# PROMOTECH®

#### smart tools for heavy tasks



# VACUUM TRACK SYSTEM

Promotech's vacuum fixing system provides firm grip of rail tracks on both ferromagnetic and non-ferromagnetic materials.

Lightweight and modular design enables easy adjustment and fitting of the system to specific needs depending on welding or cutting applications and working positions (e.g. flat, horizontal or vertical).

Vacuum fixing system can be applied to both rigid and semiflexible tracks to enable usage on surface with a radius of more than 5 m (16 ft).

#### Features

- back up reservoir for added safety in case of a power failure; back up vacuum offers additional time to safely secure a welding tractor and tracks; it also greatly reduces installation time of the whole system
- maximum plate temperature up to +320°C (608°F)
- only 100 mm (4") minimal distance from heat source to vacuum pads





### Applications

- welding and cutting of non-ferromagnetic materials (aluminum or stainless steel constructions)
- welding and cutting of thin or coated ferromagnetic materials when magnetic adhesion may be insufficient

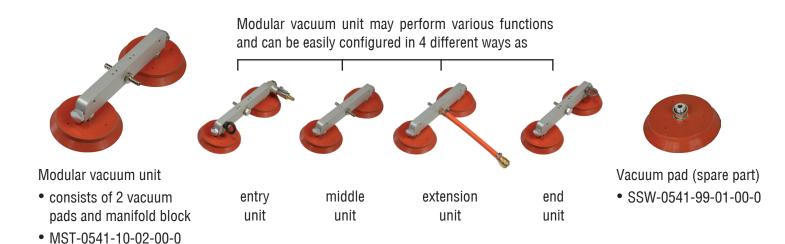
#### System elements and accessories

Vacuum Track System can be easily configured in a number of ways depending on the model of welding tractor in use and the required application

- rigid track (Rail Bull, Rail Bull 2)
- semi-flexible track (Rail Bull, Rail Bull 2)
- custom rolled tracks (Rail Bull 2)
- flexible trackway (Gecko, Gecko HS, Gecko Battery)
- V-track (Dragon, Dragon HS)



- Portable vacuum pump with safety reservoir
- generates vacuum and supports up to 21 vacuum units
- AGR-0541-10-20-00-0 for 230 V
- AGR-0541-10-10-00-0 for 115 V with UK plug





Pump connection hose

- connects pump to entry vacuum unit (10 m / 33 ft)
- PWD-0541-06-00-00-0





4-way manifold with connection cable

- can separately connect vacuum units of up to four rails
- allows rail leapfrogging during operation
- R0Z-0541-04-00-00-0





Cut-off valve (for entry vacuum unit) • ZWR-0541-10-01-30-0



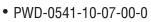


Threaded plug (for end vacuum unit) • KRK-0541-99-00-00-0



2-meter / 7-foot hose

- for interconnecting vacuum units within rail tracks
- 1 per rail track
- should be cut to the required length





