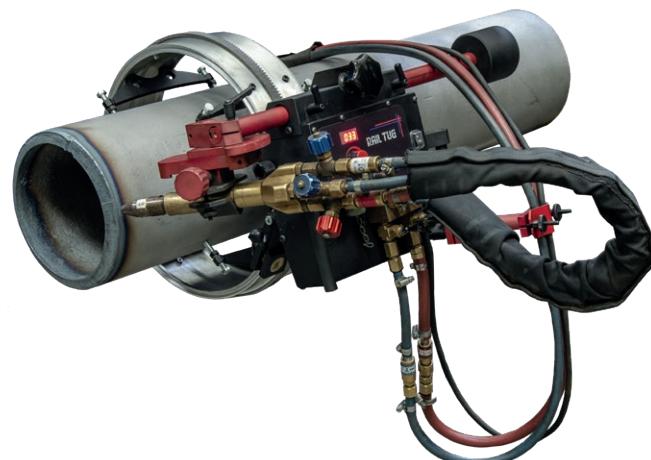
It can be used with semi-flexible tracks for plate and tank work with a minimum radius of 5 m (16 ft) or adapted to bent ring rail for pipe and tube applications.

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



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

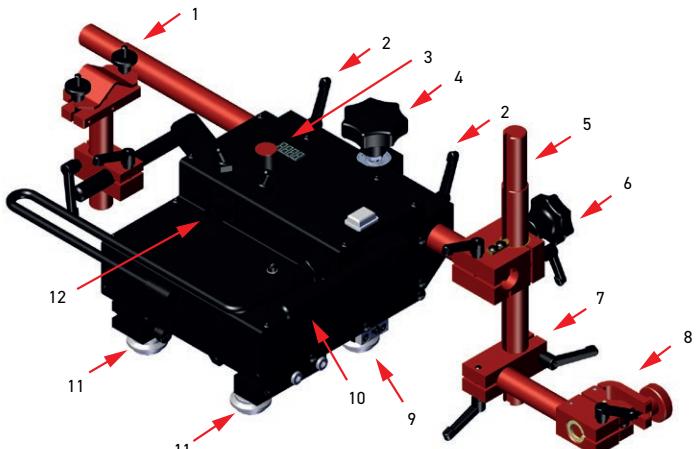
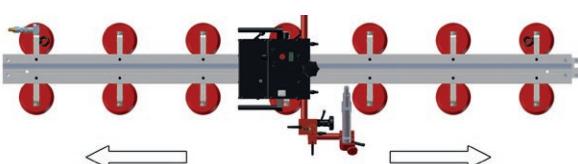
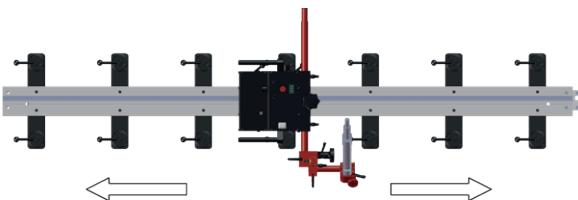
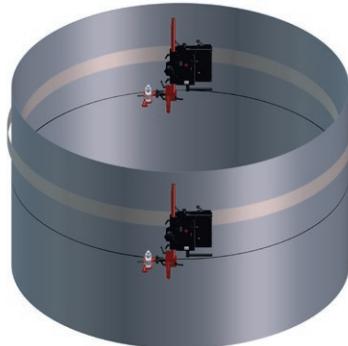
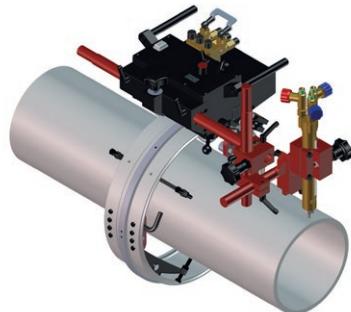
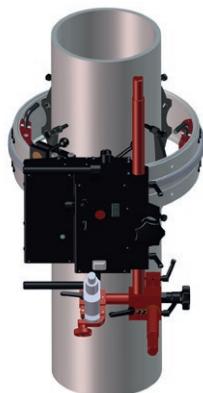


Hi Flex Track  
min OD 1500 mm (59")



Min. path convex radius for semi-  
flexible tracks is 5 m (16 ft)

