

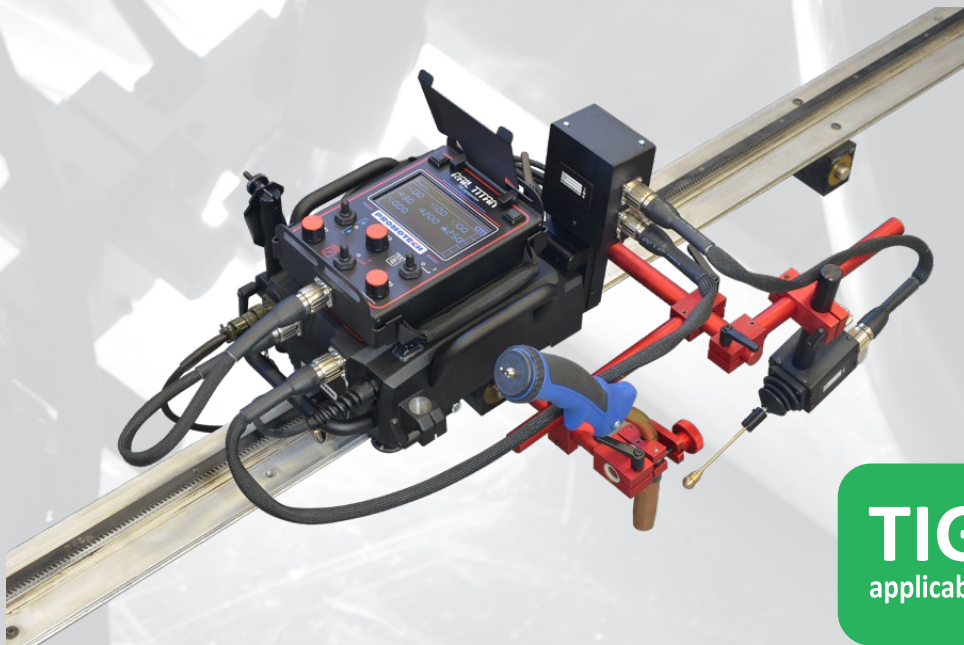
## RAIL TITAN

## MODULAR TIG-MIG-MAG WELDING AND CUTTING RAIL TRACTOR

Rail Titan is fully modular mechanized tractor that can be custom configured for TIG-MIG-MAG welding, oxy-fuel or plasma cutting and gouging applications on flat or curved plate, tube and pipe.

Linear torch oscillator produces straight, triangle, trapezoid and square weld paths.

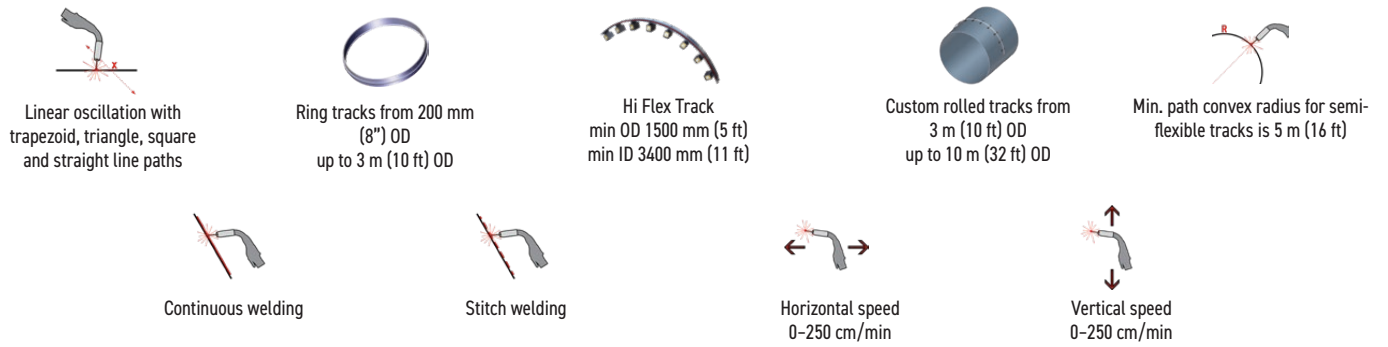
Rail Titan can travel on hi-flex, semi-flexible, rigid or ring tracks that can be clamped to ferrous materials with magnetic units and to non-ferrous materials by means of vacuum track system incl. vacuum pump and vacuum units.



