PROMOTECH®

smart tools for heavy tasks



RAIL TITAN 2 MODULAR TIG-MIG-MAG WELDING AND CUTTING RAIL TRACTOR

Rail Titan 2 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.

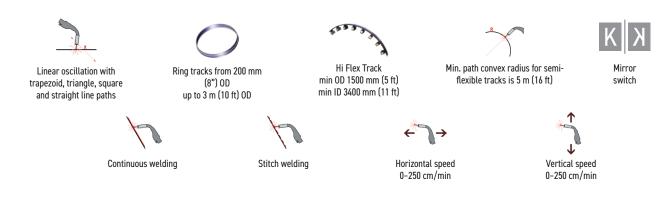
Linear torch oscillator produces straight, triangle, trapezoid and square weld paths.

Rail Titan 2 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.

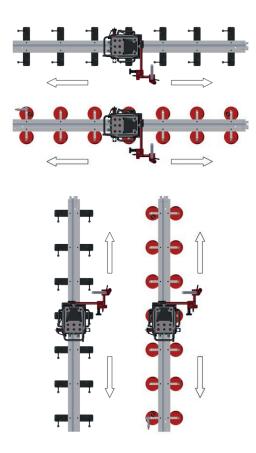


Primary features and benefits:

- 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") 0D up to 3 m (10 ft) 0D
 - Hi-Flex tracks on diameters from 1500 mm (59") OD upwards
- Semi-flexible tracks can be flexed to minimum radius of 5 m (16 ft) without permanent deformation
- Seam tracking enables active compensation of torch position vertically and horizontally with and without oscillation
- Reliable signal sockets/plugs feature increased HF immunity and improved grip for easier tightening & loosening
- 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 2 produces consistent high quality welds and cuts in a fraction of the time required by manual operations
- The mirror switch function allows the welder to adjust the torch position to the left or right, regardless of the welder's position relative to the torch
- Wide input voltage range: 100-240V, 50-60Hz 1ph (single phase)



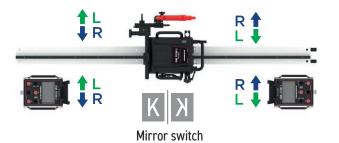
Rail Titan 2 can work in all welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.

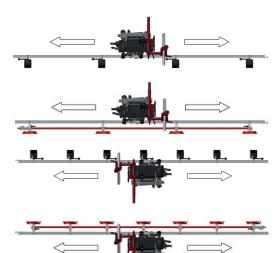


Mirror switch

In many industrial applications, the operator of welding tractor changes position relative to the workpiece. The result is a swap in the direction of the torch position adjustment.

The mirror switch function allows the operator to adjust the torch position to the left or right regardless of the welder's position relative to the torch.



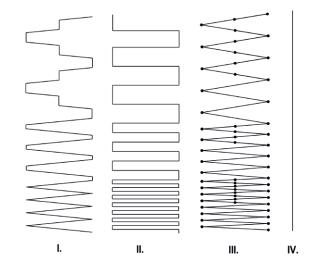








Weld paths



- I. Trapezoid The tractor travels continuously even during dwell mode. Weld path is determined by weave speed and dwell time at center and onsides 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 confliction is quite
- IV. Straight The tractor travels continuously while oscillation is switched-off.



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



Single lever with lock to position Rail Titan to track



Silicone covers protect against dirt and spatter



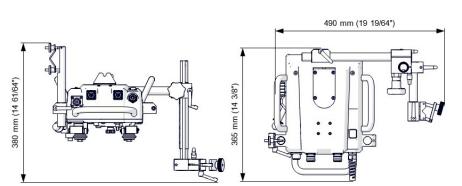
Reliable signal sockets and plugs

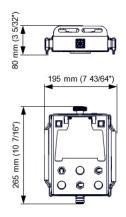
TIG welding of titanium plate



Seam tracking works with and without oscillation









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

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

UCW-0754-07-00-00-0

Short rod torch holder with clamp 16-22 mm

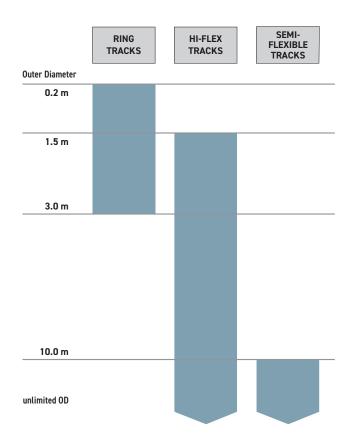
Cable anchor UCW-0654-02-00-00-0 Contact block ZDR-0523-76-00-00-0

Optional equipment

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



PROMOTECH offers a wide range of tracks suitable for variety of circumferential and irregular surface applications down to min. radius of 100 mm (4")





Ring tracks

For circumferential applications from 200 mm OD up to 3000 mm OD (from 8" to 10 ft.)