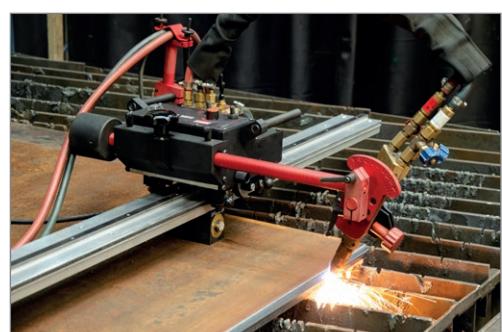
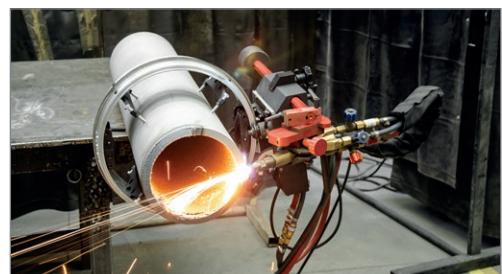
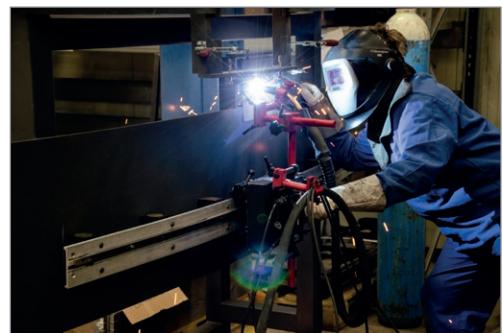
Rail Tug can work in various welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.



- 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-0466-28-00-00-0 (115 V UK)



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



540 mm (21") Geared Rack  
RAM-0753-07-00-00-0



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



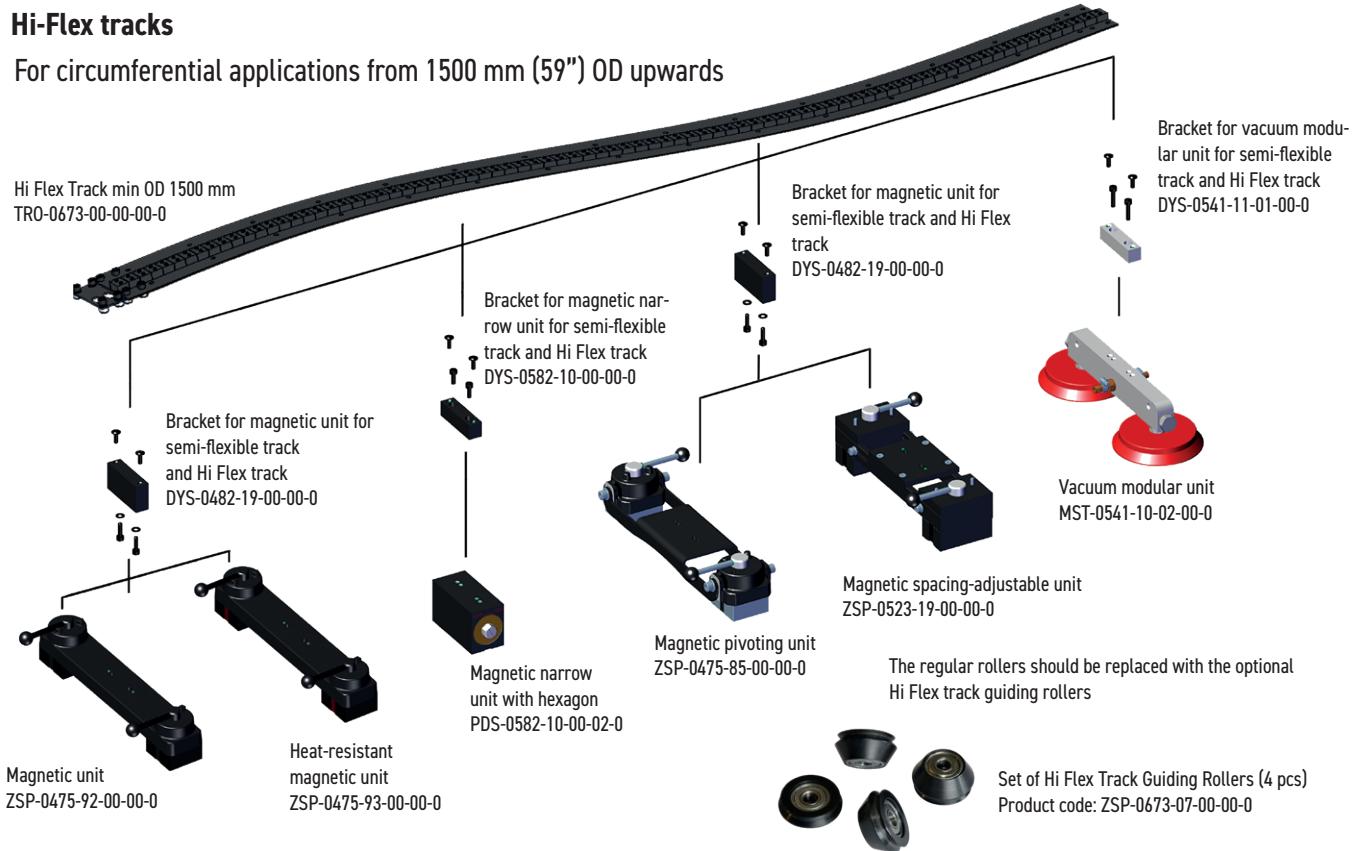
Short rod torch holder with clamp  
16-22 mm  
UCW-0754-07-00-00-0