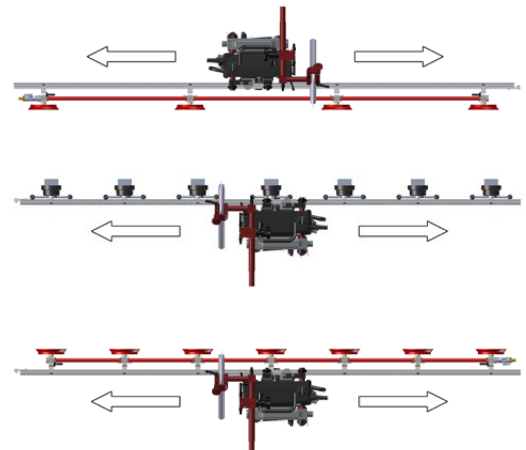
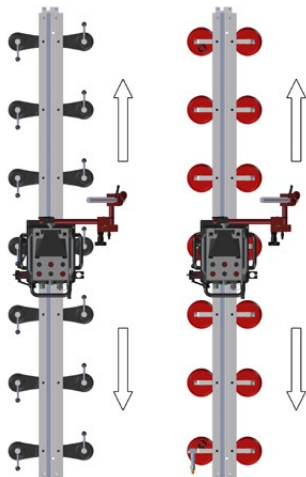
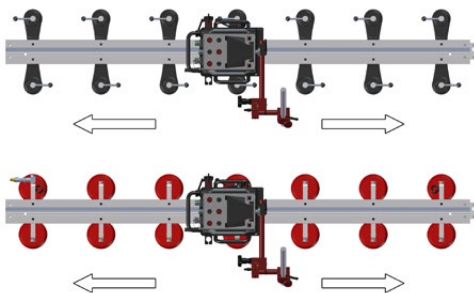
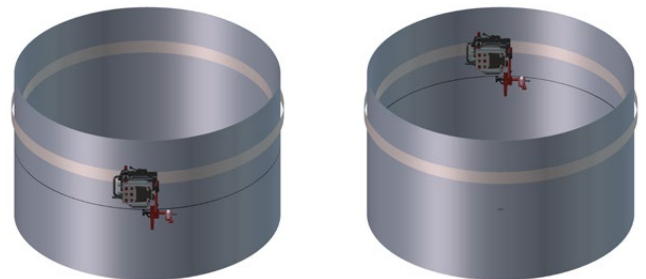
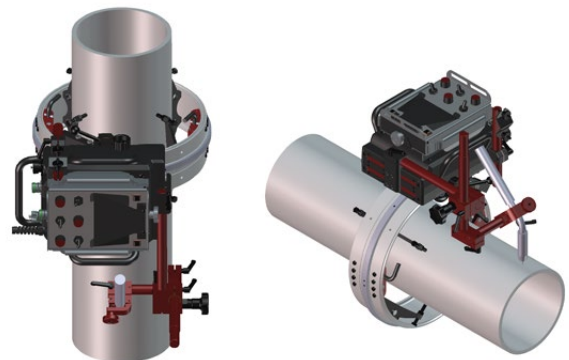
**TIG**  
applicable

### Primary features and benefits:

- Suitable for TIG welding (HF resistant)
- Robust design with die-cast aluminum housing
- Ergonomic remote control pendant with simple and easy to find control knobs makes adjustments possible without lifting of the operators welding hood
- Programmable path of stitch welds
- Suitable for variety of circumferential and irregular surface applications down to min. 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
  - 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
- Active compensation of torch position vertically and horizontally also with oscillator in use by means of modular automatic seam tracking system
- 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 Titan produces consistent high quality welds and cuts in a fraction of the time required by manual operations
- Convenient Power Supply 115-230 V

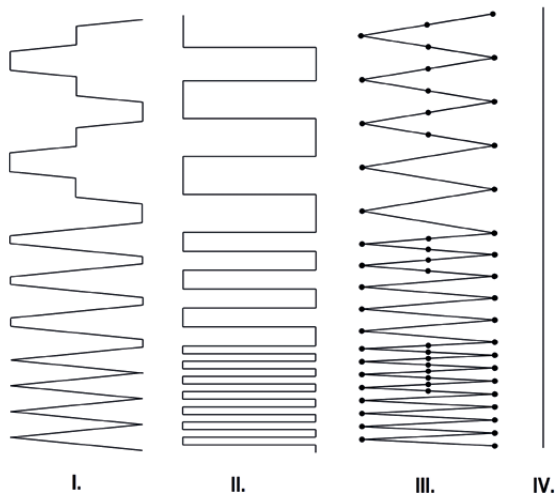


Rail Titan can work in all welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.