Support with bolts WSP-0654-11-00-00-0



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

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

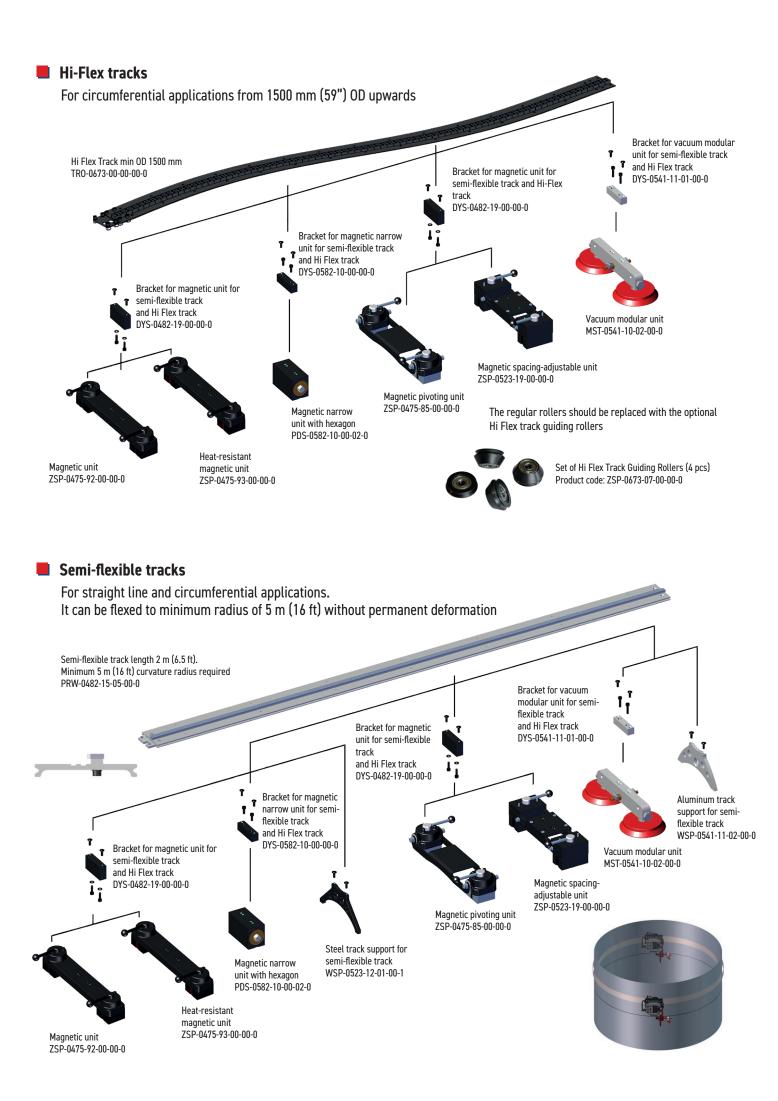


Support with plastic feet WSP-0654-12-00-00-0



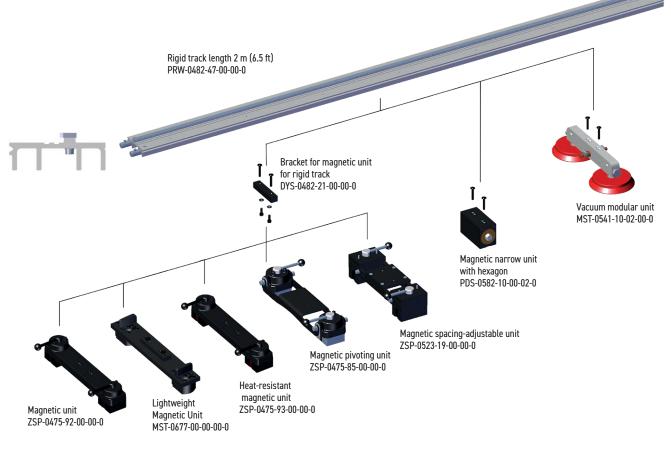
Bracket for ring track supports to expand pipe diameter range by 50 mm downwards DYS-0523-14-14-00-0

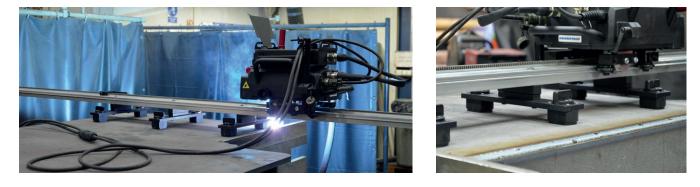




Rigid tracks

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





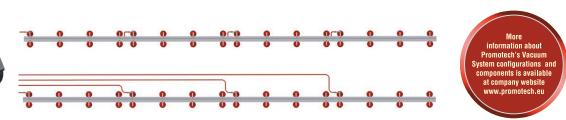
Vacuum tracks system

For non-ferrous applications

Promotech's vacuum fixing system provides firm grip of rail tracks on both ferromagnetic and non-ferromagnetic materials (aluminum or stainless steel constructions)

Portable vacuum pump with safety reservoir generates vacuum and supports up to 21 vacuum units System can be configured as serial or parallel connection





| RAIL TITAN 2 Technical specification | | |
|--|-----------------------|---|
| Voltage | | 1~100-240V, 50-60Hz |
| Power | | 120 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) |
| - . | 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 | | 315 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 (incl. standard accessories) | | 13 kg (29 lbs) |
| Product code | | WOZ-0813-10-20-00-0 |

Standard shipping set:

- Rail Titan 2 tractor
- Plastic box
- Remote control pendant
- Set of 3 signal cables
- Power cord
- 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











Shipping weight: 23 kg Shipping dimensions (W x L x H): 515 mm x 830 mm x 340 mm

More information available at www.promotech.eu



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