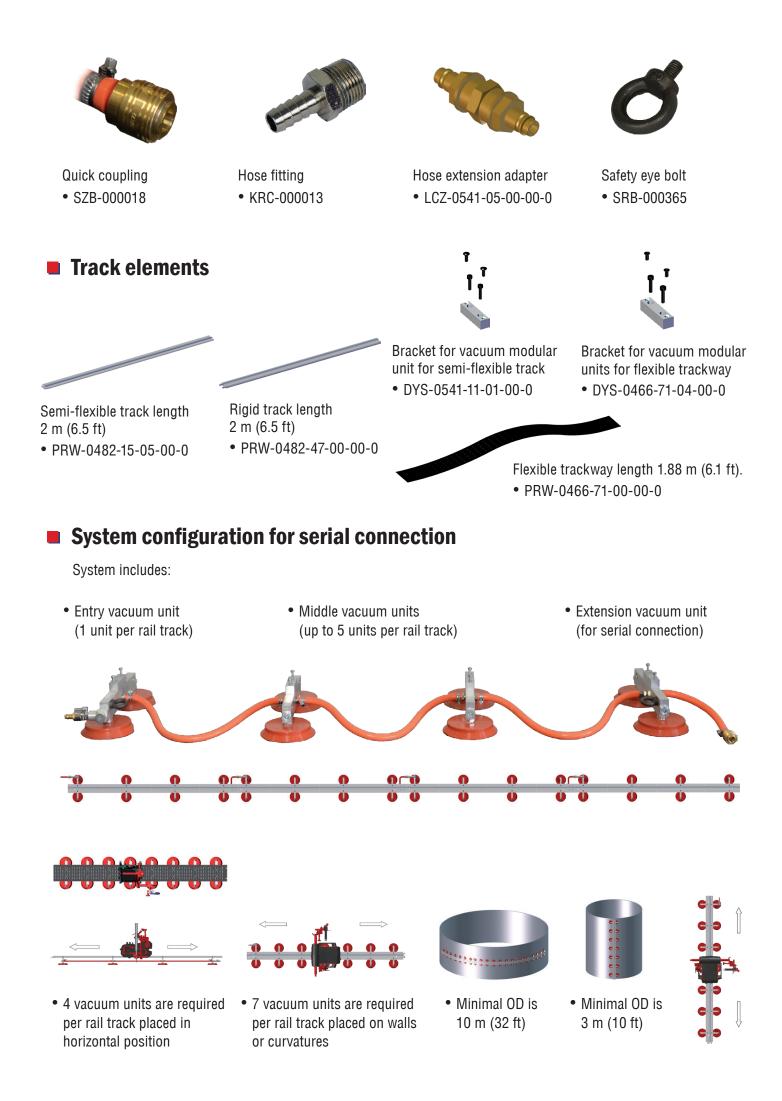
Hose clamp • OPS-000005





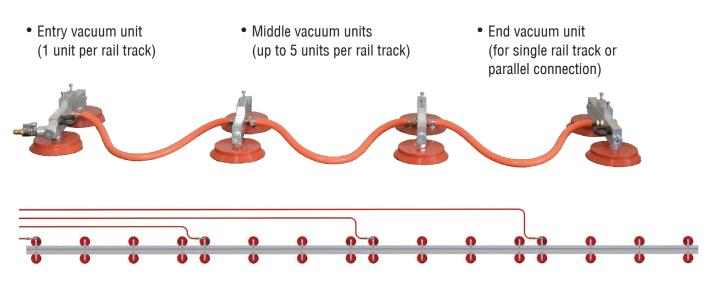
Coupled hose

- for interconnecting vacuum units of different rail tracks
- 1 per additional rail track (serial connection)
- PWD-0541-10-04-00-0



## System configuration for single track or parallel connection

System includes:



#### Technical specifications

Promotech's system consists of a vacuum pump that generates vacuum and of vacuum units that fix the semi-flexible or rigid track to the surface.

A single pump provides gauge pressure sufficient for up to 21 vacuum units.

A single vacuum unit provides suction power of 1400 N (at gauge pressure of -0.7 bar / -10 psig).

The permitted load is up to 30 kg (66 lbs) - welding/ cutting tractor with accessories.

Semi-flexible track can be fixed on flat or curved surfaces with a radius of at least 5 meters (16 ft).

An optional manifold can separately connect vacuum units of up to four rails, what allows rail leapfrogging during operation.

Temperature of material on which vacuum pads are used cannot exceed +320 °C (608 °F).

Heat source must be kept at least 100 mm (4") away from vacuum pads.

Safety eye bolts are provided to suspend vacuum rail tracks and protect them against accidental fall.

Vacuum Track System parameters	
Maximum number of vacuum units per vacuum pump	21
Minimum curvature radius of a semi-flexible track	5 m (16 ft)
Vacuum unit holding force	1400 N (at gauge pressure of –0.7 bar / –10 psig)
Working positions	flat, horizontal, vertical
Maximum permitted track load	30 kg (66 lbs)
Required number of vacuum units per rail placed in horizontal position	4
Required number of vacuum units per rail placed on walls or curvatures	7
Permitted ambient temperature near vacuum units	from –20°C to 200°C (from –4°F to 392°F)

Portable vacuum pump parameters	
Voltage	1~ 230 V, 50–60 Hz 1~ 115 V, 50–60 Hz
Power	400 W
Gauge pressure obtainable	-0.8 bar (-11.5 psig) (where 0 is for atmospheric pressure, and -1 is for perfect vacuum)
Pump capacity	4 m <sup>3</sup> /h (141 ft <sup>3</sup> /h)
Ambient temperature	0-40°C (32-104°F)
Safety reservoir volume	10 l (0.35 ft <sup>3</sup> )
Weight (with safety reservoir)	23 kg (51 lbs)



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