## Weld paths:



- 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. Square The tractor 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 tractor travels only during weaving. Both the tractor and oscillation stop during dwell mode.
- IV. Straight The tractor travels continuously while oscillation is switched-off.



F1, F2, F3 – Rotary parameter/function setting knobs



## Standard accessories:



Rackholder  
ZSP-0475-62-00-00

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

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

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

Contact block  
ZDR-0523-76-00-00-0

Remote control pendant

5 m (16.5 ft) remote control cable  
3 m (10 ft) remote control cable  
0.5 m (1.5 ft) remote control cable

PWD-0466-18-00-00-0 (230 V CEE)  
PWD-0466-16-00-00-0 (115 V USA)  
PWD-0466-23-00-00-0 (115 V UK)  
Power cord 3 m (10 ft)

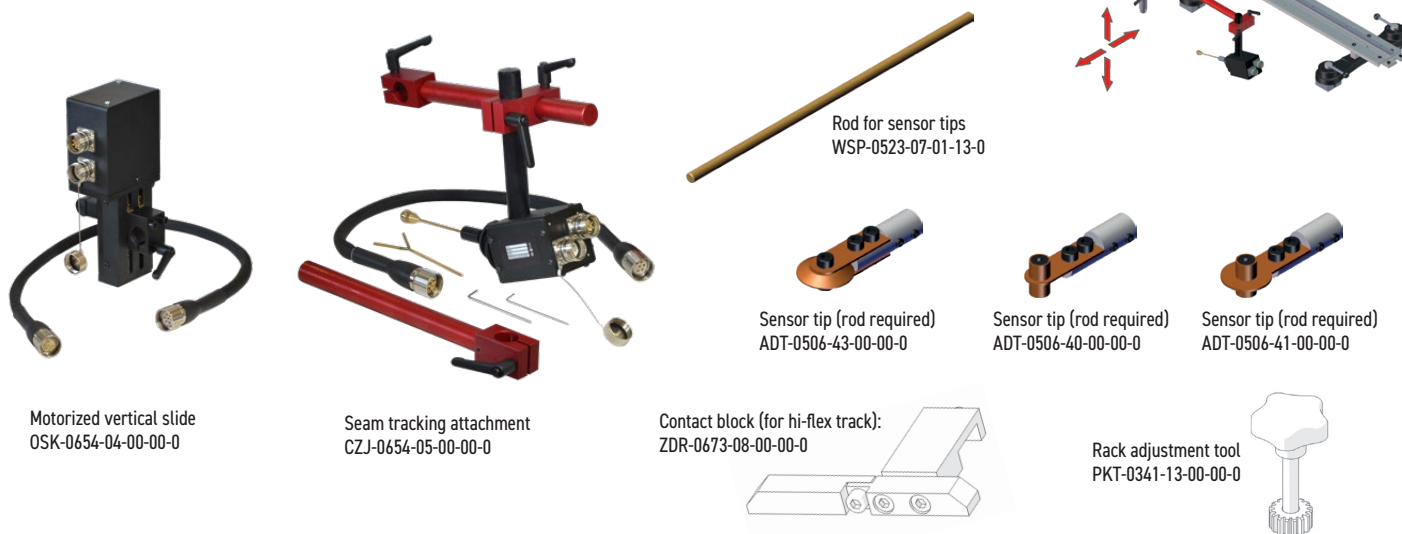
6.5 m (21 ft) arc ignition cable  
KBL-0466-17-00-00-0