## Optional accessories:

		 Counterweight 1.3 kg (2.9 lbs) PWG-0753-09-00-00-0		 Large Counterweight 2,6 kg (5,7lbs) PWG-0753-12-00-00-0	 203 mm rod KLM-0236-00-16-00-0
Gear Rack Adjustment Tool PKT-0341-13-00-00-0	700 mm (27.6") Geared Rack RAM-0475-07-03-00-0	1000 mm (39.4") Geared Rack RAM-0753-13-00-00-0			Clamping block with levers KST-0525-11-00-00-0
					
22-35 mm Torch Clamp ZRZ-0466-19-00-00-0	Standard Torch Holder 28-35 mm (1.10-1.38") ZCS-0475-28-10-00-0	16-22 mm Torch Clip ZCS-0476-06-01-00-0	Standard Torch Holder with angle adjustment UCW-0475-28-00-00-0		
			Precise Machine Torch Holder Ø 30 mm (1.18") UCW-0753-22-00-00-0		
Precise Torch Holder with angle and height adjustment UCW-0753-08-00-00-0	Machine Barrel Torch Holder Ø 30 mm (1.18") UCW-0475-61-00-00-0	Precise Machine Torch Holder Ø 35 mm (1.38") UCW-0753-24-00-00-0	Precise Machine Torch Holder Ø 35 mm (1.38") UCW-0475-29-00-00-1	Precise Machine Torch Holder Ø 35 mm (1.38") UCW-0753-24-00-00-1	
	<b>Gas Manifold type</b>	<b>Metric</b>	<b>Imperial</b>		
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			

## Hi-Flex tracks

For circumferential applications from 1500 mm (59") OD upwards



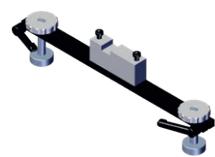
## Ring tracks

For circumferential applications 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-0654-11-00-00-0



Support with magnets  
WSP-0654-13-00-00-0



Support with plastic feet  
WSP-0654-12-00-00-0



Bracket for ring track supports to expand pipe diameter range by 50 mm downwards  
DYS-0523-14-14-00-0

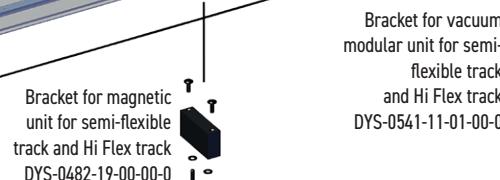
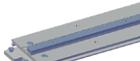
## Semi-flexible tracks

For straight line and circumferential applications.

It can be flexed to minimum radius of 5 m (16 ft)  
without permanent deformation



Semi-flexible track length 2 m (6.5 ft)  
PRW-0482-15-05-00-0



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



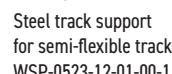
Aluminum track support for semi-flexible track  
WSP-0541-11-02-00-0



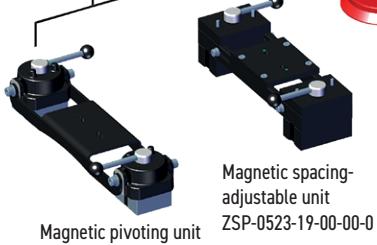
Bracket for magnetic unit for semi-flexible track and Hi Flex track  
DYS-0482-19-00-00-0



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



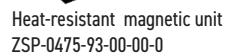
Magnetic pivoting unit  
ZSP-0475-85-00-00-0



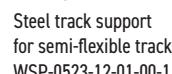
Magnetic spacing-adjustable unit  
ZSP-0523-19-00-00-0



Magnetic unit  
ZSP-0475-92-00-00-0



Heat-resistant magnetic unit  
ZSP-0475-93-00-00-0

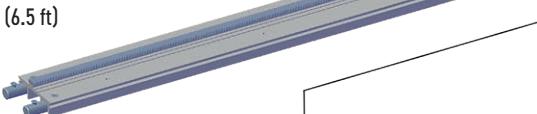


Steel track support for semi-flexible track  
WSP-0523-12-01-00-1

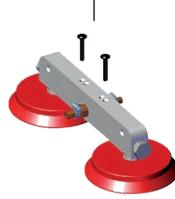
## Rigid tracks

For straight line applications and for going beyond workpiece  
and continuous welding edge to edge

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



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



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



Magnetic unit  
ZSP-0475-92-00-00-0



Lightweight Magnetic Unit  
MST-0677-00-00-00-0



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

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 Hi Flex tracks Semi-flexible track	from 200 mm (8") OD up to 3 m (10 ft) OD Minimum curvature radius of 750 mm (30") 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)	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)



Mitglied im DVS – Deutscher Verband für Schweißen und verwandte Verfahren e. V.



Your local dealer:



PROMOTECH Sp. z o.o.  
Elewatorska 23/1  
15-620 Białystok, POLAND  
Phone +48 85 678 34 05  
marketing@promotech.eu