300 mm (12") rod  
WSP-0523-16-00-00-0

300 mm (12") rack  
RAM-0523-17-00-00-0

## Optional equipment:

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

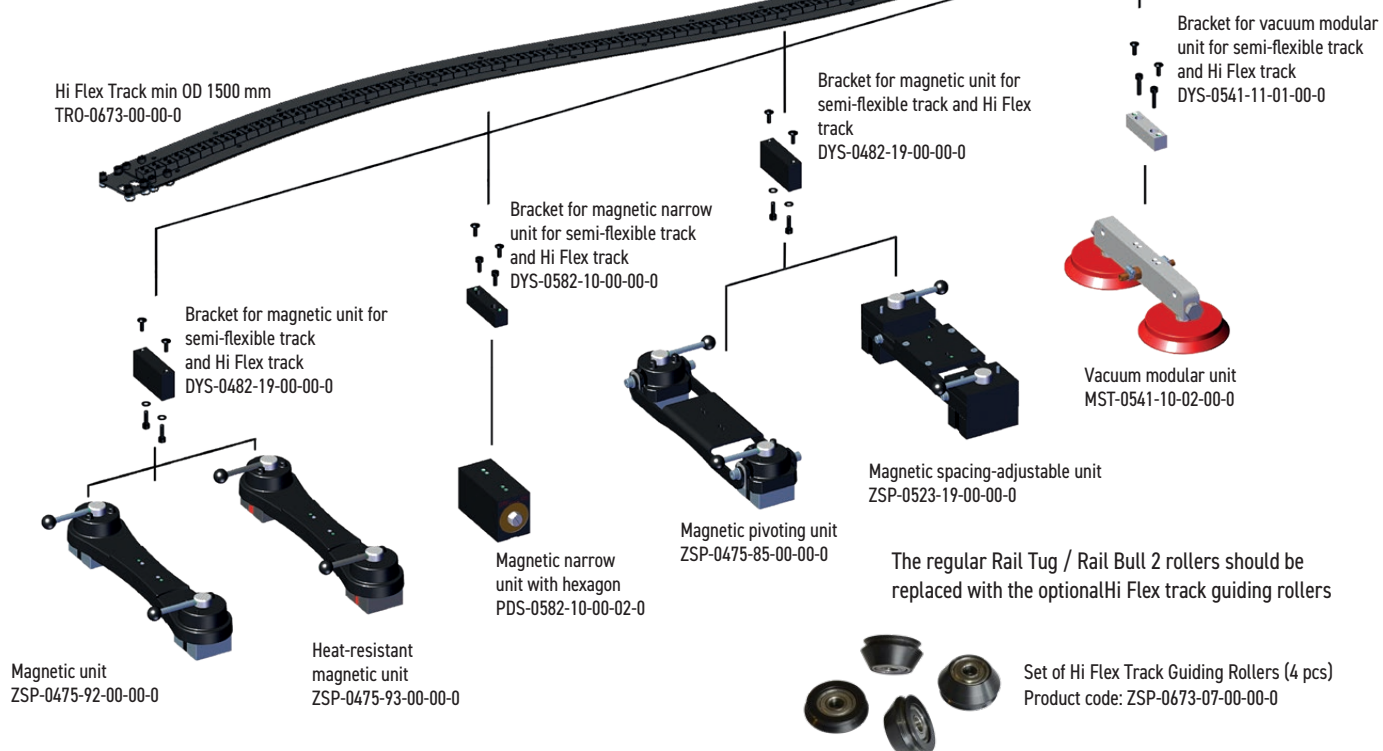


## Ring Tracks

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.



## Hi Flex Track

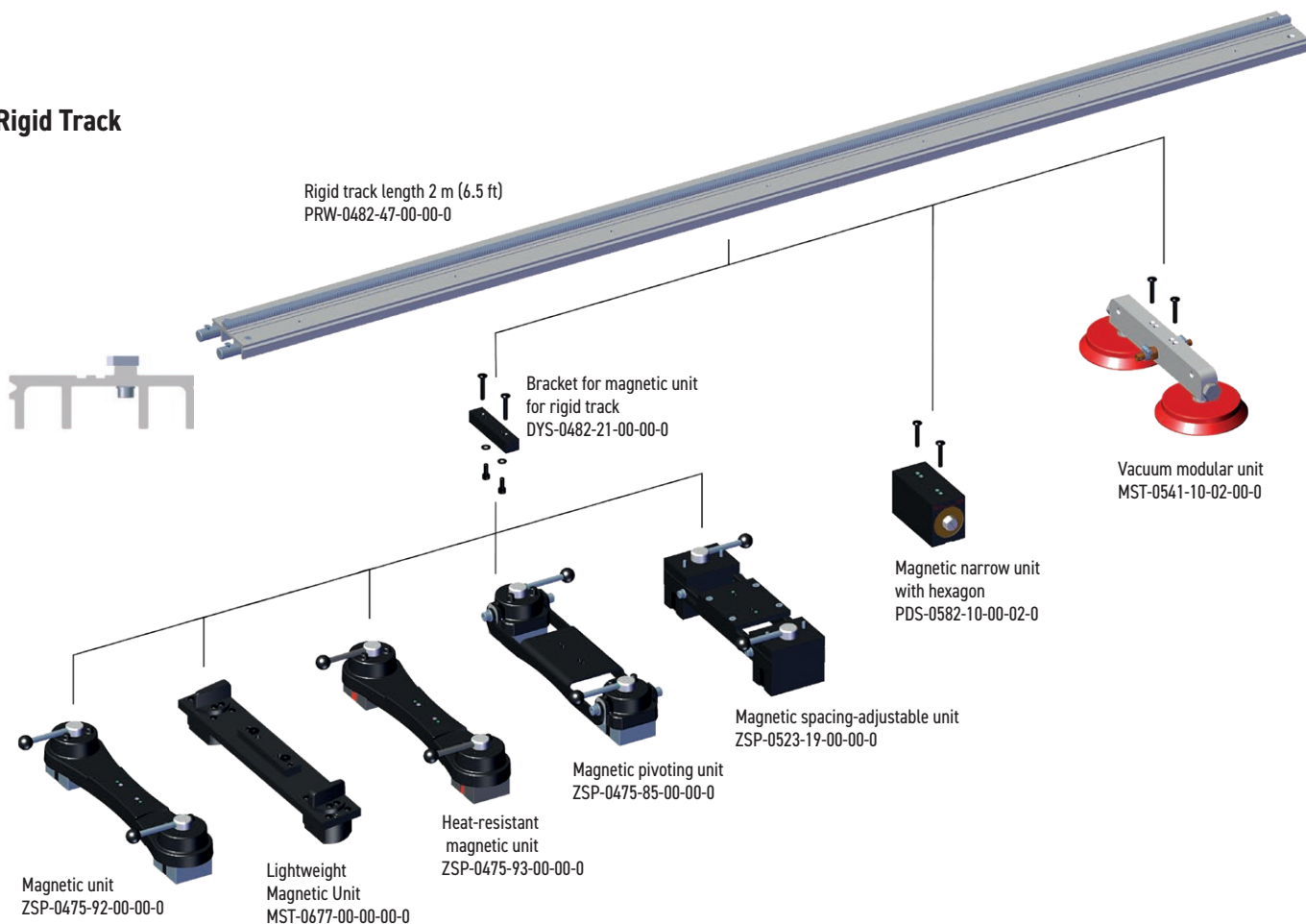




Semi-flexible tracks can be custom rolled permanently within the radius range from 1.5 m up to 5 m (5 ft up to 16 ft)



Rigid track length 2 m (6.5 ft)  
PRW-0482-47-00-00-0





RAIL TITAN Technical specification		
Voltage	1~ 115-230 V, 50-60 Hz	
Power	60 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
Fixing on pipes and round workpieces	Ring tracks (OD)	200 mm (8") – 3 m (10 ft)
	Hi-flex tracks (OD)	Minimum 1.5 m (5 ft)
	Hi-flex tracks (ID)	Minimum 3.4 m (11 ft)
	Custom rolled tracks (OD)	3-10 m (10-32 ft) (contact your dealer)
	Semi-flex tracks (OD)	Minimum 10 m (32 ft)
Torch type	MIG/MAG, TIG, oxy-fuel, plasma	
MIG/MAG torch diameter	16-22 mm (0.63-0.87")	
Minimum workpiece thickness for magnetic clamping	5 mm (0.2")	
Horizontal pulling force	400 N	
Vertical pulling force	300 N	
Horizontal speed	0-250 cm/min (0-98 in/min)	
Vertical speed	0-250 cm/min (0-98 in/min)	
Oscillation type	Linear	
Weld path	Straight, triangle, trapezoid, square	
Oscillation width	0.1-11.8 cm (0.04-4.5")	
Oscillation speed	10-200 cm/min (5-78 in/min)	
Oscillation dwell time at center and on ends	0-5 s	
Maximum oscillator pulling force	100 N	
Weight	10 kg (22 lbs)	
Product code	WOZ-0654-10-20-00-0	



#### Standard shipping set:

- Rail Titan tractor
- plastic box
- 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 with 180 mm (7") adjustment
- rack holder
- 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



**American Welding Society**

Supporting Company Member

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



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



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Your local dealer:

