svejsemateriel

PROMOTECH

Svejse- og skæretraktorer,
skinnesystemer og tilbehør

SIKKERHED

ISO-certificerede produkter

KVALITET

Professionelle kvalitets-produkter

PRÆCISION

Præcision i hver opgave

PROMOTECH®



SK SVEJSEMATERIEL APS

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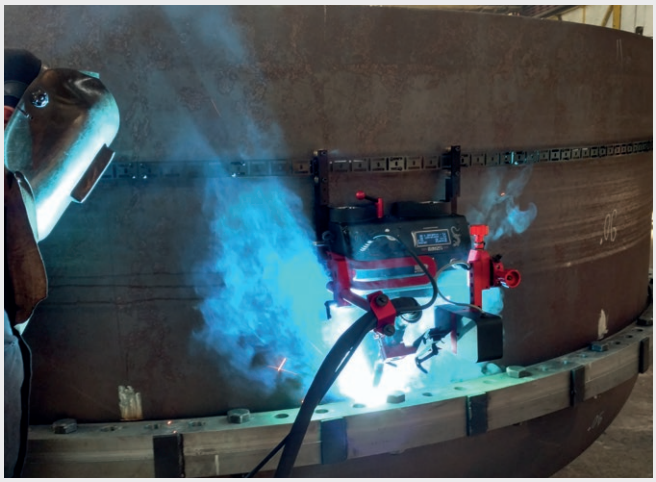
WELDING



WELDING



CUTTING



CUTTING



smart tools for heavy tasks

WELDING & CUTTING TRACTORS

CATALOGUE

PROMOTECH®

FM 37982

PROMOTECH – PROFESSIONAL MANUFACTURER OF PREMIUM MACHINES FOR METALWORKING INDUSTRY

PROMOTECH is an innovation driven ISO 9001:2015 manufacturer of professional metalworking machines, welding automation equipment and industrial systems designed for structural steel fabricators, heavy machinery manufacturers, shipyards and other metal machining companies

Main product lines:

- mag drills, pneumatic drills, rail drills and hydraulic punchers
- weld preparation/portable and stationary bevellers for plates and pipes
- welding and cutting portable mechanisation equipment
- welding and cutting automated systems

Our products:

- offer solutions to reduce cost and increase productivity
- are designed and engineered for long term use in tough industrial conditions
- meet the requirements of the most demanding clients and markets worldwide
- are made in Poland according to the highest quality standards
- include top quality components
- are thoroughly tested for quality approval
- proved to be extremely reliable with a variety of practical applications in most difficult climatic environments





FM 37982

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

American Welding Society Supporting Company Member

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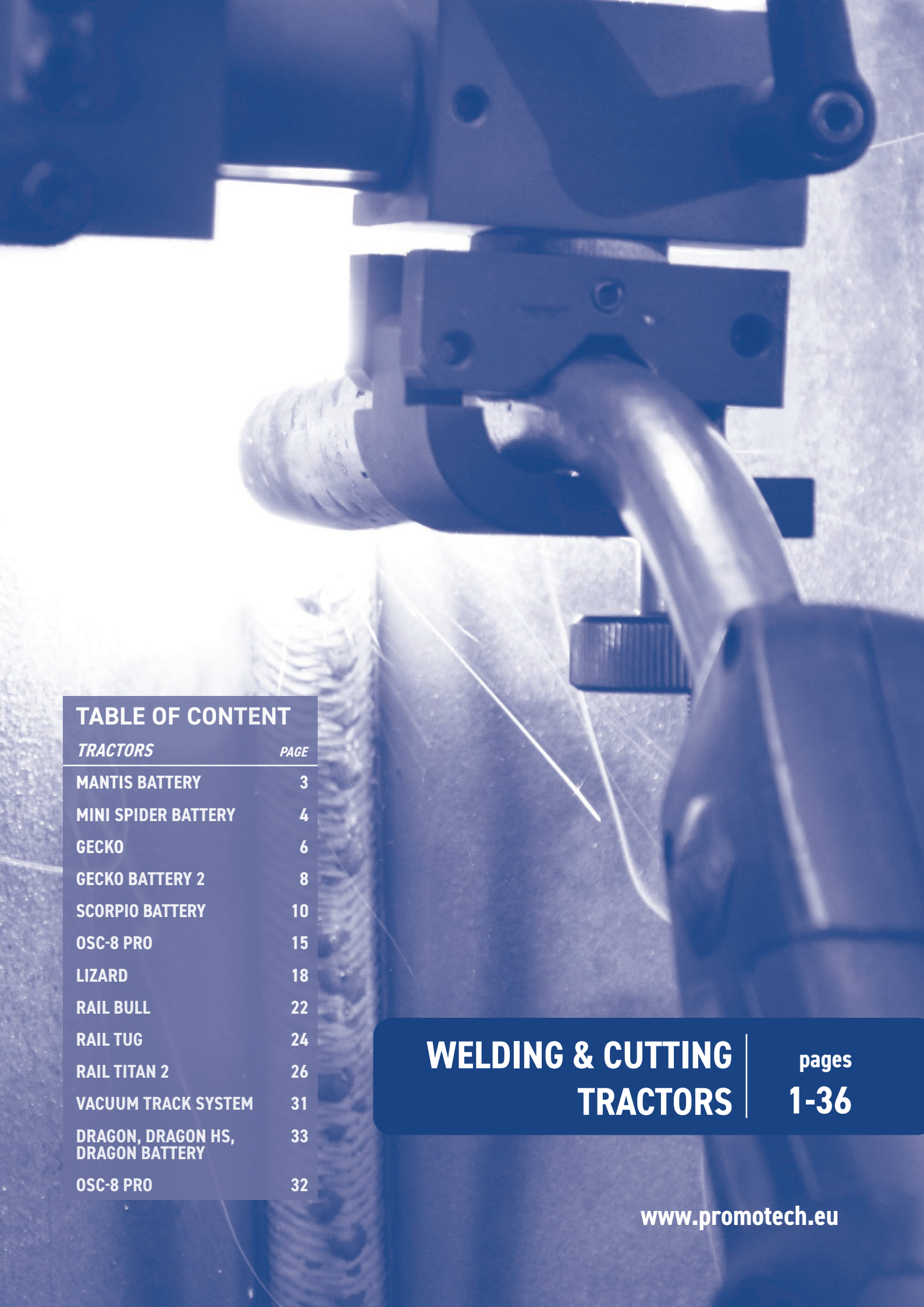

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WELDING & CUTTING TRACTORS

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www.promotech.eu

WELDING AND CUTTING TRACTORS



MANTIS BATTERY



MINI SPIDER BATTERY



GECKO



GECKO BATTERY 2



LIZARD



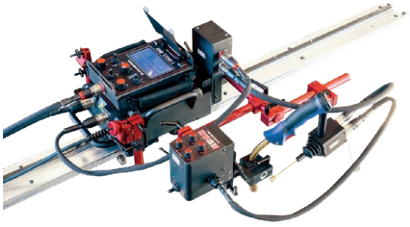
SCORPIO BATTERY



RAIL TUG



RAIL BULL



RAIL TITAN 2



OSC-8 PRO



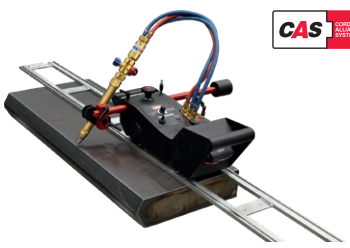
VACUUM TRACK SYSTEM



DRAGON



DRAGON HS



DRAGON BATTERY

All information is subject to change without notice. 25.09

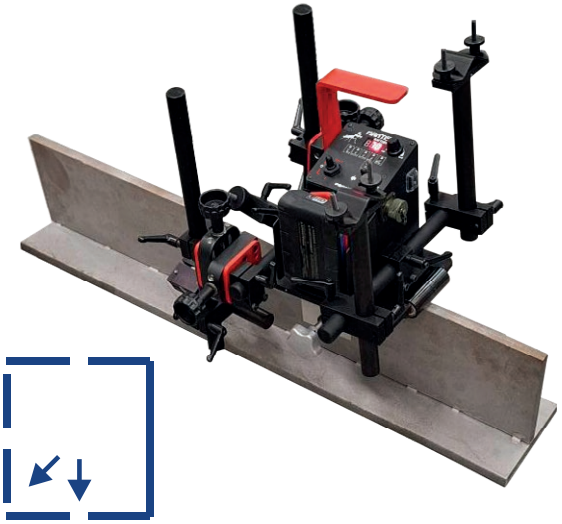
MANTIS BATTERY | CORDLESS DUAL TORCH WELDING TRACTOR

Mantis Battery is a specialized welding tractor designed for precise and efficient welding of steel profiles used as reinforcement elements in various steel structures such as flat bars, angle profiles (L), T-bars, bulb flats (often referred to as „bulb profiles"), I-beams or H-beams and channels (C-profiles).

The tractor allows operation with two torches simultaneously in continuous or intermittent welding mode.

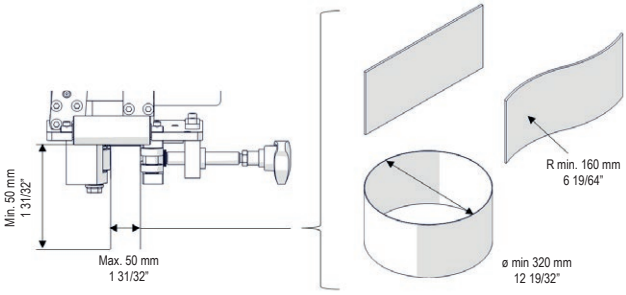
Its programming function allows you to set the desired welding path by specifying parameters such as weld length, skip length as well as crater filling at the beginning and the end of the welds.

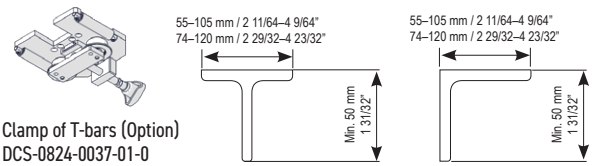
18 V DC Lithium Ion High Density battery (LiHD) ensures extended power availability even for the whole shift (the same CAS battery as used in other PROMOTECH cordless machines).



Features & benefits:

- Battery-powered programmable welding tractor for travelling on steel profiles such as flats, angles, I-beams, T-beams, bulb flats and irregularly shaped work pieces with radius down to 160 mm
- Dual-sided operation with two torches in continuous or intermittent welding mode
- Simple and ergonomic programming of weld patterns and stitch welding parameters
- Multi-functional LED display showing travel speed, units, welding settings and diagnostic messages
- 18 V DC allows safe use of MANTIS Battery in harsh environments like shipyards that are often wet, metallic, and confined
- The LiHD battery, supported by intelligent battery management, ensures maximum power availability for an extended period
- Closed-loop speed control system stabilizes travel speed, enabling uniform heat input for consistently high-quality welds
- Compact, lightweight design with durable cast aluminium housing
- Operates at speeds from 5 to 130 cm/min
- Tractor travels at full speed between stitches, which saves valuable welding time
- No need for mains power and one less cable to carry around

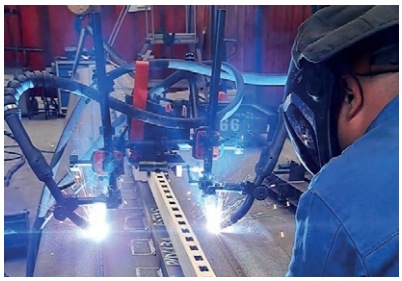


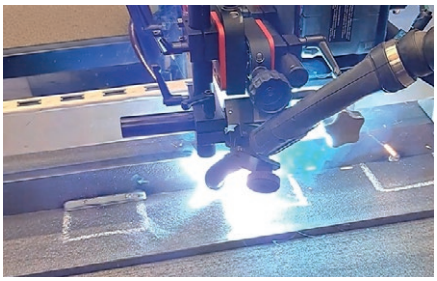


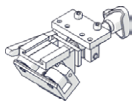
Clamp of T-bars (Option)
DCS-0824-0037-01-0

BOOST YOUR MOBILITY WITH BATTERY POWER!
No need for power cables

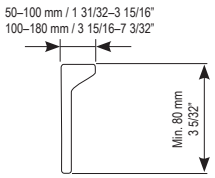
CAS CORDLESS ALLIANCE SYSTEM

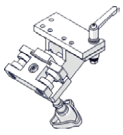




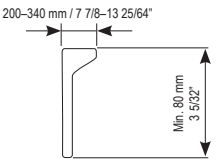


Clamp of bulb flats
50-180 mm (Option)
DCS-0824-0037-02-0





Clamp of bulb flats
200-340 mm (Option)
DCS-0824-0037-03-0



MANTIS BATTERY TECHNICAL SPECIFICATION		
Voltage		18 V DC, 4 Ah
Power		18 W
Welding position (according to EN ISO 6947 and AWS/ASME)	Horizontal	PA/1F/1G PB/2F
Torch type		MIG/MAG
Torch diameter		16–22 mm (5/8"–55/64") up to 35 mm (1.38") option
Horizontal pulling force		150 N
Cross slide adjustment range		0-35 mm (0-1 3/8"), up-down, left-right
Horizontal speed		5-130 cm/min
Weight (without the battery)		7 kg (15.4 lbs)
Product code		WOZ-0824-10-00-00-0



Continuous welding



Stitch welding



Welding path programming



Dual torch welding



Dual Arc Ignition



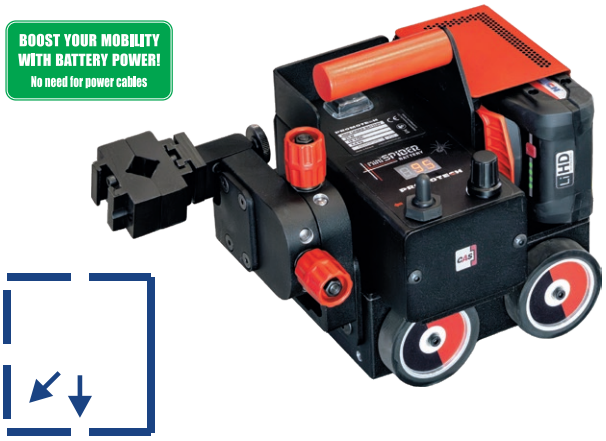
Horizontal speed 5–130 cm/min (2–51 in/min)

MINI SPIDER BATTERY | CORDLESS WELDING TRACTOR

The MINI SPIDER is a battery-powered welding tractor designed to produce continuous fillet welds using MIG/MAG torches.
The CAS LiHD (High Density Lithium Ion) battery provides sufficient power for handling even the toughest applications without the need for cables.
The 4-wheel drive system and permanent magnetic base provide powerful traction and smooth travel. Travel speed control and stabilization enable precise matching of weld bead geometry to required specifications, reducing costly over-welding and significantly decreasing filler metal consumption.
The torch can be swapped from one side of the MINI SPIDER to another, enabling the operator to weld the entire workpiece from end to end.

Features and benefits:

- The compact and lightweight design facilitates welding in narrow spaces
- Convenient 18 V DC battery supply (same 4.0 Ah battery as other PROMOTECH battery-powered tractors)
- No need for mains power and one less cable to carry around
- Intelligent battery management for long-lasting performance
- Digital LED display for presetting of travel speed and diagnostic messages
- Easy access for battery charge level reading
- Built-in guide rollers with adjustable height
- Torch on the left or right side
- Welding edge to edge (e.g. welding of stiffeners for bridge structures)
- Consistent heat input reduces distortion



Control system of battery pack:

Detection and supervised parameters:

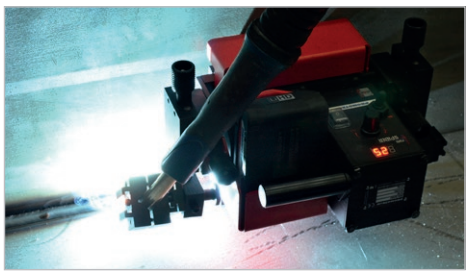
- too low and too high voltage
- too low and too high temperature
- failure of the temperature sensor
- internal battery failure

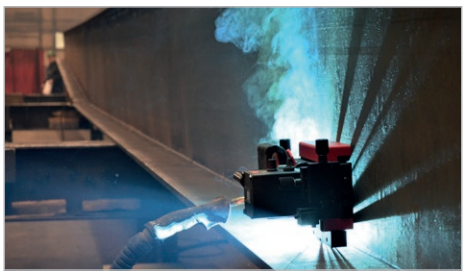
Benefits:

- over discharge protection
- extended battery life
- high level of safety for both tractor and operator



CAS CORDLESS ALLIANCE SYSTEM


Torch on the left or right side


Welding edge to edge


Welding in narrow spaces (min. width 200 mm)

MINI SPIDER BATTERY TECHNICAL SPECIFICATION	
Voltage	18 V DC, 4.0 Ah
Power	25 W
Welding position (according to EN ISO 6947 and AWS/ASME)	PB / 2F PA / 1F
Torch diameter	16–22 mm (0.63–0.87")
Min. workpiece thickness	4 mm (0.16")
Ground clearance	4 mm (0.16")
Horizontal pulling force	150 N
Horizontal speed *	0–110 cm/min (0–43.3 in/min)
Cross slide adjustment range	0–21 mm (0–0.83") up down, left-right
Weight (w/o battery)	6.6 kg (14.6 lbs)
Product code	WOZ-0759-10-00-00-0

** With battery fully charged*


Continuous welding


Horizontal speed 0–110 cm/min


Torch on the left or right side


Welding in narrow spaces


Weight 6,6 kg

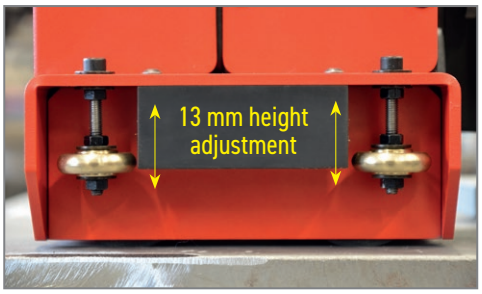


Horizontally laid control panel with display for easy reading and knob adjustment.

Side mounted battery for ergonomic handling with easier access for battery charge level reading.



Specially designed shielding with an undercut that facilitates multi-pass welding and significantly reduces the risk of collisions.



Height-adjustable guide rollers in a range of 13 mm.

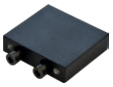
Standard accessories:



Battery 4.0 Ah
AKM-0738-10-00-01-0
(2 pcs included)



Torch holder
ZCS-0270-42-00-00-0



Bracket for opposite torch placement
DYS-0759-08-00-00-0

Standard shipping set:

- Tractor
- Plastic box
- Bracket
- 3, 4, 5 mm hex wrench
- Battery 4.0 Ah (2 pcs)
- Operator's manual

Optional accessories:



Universal cross slide
ZSP-0759-07-00-00-0



Enlarged cross slide bracket
WSP-0759-12-01-00-0



Auxiliary magnet blocks
ZSP-0759-10-00-00-0



Cable anchor
PDT-0526-21-00-00-0



Battery Charger
LDW-0738-10-00-30-0 (EU)
LDW-0738-06-00-30-0 (AUS/NZ)
LDW-0738-04-00-30-0 (UK)

Torch position – left or right side

For continuous operation, the cross-slide with torch holder is positioned on the left side of the tractor. The torch can be mounted on the right side for short-term use of up to 10 minutes, ideal for completing the weld. No optional accessories are required to change the torch position side.



Cross-slide with torch holder on the left side: suitable for continuous operation



Universal cross-slide with torch holder and bracket are included in standard shipping set



Cross-slide with torch holder on the right side: suitable for operation up to 10 minutes

Optional configuration with two cross slides and two torch holders

If the customer finds it useful to have the tractor ready to hold a torch on either side, the optional cross slide is needed.



Torch to be hold on the left side

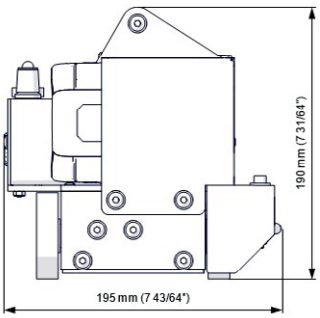


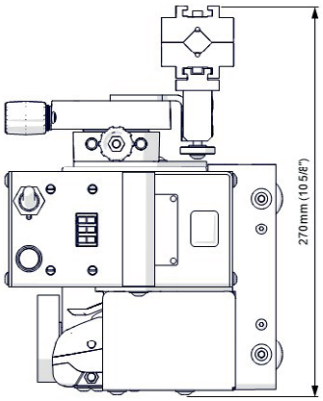
Optional universal cross-slide



Torch to be hold on the left or right side

Dimensions:





GECKO | COMPACT WELDING TRACTOR

Gecko is a portable trackless welding tractor that features a 4-wheel drive system with magnetic traction and a control loop feedback mechanism that provides speed stabilization in all welding positions.
Constant, continuous, and repeatable travel speed enables weld bead geometry that is exact to the required specifications, thus reducing costly over welding and decreasing filler metal usage, substantially.
Users can select arc ignition times of up to 5 seconds at the start and end of tractor travel to create a preferred weld fill at both ends.
A wide range of accessories makes Gecko suitable for a variety of positions and applications.
A compact design tractor weighing 8 kg can be carried anywhere.

Applications:

- Trailer manufacturing
- Truck tanks
- Oil tanks
- Water storage tanks
- Transformers
- Shipyards
- Any application demanding a long, continuous fillet weld

42V AC version available



GECKO HS (High Speed) with increased horizontal speed up to 220 cm/min (86.6 in/min) is suitable for both speed welding and plasma cutting

TECHNICAL SPECIFICATIONS	GECKO	GECKO HS
Voltage	1~ 115–230 V, 50–60 Hz 42 V, 50–60 Hz	1~ 115–230 V, 50–60 Hz 42 V, 50–60 Hz
Power	20 W	20 W
Welding position (according to EN ISO 6947 and AWS/ASME)	PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G PG / 3F / 3G (contact dealer)	PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G
Torch diameter	16–22 mm (0.63–0.87"); up to 35 mm (1.38") option	16–22 mm (0.63–0.87"); up to 35 mm (1.38") option
Minimum radius of curved workpiece surface	Outer 600 mm (23-5/8") Inner 800 mm (31-1/2")	Outer 600 mm (23-5/8") Inner 800 mm (31-1/2")
Minimum workpiece thickness	4 mm (0.16")	4 mm (0.16")
Ground clearance	4 mm (0.16")	4 mm (0.16")
Horizontal pulling force	150 N	150 N
Vertical pulling force	100 N	N/A
Cross slide adjustment range	0–35 mm (0–1.38") up down, left-right	0–35 mm (0–1.38") up down, left-right
Horizontal speed	0–110 cm/min (0–43.3 in/min)	5–220 cm/min (1.5–86.6 in/min)
Vertical speed	0–100 cm/min (0–39.4 in/min)	N/A
Weight	8 kg (18 lbs)	8 kg (18 lbs)
Welding settings storage	1 (last used)	1 (last used)
Product Code (115–230 V, 50–60 Hz, plug EU)	WOZ-0752-10-20-00-0	WOZ-0772-10-20-00-0
Product Code (115–230 V, 50–60 Hz, plug UK)	WOZ-0752-10-20-01-0	WOZ-0772-10-20-01-0
Product Code (42 V, 50–60 Hz)	WOZ-0777-10-04-00-0	WOZ-0778-10-04-00-0


Continuous welding


Dual torch welding


Horizontal speed 0–110 cm/min (0–43.3 in/min)


Vertical speed 0–100 cm/min (0–39.4 in/min)


Dual Arc Ignition



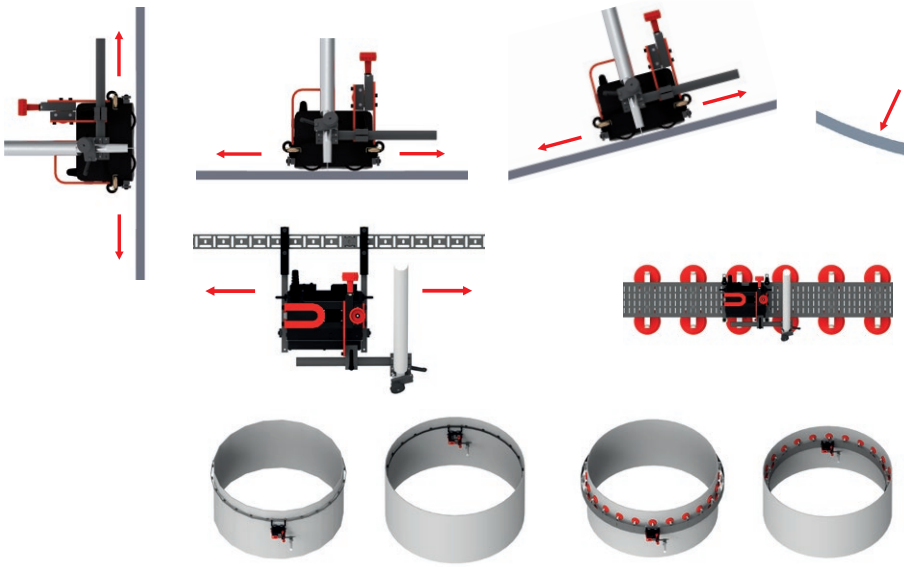
Min. path convex radius 600 mm (23 .6")



Min. path concave radius 800 mm (31.5")

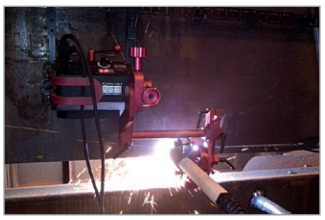

Weight 8 kg (18 lbs)

Versatility of Gecko welding tractor applications including out-of-position use

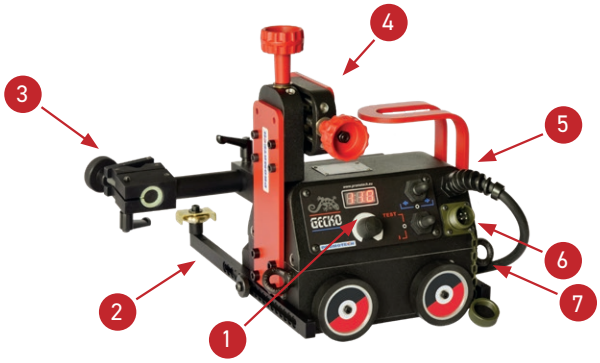




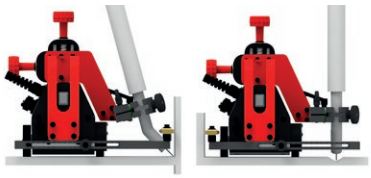




1. Drive unit with control panel
2. Adjustable guide arm
3. Quick clamp torch holder
4. Cross slide assembly
5. Main power switch (0/I)
6. Weld contact / Arc ignition socket
7. Lug for fall arrester



Standard accessories



Standard guide arms (set of 2 pcs)
PRW-0752-17-00-00-1



Long rod torch holder with clamp 16–22 mm
UCW-0752-07-00-00-0



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

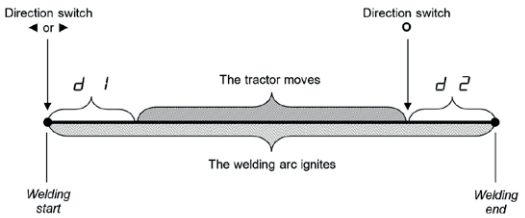


Primary features and benefits of Gecko welding tractor:

- The closed-loop speed control system stabilizes travel speed, enabling uniform heat input to produce consistently high-quality welds
- Multifunctional LED display to present travel speed, units and diagnostic messages
- 4-wheel drive magnetic traction permits out-of-position use
- Possibility of pre-setting the torch activation time before and after the tractor travel for better filling of the weld seam at both ends
- Convenient Power Supply 115–230 V, 50–60 Hz or 42 V, 50–60 Hz
- Gecko produces consistently high-quality welds and cuts in a fraction of the time required by manual operations
- Reduce wasted filler metal – eliminates over welding
- Compact, lightweight design with durable aluminum cast housing
- Positive magnetic traction permits out of position use
- Heat resistant silicone wheels
- Quick clamping Torch Holder mechanism for different types of MIG/MAG torches with diameters of 16-22 mm (5/8" – 7/8"); optionally up to 35 mm (1-3/8")
- Precise torch adjustment with screw drive cross slide
- Capable of carrying and controlling 2 torches
- Self-guiding roller arms eliminate the need for track
- Multi-surface guiding with user-friendly adjustment of tractor position
- Improves working environment - removes operator from heat and fumes
- Thermal cutting possible

Pre-setting torch activation time:

- Users can now select arc ignition times of up to 5 seconds at the start and end of the GECKO travel to create a preferred weld fill at both ends.



Parameter	Value	Description
d 1	0–5 s [step: 0.5 s]	Tractor movement delay time. When the direction switch is set to ◄ or ►: • d 1 = 0 s – the arc ignites and the tractor starts immediately, • d 1 > 0 s – the arc ignites and the tractor starts after the set time (see drawing above)
d2	0–5 s [step: 0.5 s]	Arc out delay time. When the direction switch is set to O: • d2 = 0 s – the tractor stops and the arc goes out immediately, • d2 > 0 s – the tractor stops and the arc ignites for the set time (see drawing above)

GECKO BATTERY 2 | MOBILE WELDING TRACTOR

The GECKO Battery 2 is a battery-powered trackless welding tractor designed to produce continuous butt and fillet welds using MIG/MAG torches.

CAS LiHD battery delivers enough power for handling even the toughest applications with no cables. 4-wheel drive system with magnetic traction and a feedback loop provide speed stabilization in various welding positions.

Constant, continuous and repeatable travel speed enables weld bead geometry that is exact to the required specifications, thus reducing costly over welding and substantially decreasing filler metal usage.

Users can select arc ignition times of up to 5 seconds at the start and end of tractor travel to create a preferred weld fill at both ends.

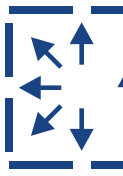
GECKO Battery 2 is ready to be configured with an external OSC-8 PRO pendulum oscillator, which can be powered from the built-in oscillator socket.



CAS CORDLESS ALLIANCE SYSTEM

BOOST YOUR MOBILITY WITH BATTERY POWER!
No need for power cables





Control system of battery pack:

Detection and supervised parameters:

- too low and too high voltage
- too low and too high temperature
- failure of the temperature sensor
- internal battery failure



Benefits:

- over discharge protection
- extended battery life
- high level of safety for both tractor and operator

Applications:

- Trailer manufacturing
- Truck tanks
- Oil tanks
- Water storage tanks
- Transformers
- Shipyards
- Any application demanding a long, continuous fillet weld

TECHNICAL SPECIFICATIONS GECKO BATTERY 2		
Voltage		18 V DC, 4.0 Ah
Power		20 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 PF / 3F (with OSC-8 PRO)
Minimum path curve radius	Outer	600 mm (23-5/8")
	Inner	800 mm (31-1/2")
Torch diameter		16–22 mm (5/8"–55/64") up to 35 mm (1.38") option
Minimum workpiece thickness		4 mm (0.16")
Ground clearance		4 mm (0.16")
Horizontal pulling force		150 N
Cross slide adjustment range		0–35 mm (0–1.38"), up-down, left-right
Horizontal speed*		0–110 cm/min (0–43.3 in/min)
Weight		8.4 kg (18.5 lbs)
Welding settings storage		1 (last used)
Product Code		WOZ-0805-10-00-01-0

* With battery fully charged.


Continuous welding


Dual torch welding


Horizontal speed
0–110 cm/min (0–43.3 in/min)

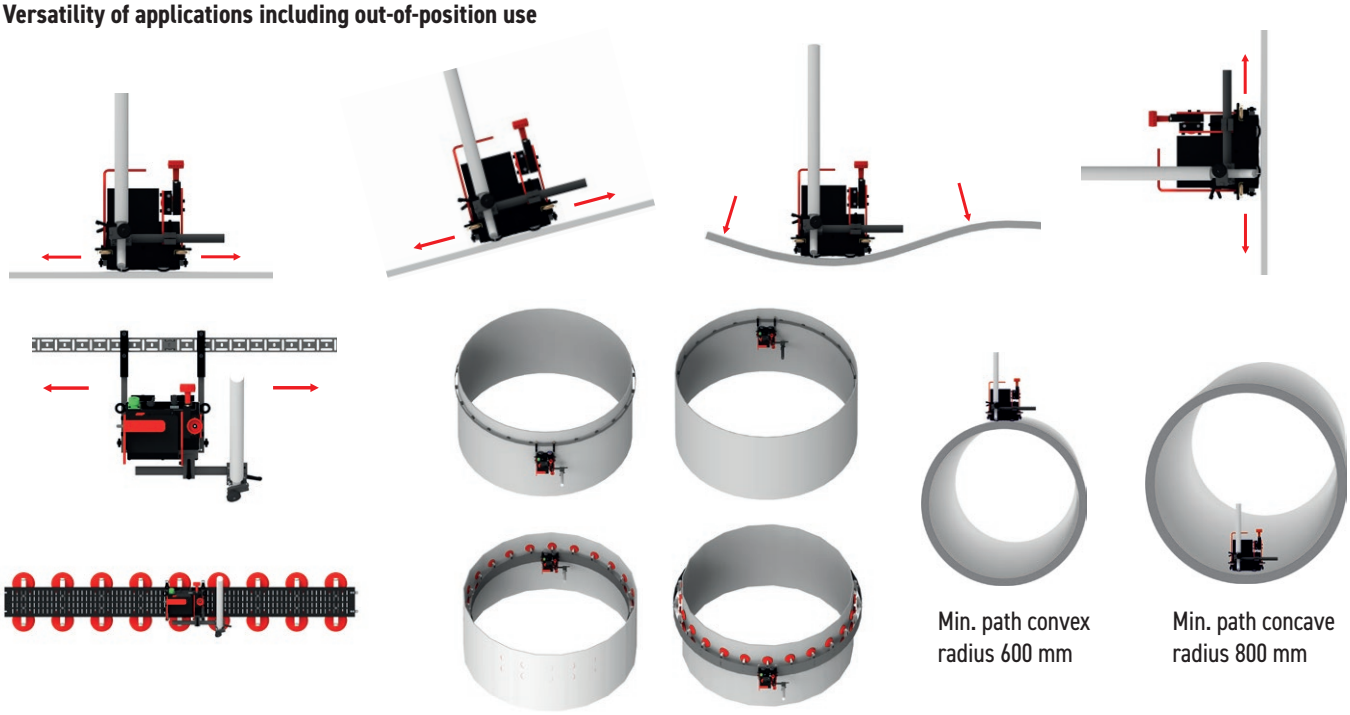

Dual arc ignition


Min. path convex radius
600 mm (23-5/8")


Min. path concave radius
800 mm (31-1/2")


Weight 8.4 kg (18.5 lbs)

Versatility of applications including out-of-position use

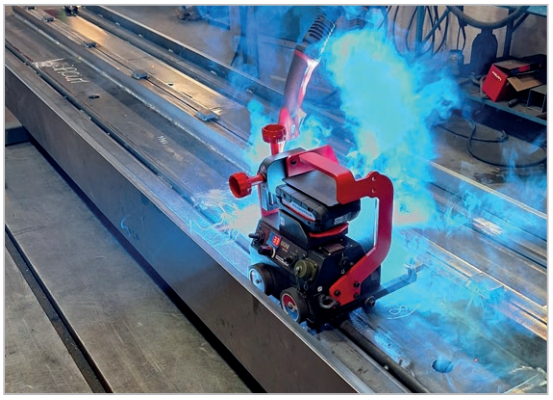


Min. path convex radius 600 mm

Min. path concave radius 800 mm

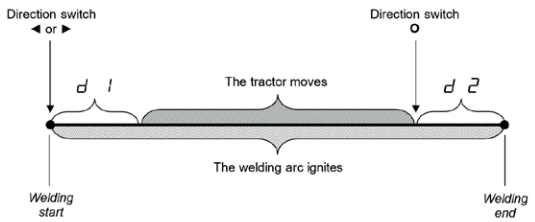
Features and benefits:

- Conveniently powered by an 18-volt DC battery – the same CAS battery as used in other cordless PROMOTECH machines
- LiHD battery ensures extended power availability even for the whole shift
- Intelligent battery management for long-lasting battery
- Digital speed control and stabilization for high quality welds
- Multifunctional LED display to present travel speed, units and diagnostic messages
- Compact, lightweight design with durable aluminum cast housing
- Optional accessories make Gecko Battery 2 fit for various applications with carbon steel, stainless steel and aluminum
- Possibility of pre-setting the torch activation time before and after the tractor travel for better filling of the weld seam at both ends
- Built-in oscillator socket for direct powering of external OSC-8 PRO pendulum oscillator
- Strong magnetic traction permits out of position use
- Heat resistant silicone wheels
- Quick clamping torch holder mechanism for different types of MIG/MAG torches with diameters of 16-22 mm (5/8"-7/8"); optionally up to 35 mm (1-3/8")
- Precise torch adjustment with screw drive cross slide
- Consistent heat input reduces distortion
- Reduced wasted filler metal - eliminates over welding
- Automatic arc on/off system initiates welding with travel, simultaneously
- Capable of carrying and controlling two torches
- Self-guiding roller arms eliminate the need for track
- Multi-surface guiding with user-friendly adjustment of tractor position
- Improves working environment - removes operator from heat and fumes
- Thermal cutting possible



Pre-setting torch activation time:

- Users can now select arc ignition times of up to 5 seconds at the start and end of the Gecko Battery 2 travel to create a preferred weld fill at both ends.



Standard accessories:



Battery 4.0 Ah (2 pcs included)
AKM-0738-10-00-01-0



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



Standard guide arms (set of 2 pcs)
ZST-0752-17-00-00-1



Long rod torch holder with clamp 16–22 mm
UCW-0752-07-00-00-0

Parameter	Value	Description
d1	0–5 s [step: 0.5 s]	Tractor movement delay time. When the direction switch is set to ◄ or ►: • d1 = 0 s – the arc ignites and the tractor starts immediately, • d1 > 0 s – the arc ignites and the tractor starts after the set time (see drawing above)
d2	0–5 s [step: 0.5 s]	Arc out delay time. When the direction switch is set to O: • d2 = 0 s – the tractor stops and the arc goes out immediately, • d2 > 0 s – the tractor stops and the arc ignites for the set time (see drawing above)

SCORPIO BATTERY | CORDLESS PROGRAMMABLE WELDING TRACTOR



The SCORPIO BATTERY is a battery-powered, programmable welding tractor designed for producing fillet and butt welds in both stitch and continuous welding modes. Its programming function allows you to set the desired welding path by specifying parameters such as weld length, skip length as well as crater filling at the beginning and the end of the welds.

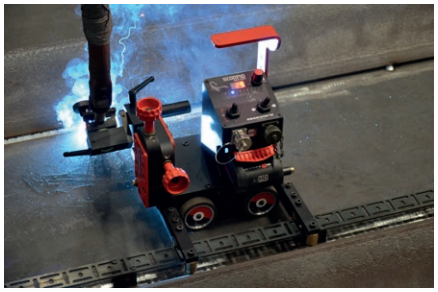
The CAS LiHD (High Density Lithium Ion) battery provides sufficient power for handling even the toughest applications without the need for cables.

Travel speed control and stabilization enable precise matching of weld bead geometry to required specifications, reducing costly over-welding and significantly decreasing filler metal consumption.

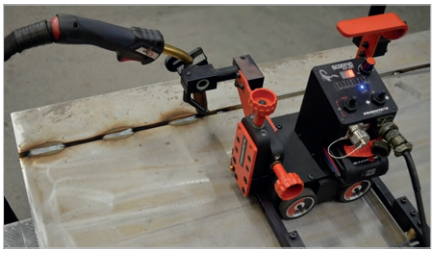
The SCORPIO BATTERY can also produce weave welds with the use of an optional pendulum oscillator, which allows for precise control of weave width, weave speed, and left/right side dwell times.

Features and benefits:

- Simple and ergonomic programming of welding patterns and stitch welding parameters
- Multifunctional LED display presenting travel speed, units, welding settings, and diagnostic messages
- Closed-loop speed control system stabilizes travel speed, enabling uniform heat input for consistently high-quality welds
- Convenient 18 V DC battery supply (the same 4.0 Ah battery for MINI SPIDER BATTERY, Gecko Battery 2 and DRAGON BATTERY tractors)
- High Density Lithium Ion battery (LiHD) ensures maximum power availability for extended periods
- Intelligent battery management for long-lasting performance
- 4-wheel drive system with magnetic traction for stable movement of the tractor
- Compact, lightweight design with durable aluminum cast housing
- Optional pendulum oscillator for producing weave welds
- Auxiliary accessories make SCORPIO BATTERY suitable for various applications with carbon steel, stainless steel and aluminium
- Equipped with limit switches





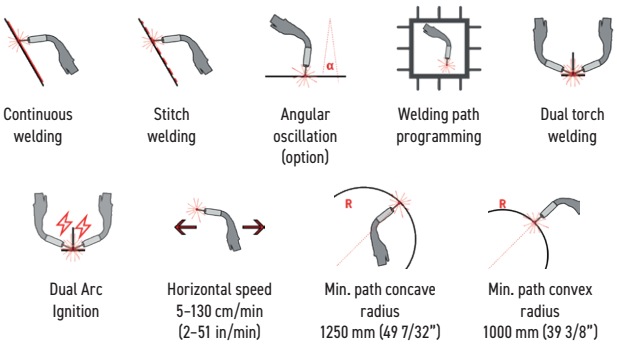


Standard shipping set:

- Tractor
- Plastic box
- Battery 4.0 Ah (2 pcs included)
- Torch holder
- Arc ignition cable
- 4 mm hex wrench
- 3 mm hex wrench
- Operator's manual



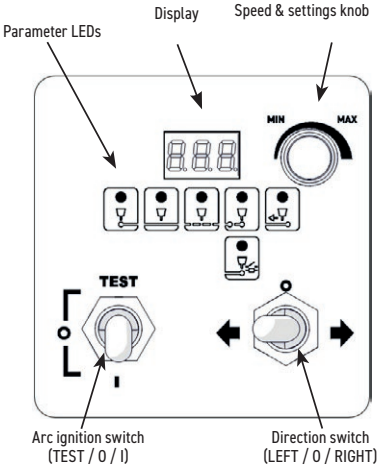
SCORPIO BATTERY - TECHNICAL SPECIFICATION		
Voltage		18 V DC, 4 Ah
Power		18 W
Welding position (according to EN ISO 6947 and AWS/ASME)		PA/1F/1G PB/2F PC/2G
Minimum path curve radius	Outer	1000 mm (39 3/8")
	Inner	1250 mm (49 7/32")
Torch type		MIG/MAG
Torch diameter		16–22 mm (5/8"–55/64") up to 35 mm (1.38") option
Minimum workpiece thickness		4 mm (5/32")
Ground clearance		4 mm (5/32")
Horizontal pulling force		150 N
Horizontal speed (with a fully charged battery)		5–130 cm/min (1–51 in/min)
Weight (without the battery)		7 kg (15.4 lbs)
Maximum torch reach		70 mm (2 3/4")
Product code		WOZ-0757-10-00-00-0

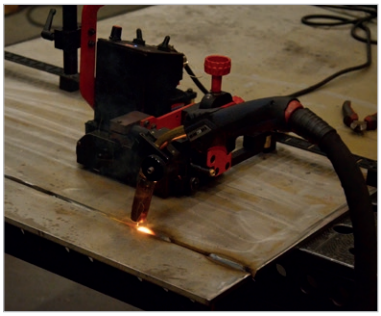


Programmable variables diagram

Simple and ergonomic programming of welding patterns and stitch welding by specifying parameters such as weld length, skip length and crater filling at the beginning and the end of the welds.









Standard accessories:



Battery 4.0 Ah
(2 pcs included)
AKM-0738-10-00-01-0



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



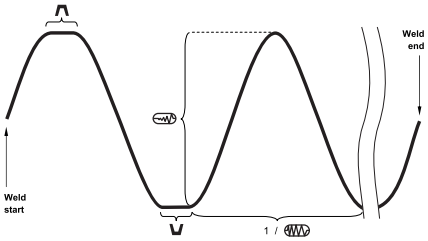
Standard guide arms
(set of 2 pcs)
ZST-0752-17-00-00-1



Ultra-short rod torch holder
with clamp 16–22 mm
UCW-0757-09-00-00-0

The following oscillation parameters can be set and adjusted with both pendulum weave welders:

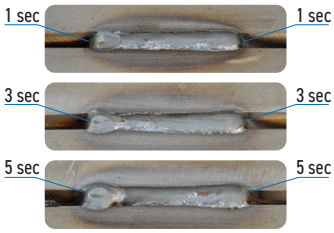
- oscillation width
- oscillation speed
- dwell time on both ends





Oscillator support:
(including two M6x14 screws)
WSP-0757-11-00-00-0

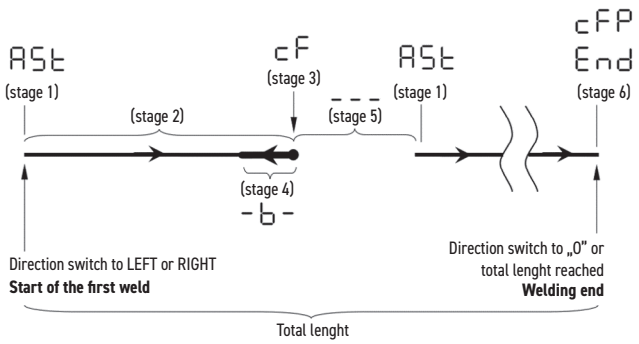
Crater filling times



Back weld 5 mm



	Crater fill time Arc stabilization time	AST	0–5.0 sec [step: 0.1] Crater filling time at the beginning of the weld
	Weld length		0.5–99.9 cm [step: 0.1] 0.5–40" [step: 0.1]
	Skip length	- - -	0.5–99.9 cm [step: 0.1] 0.5–40" [step: 0.1]
	Crater fill	cF cFP	0–5.0 sec [step: 0.1] Crater filling time at the end of the weld
	Off (default)	oFF	Current curve set on Welding Source
	On	on	Full current from Welding Source
	Reverse filling length	-b-	0–2 cm [step: 0.1] 0–1" [step: 0.1]
All LEDs on	Total length		1–999 cm [step: 1] 1–400" [step: 1] INF

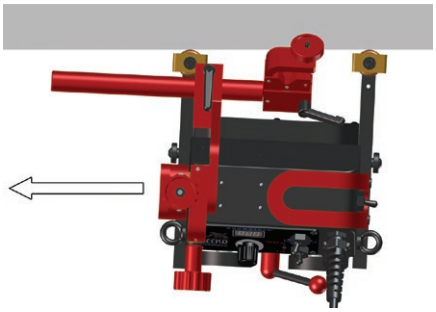


Stage 1	Arc stabilization and crater filling at the beginning of the weld
Stage 2	Tractor moves with the set speed and creates the weld of a defined length
Stage 3	Crater filling at the end of the weld
Stage 4	Back weld (Reverse filling length)
Stage 5	Tractor skips between welds. Next steps 1 ,2, 3, 4 and 5 are repeated until total length is reached
Stage 6	Final crater filling (the end of welding procedure)

Joint accessories for Gecko, Gecko HS, Gecko Battery 2 and Scorpio Battery

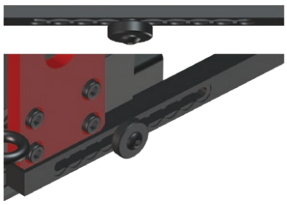
Guide arms enable a proper welding tractor positioning.

- 7 different guide types are dedicated to various welding applications and positions
- include a number of fixing grooves for your convenience
- enable simpler, easier and more consistent adjustment of how guide arms stick out
- secure proper tilting of the tractor into a direction of its movement
- maintain a permanent contact with the workpiece
- allow either interval or continuous guide arms adjustment

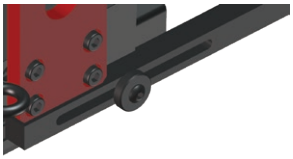




Each new guide arm has got a number of indented grooves only on one side.
All types of guide arms are available in pairs of 2 pcs: right and left.



Interval adjustment of a degree how much the guide arms stick out



Continuous adjustment of a degree how much the guide arms stick out



Standard guide arms (set of 2 pcs)
PRW-0752-17-00-00-1

Optional accessories for multi-surface guiding and variety of applications



Low guide arms (set of 2 pcs)
PRW-0752-12-00-00-1



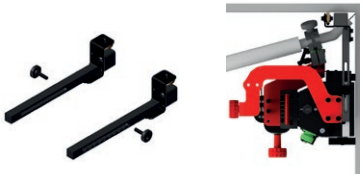
High guide arms (set of 2 pcs)
PRW-0752-13-00-00-1



Edge following guide arms (set of 2 pcs)
PRW-0466-41-00-00-1
(Except for Scorpio Battery)



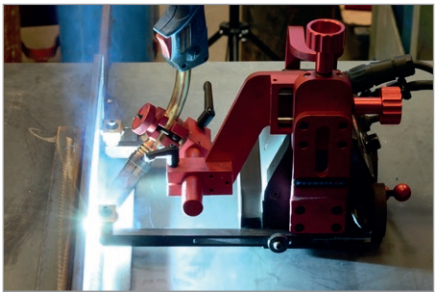
Adjustable guide arms (set of 2 pcs)
PRW-0752-10-00-00-01

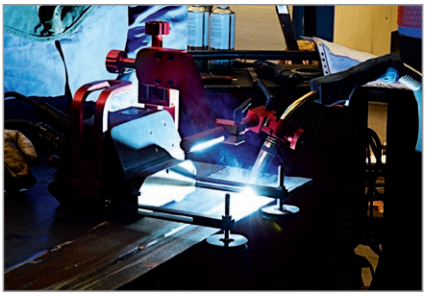


Magnet guide arms (set of 2 pcs)
PRW-0752-11-00-00-1



Track following guide arms (set of 2 pcs)
PRW-0752-14-00-00-1







Optional accessories for variety of applications



Torch clamp 16–22 mm
ZRZ-0752-07-01-00-0



Torch clip 16–22 mm
ZCS-0476-06-01-00-0



Torch clamp 22–35 mm
ZRZ-0466-19-00-00-0



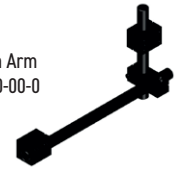
Short Rod Clamp
WLK-0476-20-01-00-0



Short rod torch holder
with clip 16–22 mm
UCW-0476-27-00-00-0



Long Rod Clamp
WLK-0466-04-10-00-0



Torch Extension Arm
PRD-0757-10-00-00-0



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



Long rod torch holder
with clip 16–22 mm
UCW-0466-22-00-00-0



Long rod torch holder
with clamp 16–22 mm
UCW-0752-07-00-00-0



Torch Holder Lower
Rod Clamp Assembly
UCW-0476-06-00-00-0



Battery Charger
LDW-0738-10-00-30-0 (EU)
LDW-0738-04-00-30-0 (UK)



Fall arrester device
URZ-000001



Oscillator OSC-8 PRO
OSC-0799-10-00-00-0



Cable anchor (Gecko)
PDT-0466-55-00-00-0



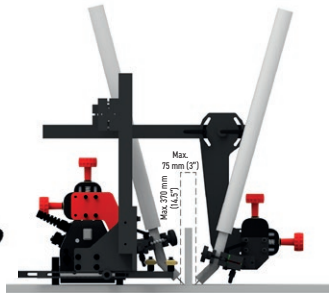


Cable anchor
(Gecko Battery 2,
Scorpio Battery)
PDT-0776-04-00-00-0





Dual Torch Mount
PDT-0466-40-00-00-0





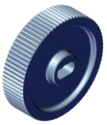
Oscillator support for GECKO
and GECKO Battery 2
(incl. two M6x14 screws)
KTW-0805-99-01-00-0



Oscillator support for
SCORPIO Battery
(including two M6x14 screws)
WSP-0757-11-00-00-0

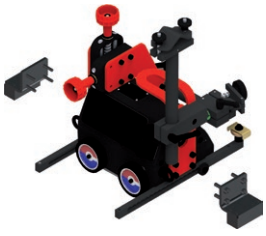


Extended cross-slide
0-76 mm (0-3") either
up-down or left-right
ZSP-0466-46-00-00-1



Stainless steel
driving wheel
KOL-0466-72-00-00-0







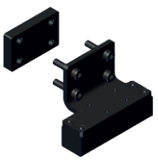
Magnet blocks (front)
clamping force 55 N
BLO-0752-21-00-00-0



Magnet blocks (front)
clamping force 80 N
BLO-0752-22-00-00-0



Magnet blocks (back)
clamping force 55 N
BLO-0466-45-01-00-0



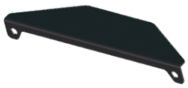
Magnet blocks (back)
clamping force 80 N
BLO-0466-48-01-00-0



Guide arm screw long
SRB-0466-10-00-00-0



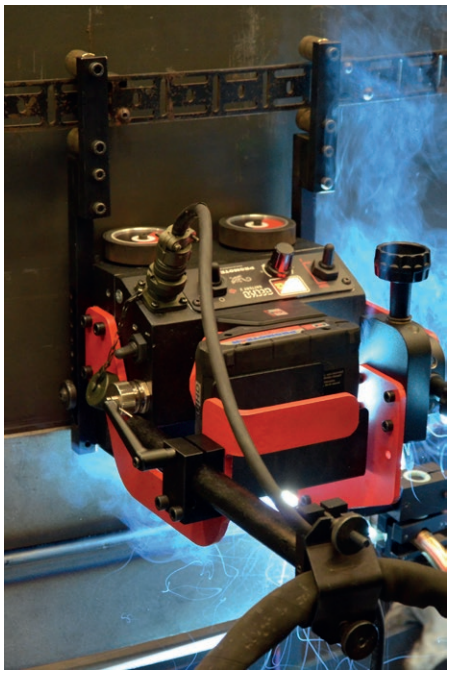
Guide arm screw short
SRB-0752-18-00-00-0

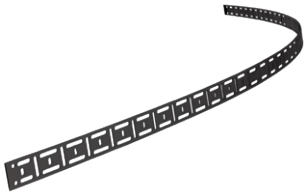


Display shield (Gecko)
OSL-0466-29-00-00-0



Display shield (Gecko Battery 2)
OSL-0526-22-00-00-0





Flexible track length 185cm (6ft) 1pc
Minimum curvature radius of 1.0 m (3.3 ft)
PRW-0466-50-01-01-0

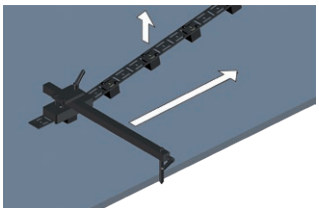


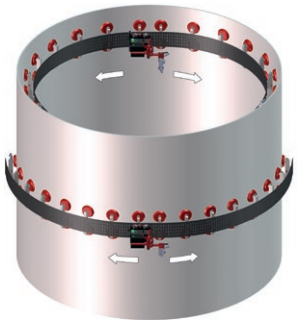


Magnetic block for flexible track
box of 10 pcs
BLO-0466-68-00-00-0



Guide adjustment tool to position the track
parallel to the edge
UST-0466-53-00-00-0

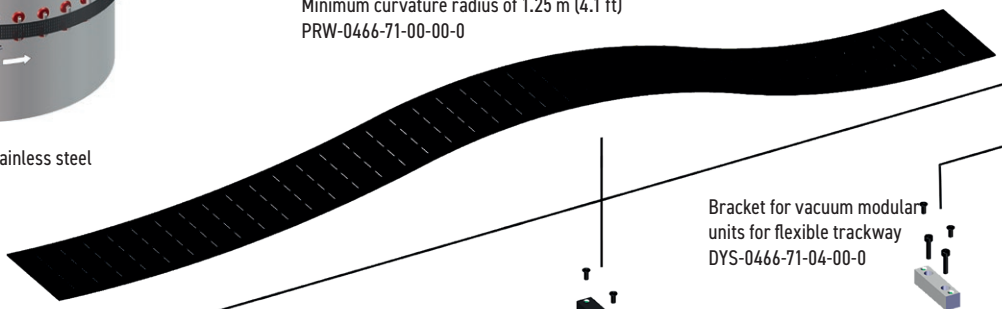




Vacuum units in use on stainless steel
or aluminum tanks

Depending on sort of fixing units in use with flexible trackway, Gecko, Gecko Battery 2 welding tractors are suitable for applications with carbon steel, stainless steel and aluminum.

Flexible trackway length 1.88 m (6.1 ft).
Minimum curvature radius of 1.25 m (4.1 ft)
PRW-0466-71-00-00-0



Bracket for vacuum modular
units for flexible trackway
DYS-0466-71-04-00-0

Bracket for magnetic
units for flexible trackway
DYS-0466-71-05-00-0

Aluminum track support
for flexible trackway
WSP-0466-71-03-00-0

Vacuum modular unit
MST-0541-10-02-00-0

Bracket for magnetic narrow
unit for flexible trackway
DYS-0466-71-07-00-0

Bracket for
magnetic
units for flexible
trackway
DYS-0466-71-05-00-0

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

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

Steel track support
for flexible trackway
WSP-0466-71-06-00-0

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

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

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

More information about Promotech's Vacuum System configurations and components is available at company website www.promotech.eu



Trackway following guide
arms (set of 2 pcs)
ZST-0466-69-00-00-0

OSC-8 PRO | PENDULUM OSCILLATOR WITH LED DISPLAY

The OSC-8 PRO is a new generation pendulum oscillator with a built-in LED display and user-friendly pre-setting and control of four welding parameters: oscillation width, oscillation speed, right and left dwell times.

This is an ideal weave welding solution for many applications including: pipes, tubes, vessels, flanges, fittings, and much more.

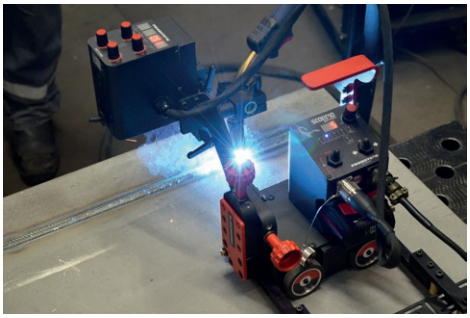
Portable OSC-8 PRO pendulum oscillator can be combined with both track-mounted and trackless welding carriages, welding positioners, turning rolls, an existing welding system, such as a column and boom, or use it independently with the rugged freestanding supports.

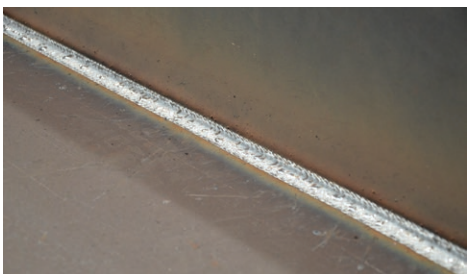












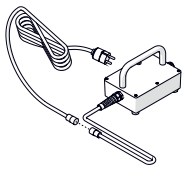
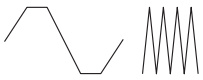
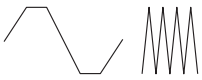
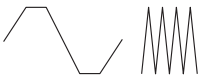
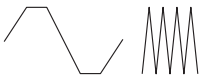
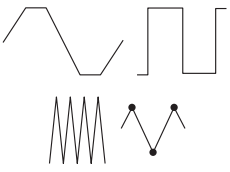
Features & Benefits:

- Lightweight and compact design
- Four adjustable parameters: oscillation width, oscillation speed, oscillation dwell time on ends
- Triangle and trapezoid weld paths
- Ergonomic control panel with four knobs
- Digital LED display enables precise setting and reading of oscillation parameters; it also indicates the current status of the OSC-8 PRO and provides safety and diagnostic information
- Two control modes: manual and external start
- Can operate as a stand-alone unit or be part of more advanced welding systems configured with welding tractors, columns and booms, positioners, gantry systems, etc.

OSC-8 PRO TECHNICAL SPECIFICATION	
Voltage	14–24 V DC
Power	50 W
Torch type	MIG/MAG
Torch diameter	16–22 mm (5/8"–55/64")
Oscillation type	Angular
Oscillation width at r=150 mm (5 29/32")	1–30 mm; 3/64"–1 3/16" (3–99%)
Oscillation speed at oscillation width of 10 mm (3/8") and zero dwell time on ends	12–300 cycles/min
Dwell time on ends	0–5 s
Maximum torque	8 N·m
Protection level	IP 20
Protection class	I
Required ambient temperature	0–50°C (32–122°F)
Weight	2.1 kg (4.6 lbs)
Product code:	OSC-0799-10-00-00-0

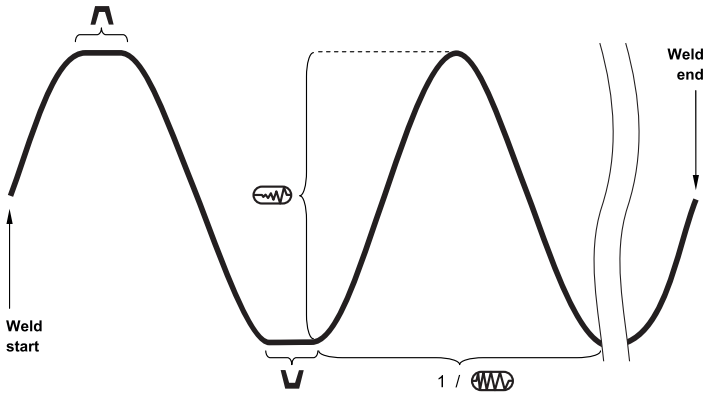
OSC-8 PRO configurations at glance:

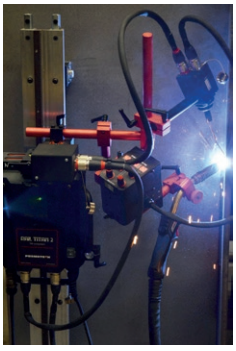
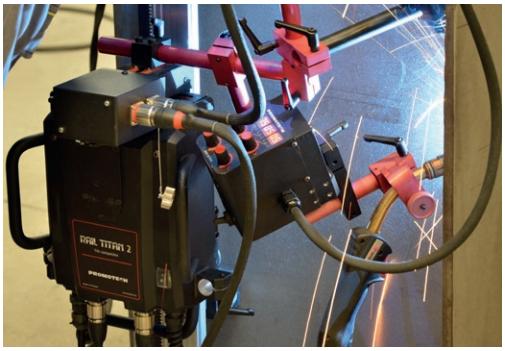
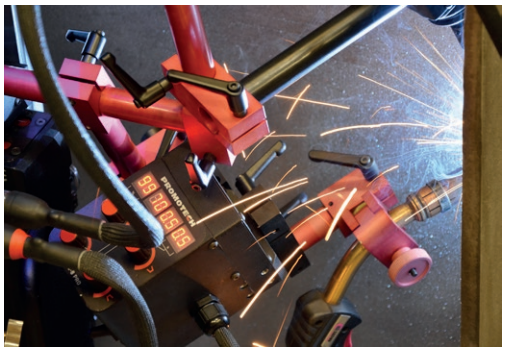
The OSC-8 PRO can be used in conjunction with a range of external equipment to create more advanced welding systems with a variety of power supplies, available operating modes and achievable weld paths (see table below).

	GECKO RAIL BULL RAIL TUG Freestanding supports PRO-WP 150 PRO-WP 300 PRO-WP 300P PRO-WP 750P	Gecko Battery 2 Rail Titan 2	SCORPIO BATTERY	Rail Titan 2 WA Compact Mini C&B System (SWSO)
Power supply method				
	External Power Supply 	Directly from oscillation socket of the machine	Directly from oscillation socket of the Scorpio Battery	Directly from oscillation socket of the machine
MANUAL operation mode				
Oscillator settings:	MANUAL	MANUAL	MANUAL	MANUAL
Communication with the machine:	NO	NO	NO	NO
Weld paths:	TRAPEZOID and TRIANGLE 	TRAPEZOID and TRIANGLE 	TRAPEZOID and TRIANGLE 	TRAPEZOID and TRIANGLE 
EXTERNAL operation mode				
Oscillator settings:	N/A	N/A	MANUAL	From remote control pendant of the machine
Communication with the machine:	N/A	N/A	YES (start/stop of both tractor & oscillator)	YES
Weld paths:	N/A	N/A	TRIANGLE and TRIANGLE with dwell times at both ends 	TRAPEZOID, SQUARE, TRIANGLE and TRIANGLE with dwell times at both ends 

Oscillation parameters:

Parameter	Value	Description
	3–99%	Oscillation width
	0–99% (where 0%=5s, 99%=0.2s) 0.2–5 s	Oscillation speed
	0–5 s [step: 0.1]	Oscillation dwell time in right position
	0–5 s [step: 0.1]	Oscillation dwell time in left position



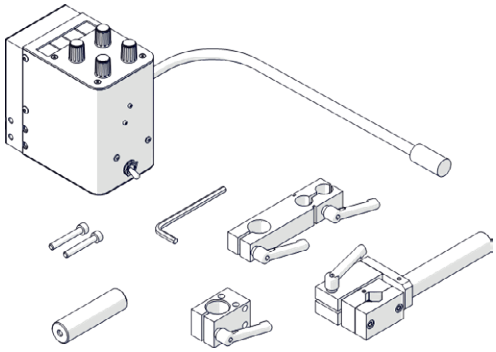









Standard shipping set:

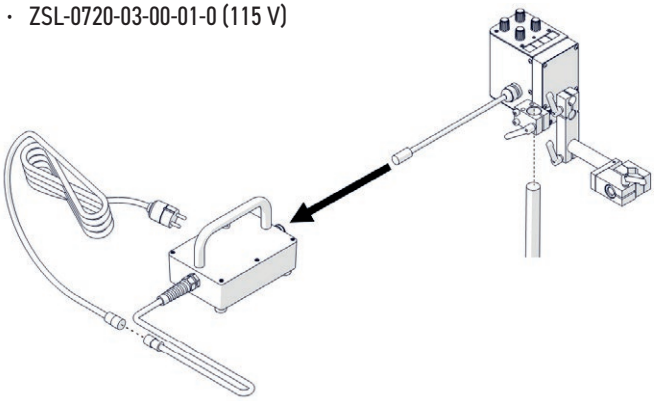
- Oscillator
- 5 mm hex wrench
- Arm
- Low rod torch holder with clip
- Clamping block
- M6x40 screw 2 pcs
- 80 mm (3 5/32") rod
- Operator's Manual



Optional Power Supply:

Product codes:

- ZSL-0720-03-00-05-0 (230V)
- ZSL-0720-03-00-04-0 (230 V, India type D)
- ZSL-0720-03-00-03-0 (230 V, UK type G)
- ZSL-0720-03-00-02-0 (230 V, Australia)
- ZSL-0720-03-00-01-0 (115 V)



LIZARD | PROGRAMMABLE WELDING TRACTOR

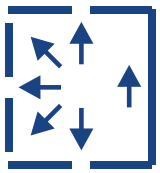
Lizard is a portable, programmable, trackless welding tractor designed to produce consistently high-quality welds.

It can be programmed in continuous or stitch welding modes.

Welder-friendly two-function buttons enable storage and reproduction of up to 40 different welding programs for various joint configurations and multi-pass, multi-layer welds.

Constant, continuous, and repeatable travel speed enables weld bead geometry that is exact to the required specifications, thus reducing costly over welding and decreasing filler metal usage, substantially.

Lizard is capable of producing weave welds by means of an optional pendulum oscillator. The oscillator allows for precise control of weave width, weave speed, and left/right side wall dwell and is particularly useful for vertical welding.





Applications:

- Trailer manufacturing
- Truck tanks
- Oil tanks
- Water storage tanks
- Transformers
- Shipyards
- Any application demanding stitch or a long, continuous fillet weld



A very important optional feature of LIZARD is oscillation attachment to produce weave welds.

The unit can identify its connection automatically and configure suitable operating modes.

Torch oscillator increases significantly functionality of Lizard welding tractor by allowing it to operate in most out-of-position welding jobs.

TECHNICAL SPECIFICATIONS LIZARD	
Voltage	1~ 115–230 V, 50–60 Hz 42 V, 50–60 Hz
Power	25 W
Welding position (according to EN ISO 6947 and AWS/ASME)	PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G PF / 3F / 3G with optional oscillator) PG / 3F / 3G (with optional oscillator)
Programmable variables	tractor speed, weld length, skip, crater fill, backweld, total length
Welding settings storage	up to 40
Menu language	English, French, German, Polish, Portuguese, Russian, Spanish, Turkish
Torch diameter	16–22 mm (0.63–0.87"); up to 35mm (1.38") option
Minimum radius of curved workpiece surface	1500 mm (5 ft)
Minimum workpiece thickness	5 mm (0.2")
Ground clearance	5 mm (0.2")
Horizontal pulling force	220 N
Vertical pulling force	150 N
Cross slide adjustment range	0–35 mm (0–1.38") up-down, left-right
Horizontal speed	0–130 cm/min (0–51 3/16 in/min)
Vertical speed	0–120 cm/min (0–47 1/4 in/min)
Limit switch	at both sides
Weight	14 kg (31 lbs)
Product Code (115–230 V, 50–60 Hz, plug EU) Product Code (115–230 V, 50–60 Hz, plug UK) Product Code (42 V, 50–60 Hz)	WOZ-0754-10-20-02-0 WOZ-0754-10-10-03-0 WOZ-0784-10-42-01-0


Programming device up to 40 welding programs


Dual Arc Ignition



Min. path convex radius
1500 mm (5 ft)



Angular oscillation


Dual torch welding



Min. path concave radius
1500 mm (5 ft)


Continuous welding

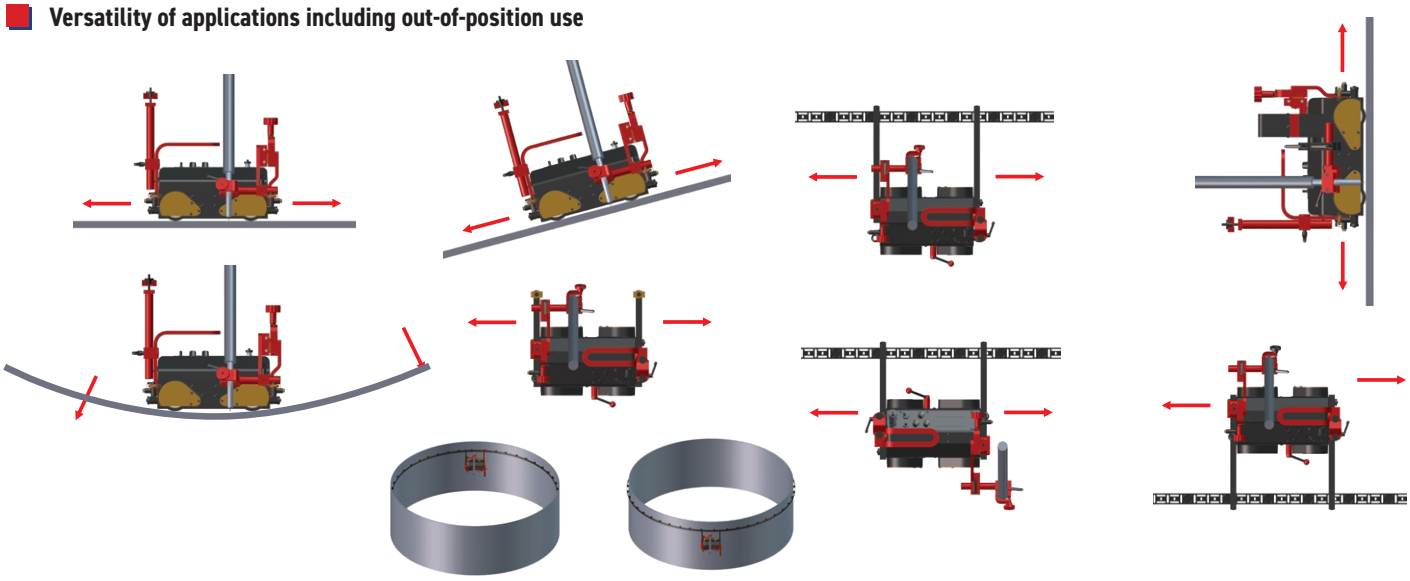

Horizontal speed
0–130 cm/min (0–51 3/16 in/min)


Vertical speed
0–120 cm/min (0–47 1/4 in/min)


Stitch welding


Weight 14 kg (31 lbs)

Versatility of applications including out-of-position use

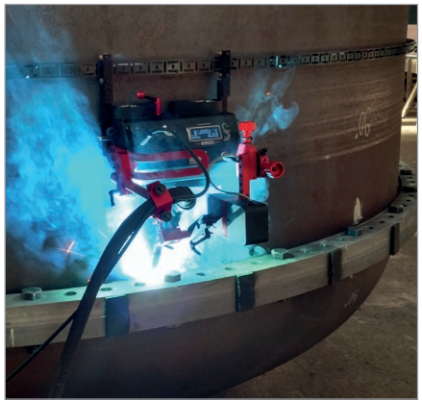


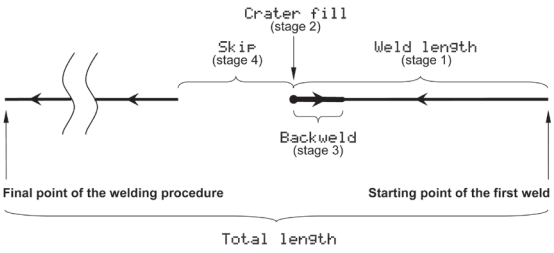
Primary features and benefits:

- Up to 40 complete programs may be stored in non-volatile memory to repeat optimum weld procedures
- Multifunctional LCD and 2-function buttons for programming selected welding patterns and parameters such as weld length, the distance between welds, reverse fill, crater fill time, and others
- The closed-loop speed control system stabilizes travel speed, enabling uniform heat input to produce consistently high-quality welds
- Lizard travels at full speed between stitches, which saves valuable welding time.
- The optional torch oscillator produces weave welds
- 4-wheel drive magnetic traction permits out-of-position use
- Compact, lightweight design with a durable aluminum cast housing
- Convenient Power Supply 115–230 V, 50–60 Hz or 42 V, 50–60 Hz
- Positive magnetic traction permits out of position use
- Magnet on/off lever permits easy set up and adjustment on work piece
- Heat resistant silicone wheels
- Quick clamping Torch Holder mechanism for different types of MIG/MAG torches with diameters of 16-22 mm (5/8" – 7/8"); optionally up to 35 mm (1-3/8")
- Precise torch adjustment with screw drive cross slide
- Consistent heat input reduces distortion
- Reduced wasted filler metal – eliminates over welding
- Automatic arc on/off system initiates welding and travel, simultaneously
- Capable of carrying and controlling 2 torches (without oscillation)
- Self-guiding roller arms eliminate the need for track
- Multi-surface guiding





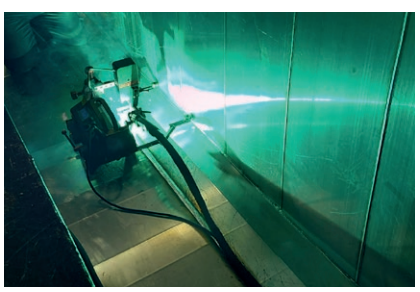




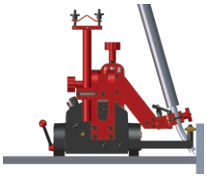
Programmable variables diagram

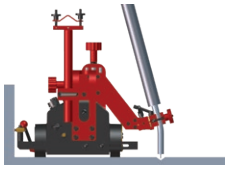
1. Operator's panel with control knobs and switches
2. Limit switch
3. Adjustable guide arm
4. Quick clamp torch holder
5. Cross slide assembly
6. Cable anchor
7. Main Power Switch (0/I)
8. Weld contact / Arc ignition socket
9. Magnetic adhesion release lever





Standard accessories







Standard guide arms
(set of 2 pcs)
PRW-0476-56-00-00-0



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



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



Cable anchor
PDT-0754-12-00-00-0

Optional accessories



Torch clamp 16–22 mm
ZRZ-0752-07-01-00-0



Torch clip 16–22 mm
ZCS-0476-06-01-00-0



Torch clamp 22–35 mm
ZRZ-0466-19-00-00-0



Short Rod Clamp
WLK-0476-20-01-00-0



Short rod torch holder
with clip 16–22 mm
UCW-0476-27-00-00-0



Fall arrester device
URZ-000001



Long rod torch holder
with clamp 16–22 mm
UCW-0752-07-00-00-0



Long rod torch holder
with clip 16–22 mm
UCW-0466-22-00-00-0



Long Rod Clamp
WLK-0466-04-10-00-0



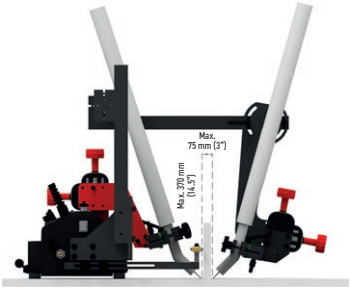
Torch Extension Arm
PRD-0466-43-00-00-0

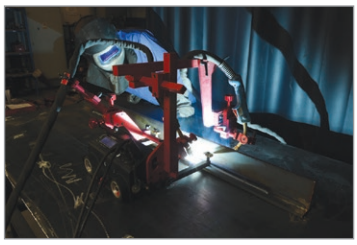


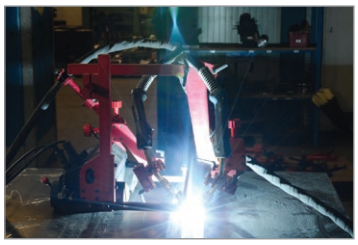
Extended cross-slide
0-76 mm (0-3") either
up-down or left-right
ZSP-0466-46-00-00-1



Dual Torch Mount
PDT-0466-40-00-00-0

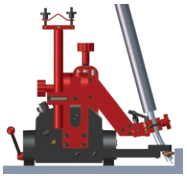






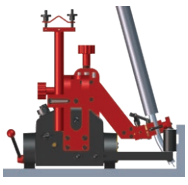
Optional accessories for multi-surface guiding and variety of applications

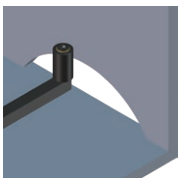




Low Guide Arms (set of 2 pcs)
PRW-0476-54-00-00-1

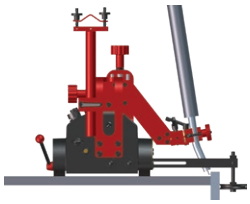






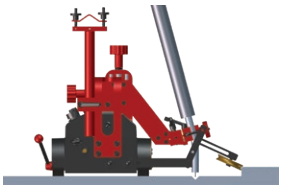
High Guide Arms (set of 2 pcs)
PRW-0476-55-00-00-1





Edge Following Guide Arms (set of 2 pcs)
PRW-0476-21-00-00-1

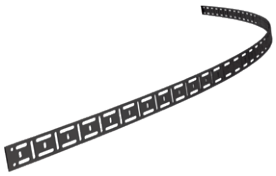




Adjustable Guide Arms (set of 2 pcs)
PRW-0476-22-00-00-1



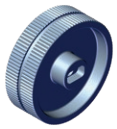
Track Following Guide Arms
(set of 2 pcs)
PRW-0476-50-01-00-1



Flexible Track 185cm (6ft) 1 pc
PRW-0466-50-01-01-0



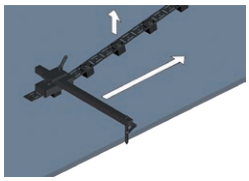
Magnetic block for flexible
track box of 10 pcs
BLO-0466-68-00-00-0

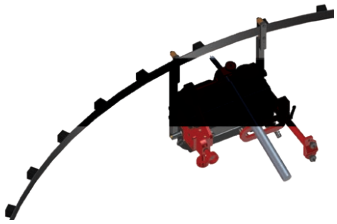


Stainless steel driving
wheel
KOL-0476-57-00-00-0



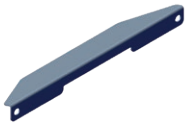
Guide adjustment tool to position
the track parallel to the edge
UST-0466-53-00-00-0



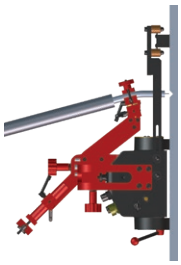




Magnet guide arms (set of 2 pcs)
PRW-0476-52-00-00-1



Display shield
OSL-0476-23-00-00-0





Optional Pendulum Oscillator

The oscillator features precise control of weave width, weave speed and dwell times.



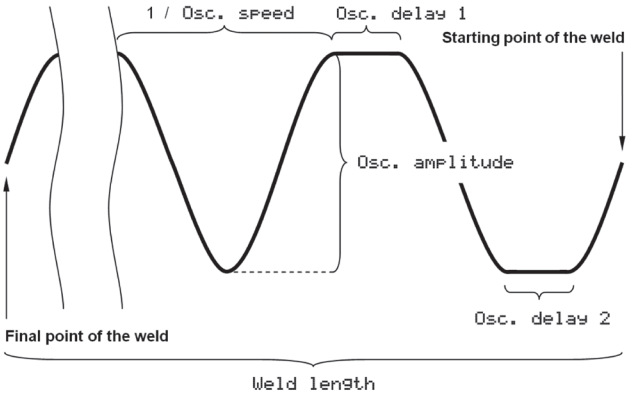
Oscillator
ZSP-0477-10-00-00-0

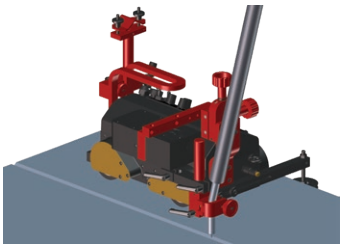


Torch Holder Lower Rod Clamp Assembly
UCW-0476-06-00-00-0



Oscillator settings diagram







Oscillation type	pendulum (0°–11°)
Oscillation amplitude	1–30mm (1–100%) at r=150 mm (5.9")
Oscillation speed at oscillation amplitude of 10 mm (25/64") and zero dwell time on ends	7–164 cycles/min (1–100%)
Oscillation delay time	0–5 s (at external points)
Power	12 W
Weight	2.6 kg (5.7 lbs)



Fillet Welding with oscillator



RAIL BULL | WELDING & CUTTING RAIL TRACTOR

RAIL BULL is a digitally controlled welding tractor with an integrated linear oscillator that produces straight and trapezoid weld paths.

The tractor can move along rigid or semi-flexible tracks and is suitable for variety of circumferential and irregular surface applications down to min. radius of 5000 mm.

The tracks can be clamped to ferrous materials with magnetic units and to non-ferrous materials by means of a vacuum track system incl. vacuum pump and vacuum units.

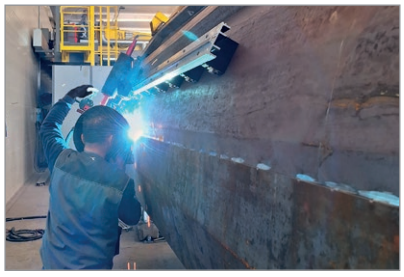
Featuring a rack and pinion drive system with electronic speed control, RAIL BULL can produce consistent, high-quality welds in flat, vertical, or horizontal positions.

42V AC version available



Features and benefits:

- Closed loop position control system based on an electric motor with an encoder ensures increased accuracy of speed and positioning
- Integrated linear oscillator for weave welding and overlay
- Multifunctional LCD shows process parameters and warnings
- Compact, lightweight design with a durable aluminum cast housing
- Convenient power supply 115–230 V, 50–60 Hz or 42 V, 50–60 Hz
- Rail Bull produces consistently high-quality welds and cuts in a fraction of the time required by manual operations
- Quick clamping torch holder mechanism for different types of MIG/MAG 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
- Ready to work in both vertical and horizontal positions
- Consistent heat input reduces distortion
- Reduce wasted filler metal - eliminates over welding
- Automatic arc on/off initiates welding and travel, simultaneously
- Improves working environment - removes operator from heat and fumes
- Rack and pinion drive





RAIL BULL TECHNICAL SPECIFICATION		
Voltage		1~ 115–230 V, 50–60 Hz 42 V, 50–60 Hz
Power		100 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
Minimum curve radius of a semi flex track		5 m (16 ft)
Torch type		MIG/MAG
Torch diameter		16–22 mm (5/8"–55/64") up to 35 mm (1.38") option
Minimum workpiece thickness for magnetic clamping		5 mm (13/64")
Horizontal pulling force		350 N
Vertical pulling force		150 N
Cross slide adjustment range		0-35 mm (0-1 3/8", up-down, left-right)
Horizontal speed		0-120 cm/min (0-47 1/4 in/min)
Vertical speed		0-110 cm/min (0-43 5/16 in/min)
Oscillation type		Linear
Oscillation path		Trapezoid, straight line
Oscillation width		0-50 mm (0-1 31/32")
Oscillation speed		0-1500 mm/min (0-59 1/16 in/min)
Oscillation dwell time at center and on ends		0-5 s
Maximum oscillator pulling force		100 N
Weight		16,5 kg (36.3 lbs)
Product Code (115–230 V, 50–60 Hz, plug EU)		WOZ-0760-10-20-00-0
Product Code (115–230 V, 50–60 Hz, plug G)		WOZ-0760-10-20-01-0
Product Code (42 V, 50–60 Hz)		WOZ-0624-10-04-00-0


Continuous welding

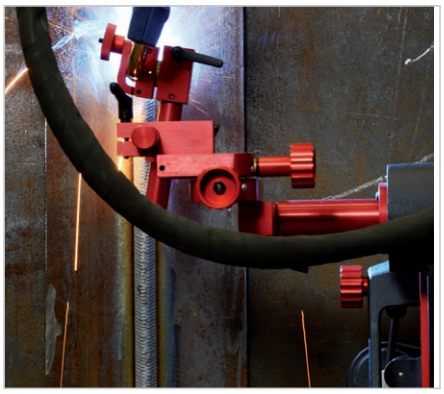

Horizontal speed 0–120 cm/min

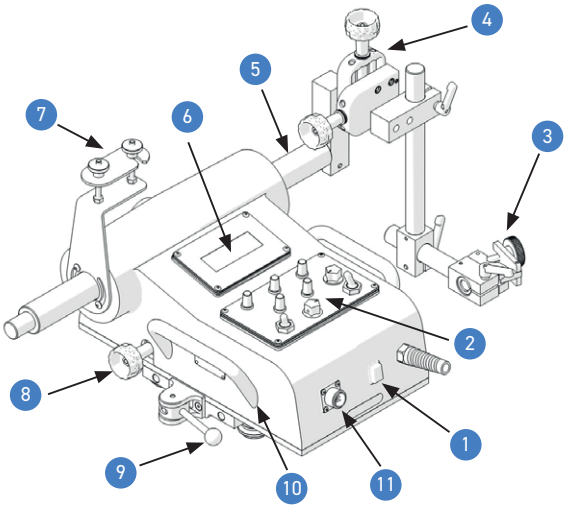

Vertical speed 0–110 cm/min


Linear oscillation with trapezoid and straight line paths

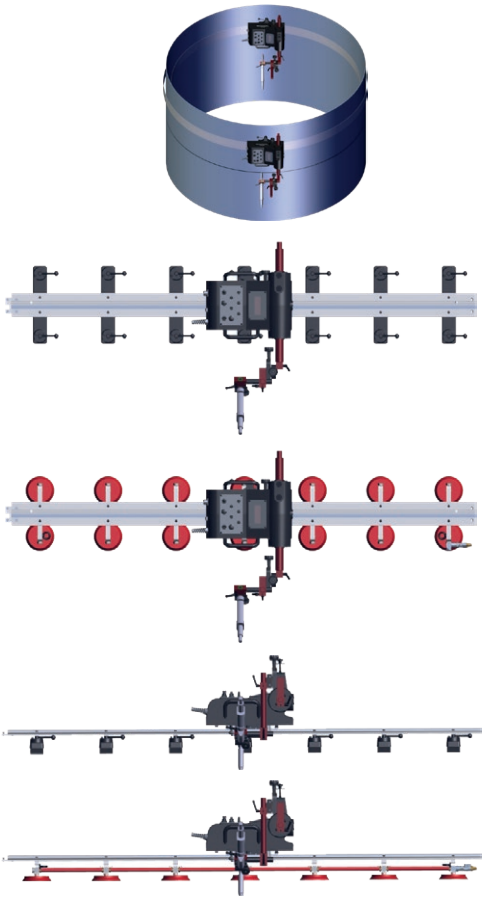

Min. path convex radius 5000 mm


Min. path concave radius 5000 mm

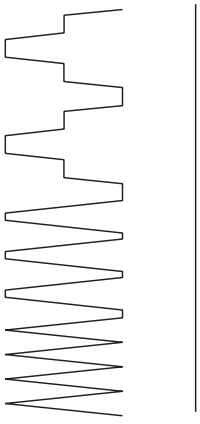




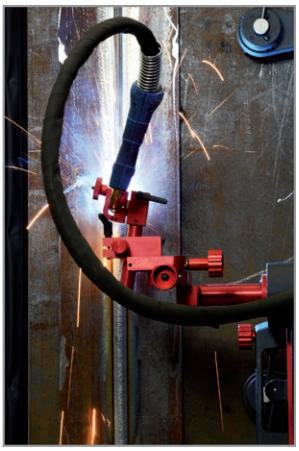
1. Power switch
2. Control panel
3. Torch holder with clamp
4. Cross slide assembly
5. Oscillator arm
6. Display
7. Cable anchor
8. Drive clutch knob
9. Mounting lever
10. Carrying handle
11. Arc ignition socket



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. Straight The tractor travels continuously while oscillation is switched-off.

Standard shipping set:

- Carton box
- Cross slide assembly
- Short rod torch holder with clamp
- 6.5 m (21 ft) arc ignition cable
- 3 mm hex wrench
- 4 mm hex wrench
- Operator's Manual

Standard accessories:



Dual Arc Ignition Cable of 6.5 m (21 ft)
KBL-0466-17-00-00-0



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

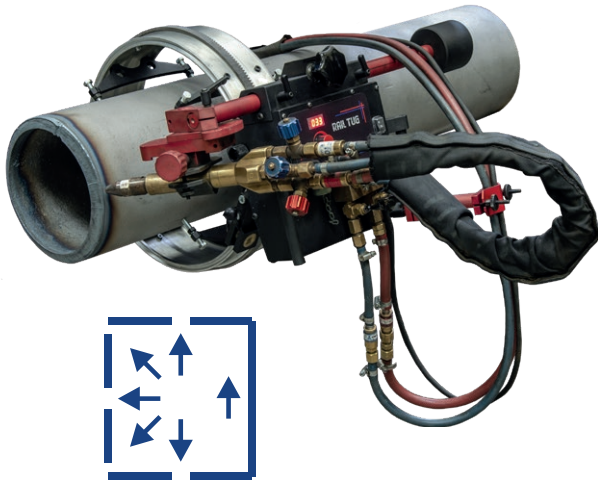


Cable Anchor
WSP-0760-06-00-00-0



Cross slide assembly
PRW-0482-11-00-00-0

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")

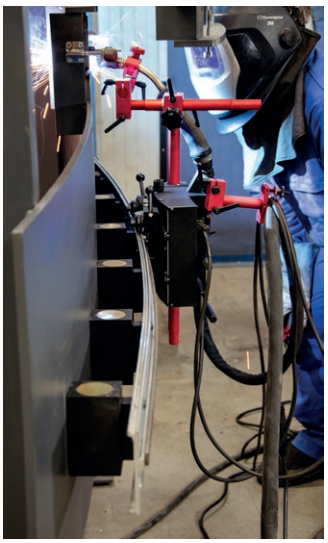
Standard ring tracks are available for tube diameters from 200 mm (8") up to 3000 mm (10 ft).

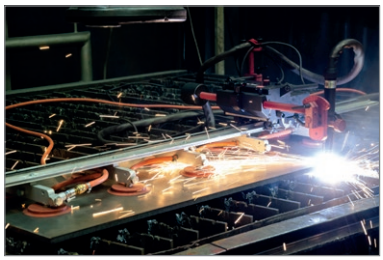
Using a vacuum system allows the tracks to be clamped to non-ferrous surfaces (stainless steel, aluminum etc.)

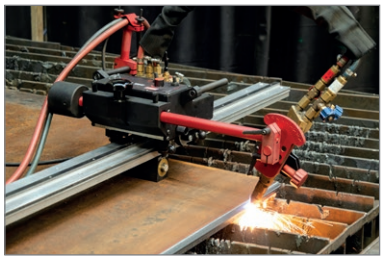
The Rail Tug economically meets a broad array of welding and cutting applications on flat or curved plate, tube and pipe.

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 OD
  - Hi-Flex tracks on diameters from 1500 mm (59") OD upwards
  - Semi-flexible tracks can be bended to minimum radius of 5 m 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







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") OD up to 3 m (10ft) OD
	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	16–22 mm (0.63–0.87")
	SAW, Plasma	
	Oxy-fuel	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



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

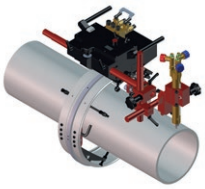
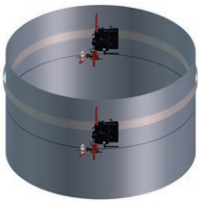
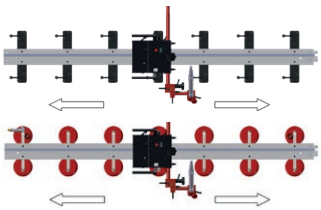
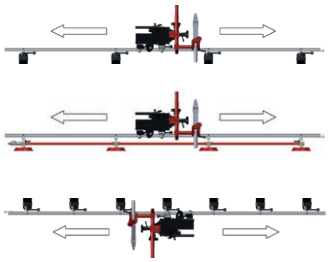


Hi Flex Track
min OD 1500 mm (59")

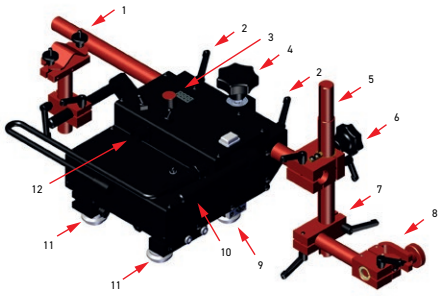


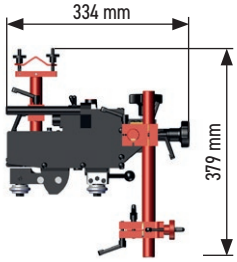
Min. path convex radius
for semi-flexible tracks
is 5 m (16 ft)

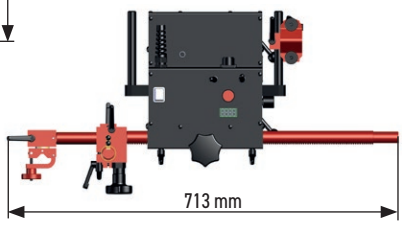
Rail Tug can work in various welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.

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







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



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



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



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



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



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

Optional accessories:



Gear Rack
Adjustment Tool
PKT-0341-13-00-00-0



700 mm (25.6")
Geared Rack
RAM-0475-07-03-00-0



1000 mm (39.4")
Geared Rack
RAM-0753-13-00-00-0

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



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



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



203 mm (8") rod
KLM-0236-00-16-00-0



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



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



Precise Torch Holder with
angle and height adjustment
UCW-0753-08-00-00-0



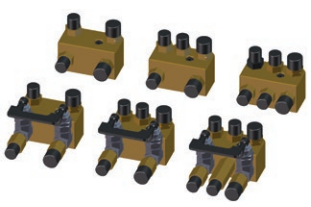
Machine Barrel Torch Holder
Ø 30 mm (1.18")
UCW-0475-61-00-00-0

Machine Barrel Torch Holder
Ø 35 mm (1.38")
UCW-0475-29-00-00-1



Precise Machine Torch Holder
Ø 30 mm (1.18")
UCW-0753-22-00-00-0

Precise Machine Torch Holder
Ø 35 mm (1.38")
UCW-0753-24-00-00-0



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

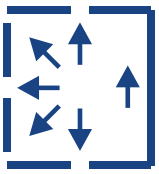
Standard shipping set:

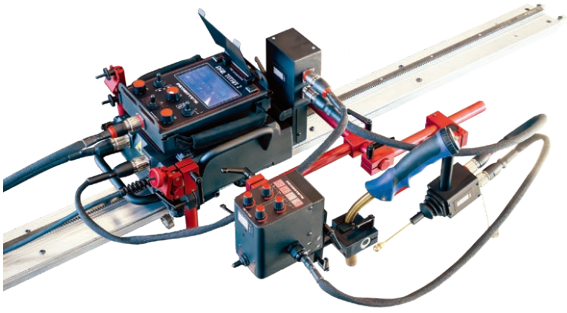
- Rail Tug tractor
- Cardboard box
- 300 mm (12") rack with 180 mm (7") adjustment
- Rack holder
- Clamping block with levers
- Short rod torch holder with clamp
- Cable anchor
- 6 mm hex wrench
- 6.5 m (21 ft) arc ignition cable
- 3 m (10 ft) power cord
- Operator's Manual

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.

TIG compatible



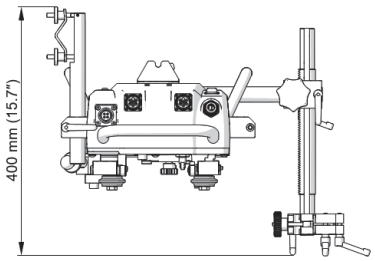


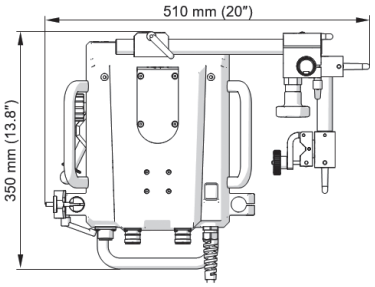
Primary features and benefits:

- 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
  - 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 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 (115–230 V, 50–60 Hz, plug EU)		WOZ-0813-10-20-00-0

Dimensions:






Linear oscillation with trapezoid, triangle, square and straight line paths


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


Hi Flex Track
min OD 1500 mm (5 ft)
min ID 3400 mm (11 ft)


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


Continuous welding

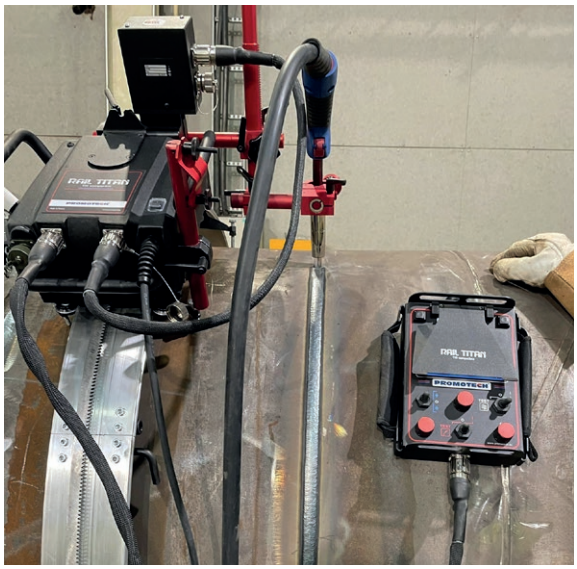

Stitch welding

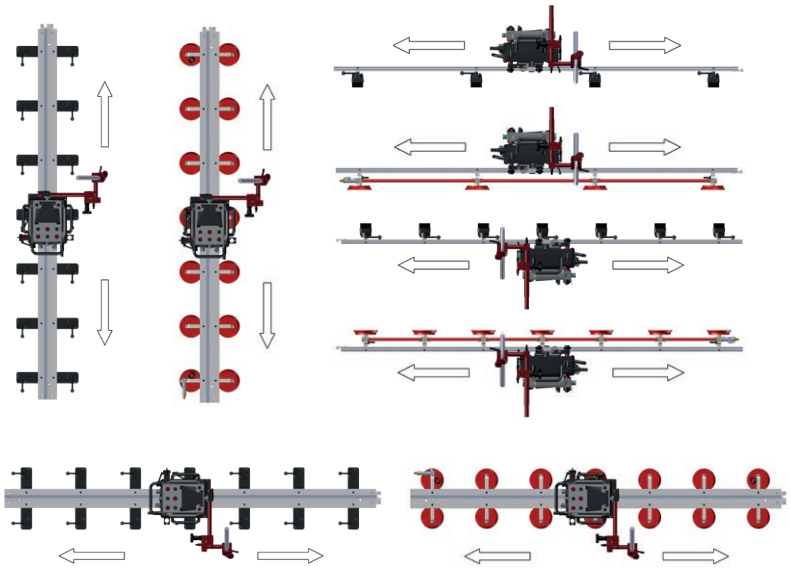

Horizontal speed
0-250 cm/min


Vertical speed
0–250 cm/min


Mirror switch

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.



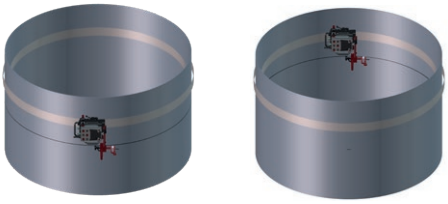


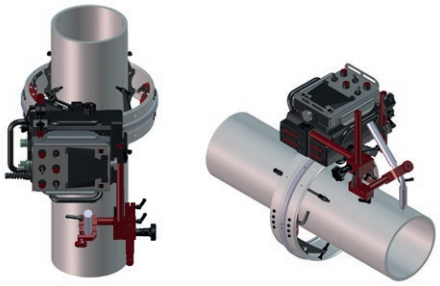
Mirror Switch

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.



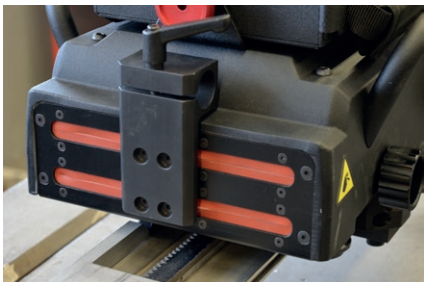








Single lever with lock to position Rail Titan 2 to track



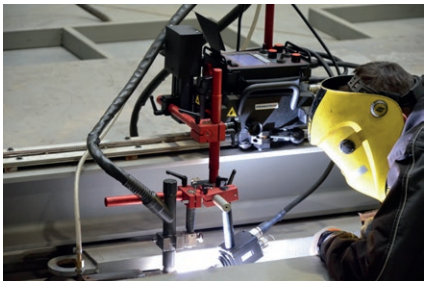
Silicone covers protect against dirt and spatter



Seam tracking works with and without oscillation

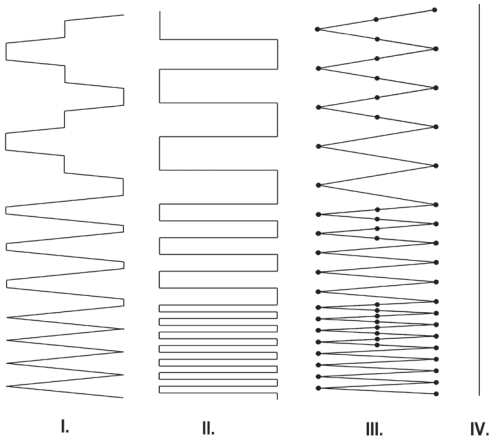


Reliable signal sockets and plugs



TIG welding of titanium plate

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 oscillation is switched-off.



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

Standard accessories





Remote control pendant



Power cord 3 m (10 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 (115 V UK)



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



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



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



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



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



Cable anchor
UCW-0654-02-00-00-0



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





Seam tracking attachment
CZJ-0654-05-00-00-0



Sensor tip (rod required)
ADT-0506-43-00-00-0



Sensor tip (rod required)
ADT-0506-40-00-00-0



Rod for sensor tips
WSP-0523-07-01-13-0



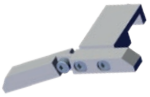
Sensor tip (rod required)
ADT-0506-41-00-00-0



Motorized vertical slide
OSK-0654-04-00-00-0



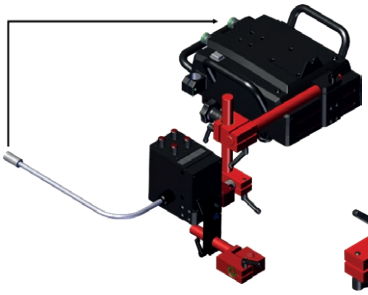
Transport Attachment
PEP-0523-93-00-00-0



Contact block for Hi-Flex track
ZDR-0673-08-00-00-0



Rack adjustment tool
PKT-0341-13-00-00-0



203 mm rod
KLM-0236-00-16-00-0

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

Standard shipping set:

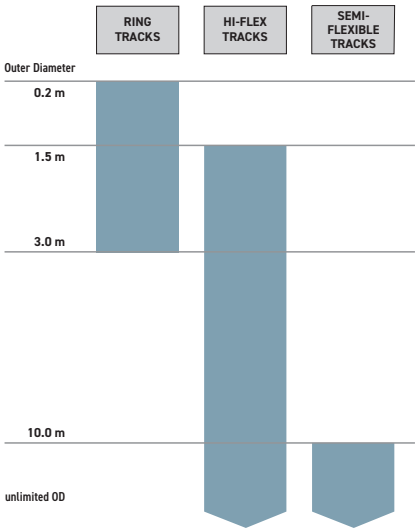
- Rail Titan 2 tractor
- Plastic box
- Remote control pendant
- Set of 3 signal cables
- Power cord
- 6.5 m (21 ft) arc ignition cable
- 300 mm (12") rod
- 300 mm (12") rack with 180 mm (7") adjustment
- Rack holder
- Clamping block with levers
- Short rod torch holder with fits-all clamp
- Cable anchor
- 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

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

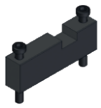


Ring tracks suitable for Rail Titan 2 and Rail Tug

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



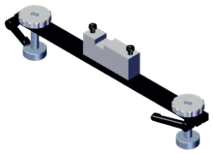
Ring tracks can be equipped with various supports depending on the customer's needs.



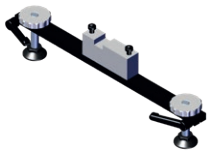
Bracket for ring track supports to expand pipe diameter range by 50 mm downwards
DYS-0523-14-14-00-0



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



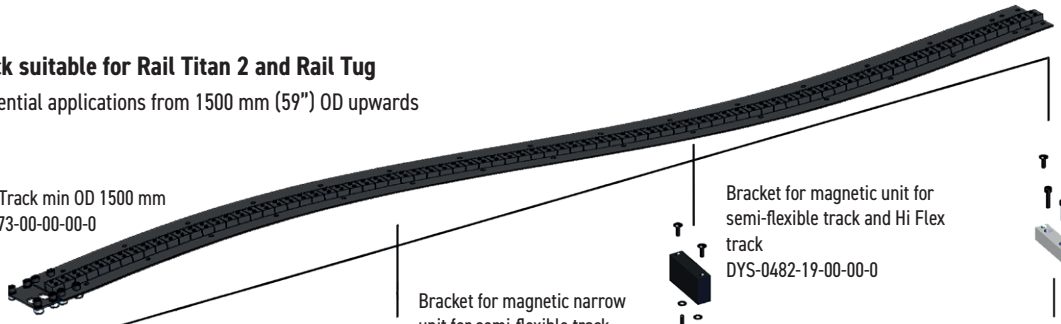
Support with magnets
WSP-0654-13-00-00-0



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

Hi-Flex track suitable for Rail Titan 2 and Rail Tug

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

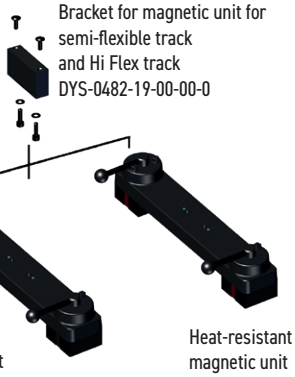


Hi Flex Track min OD 1500 mm
TRO-0673-00-00-00-0

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

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

Bracket for vacuum modular unit for semi-flexible track and Hi Flex track
DYS-0541-11-01-00-0

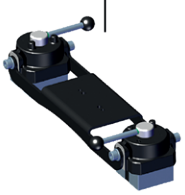


Magnetic unit
ZSP-0475-92-00-00-0

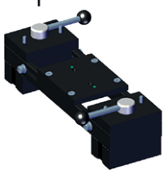
Heat-resistant magnetic unit
ZSP-0475-93-00-00-0



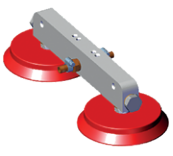
Magnetic narrow unit with hexagon
PDS-0582-10-00-02-0



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



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



Vacuum modular unit
MST-0541-10-02-00-0

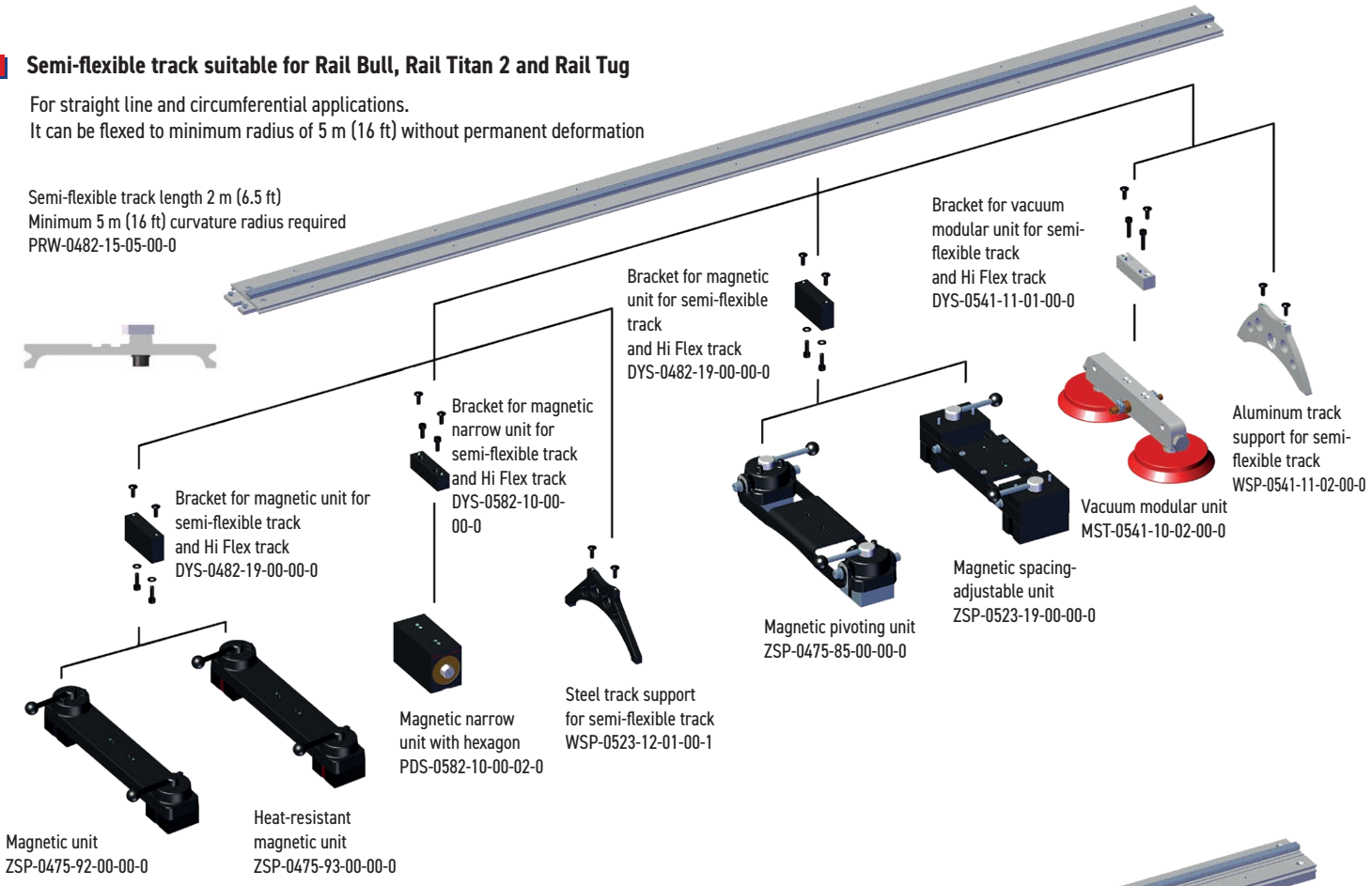
The regular rollers should be replaced with the optional Hi Flex track guiding rollers



Set of Hi Flex Track Guiding Rollers (4 pcs)
ZSP-0673-07-00-00-0

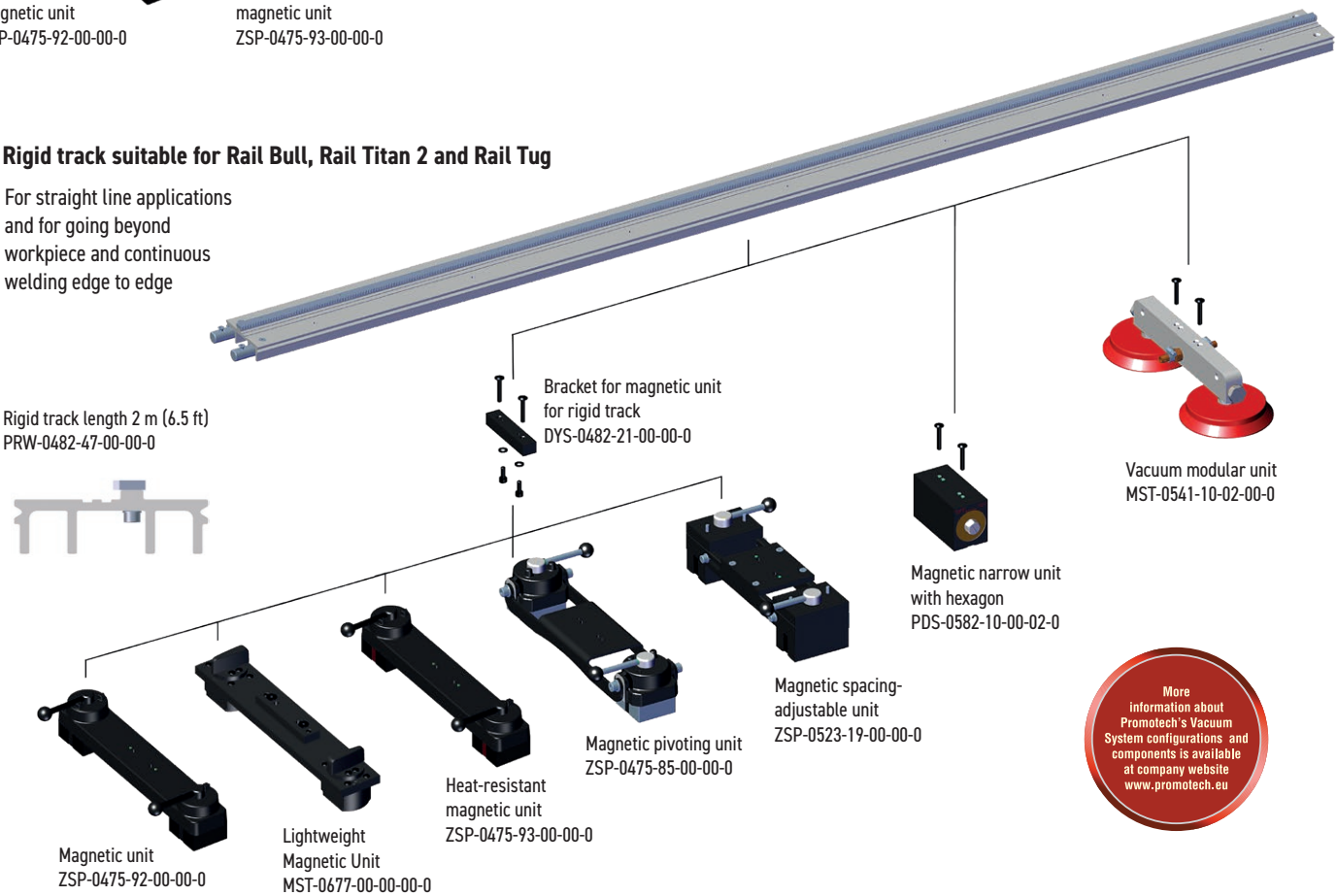
Semi-flexible track suitable for Rail Bull, Rail Titan 2 and Rail Tug

For straight line and circumferential applications.
It can be flexed to minimum radius of 5 m (16 ft) without permanent deformation



Rigid track suitable for Rail Bull, Rail Titan 2 and Rail Tug

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



More information about Promotech's Vacuum System configurations and components is available at company website www.promotech.eu

Optional accessories for variety of applications:



Gear Rack Adjustment Tool
PKT-0341-13-00-00-0

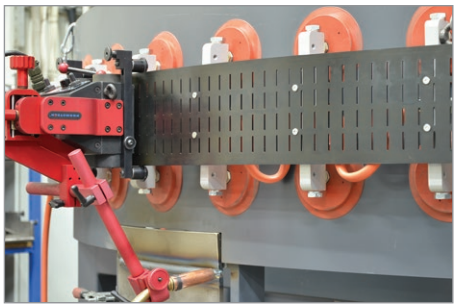
16-22mm Torch Clip
ZCS-0476-06-01-00-0

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

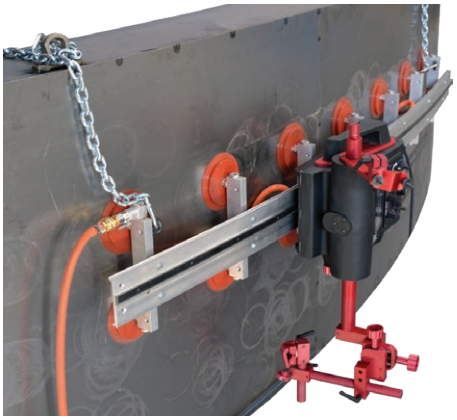
Transport Attachment
PEP-0482-18-00-00-0

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 semi-flexible 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

Technical specification

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 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)		
Minimum number of vacuum units	Track type	Horizontal position	Wall position	Curve
	Hi-Flex Track	8	8	8
	Semi-Flex Track	4	7	7
	Rigid Track	4	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^3/h (141 ft^3/h)
Ambient temperature	0–40°C (32–104°F)
Safety reservoir volume	10 l (0.35 ft^3)
Weight (with safety reservoir)	23 kg (51 lbs)

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



Modular vacuum unit may perform various functions and can be easily configured in 4 different ways as



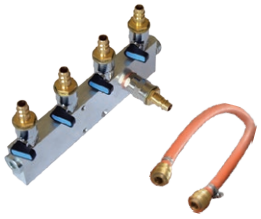
entry unit | middle unit | extension unit | end unit

Modular vacuum unit
- consists of 2 vacuum pads and manifold block

MST-0541-10-02-00-0



Vacuum pad (spare part)
SSW-0541-99-01-00-0



4-way manifold with connection cable
- can separately connect vacuum units of up to four rails
- allows rail leapfrogging during operation

ROZ-0541-04-00-00-0





Pump connection hose
- connects pump to entry vacuum unit (10 m / 33 ft)

PWD-0541-06-00-00-0





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



Hose clamp
OPS-000005



2-meter / 7-foot hose
- for interconnecting vacuum units within rail tracks
- 1 per rail track
- should be cut to the required length

PWD-0541-10-07-00-0





Coupled hose
- for interconnecting vacuum units of different rail tracks
- 1 per additional rail track (serial connection)

PWD-0541-10-04-00-0



Quick coupling
SZB-000018



Hose fitting
KRC-000013

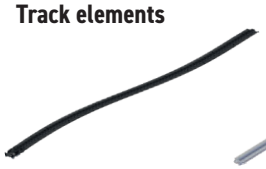


Hose extension adapter
LCZ-0541-05-00-00-0



Safety eye bolt
SRB-000365

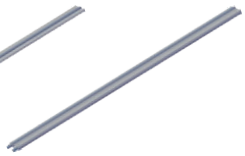
Track elements



Hi Flex Track
min OD 1500 mm
TRO-0673-00-00-0



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



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



Bracket for vacuum modular unit for semi-flexible track and Hi Flex track
DYS-0541-11-01-00-0



Flexible trackway
length 1.88 m (6.1 ft).
PRW-0466-71-00-00-0



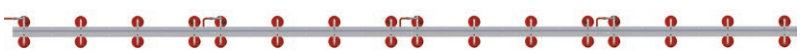
Bracket for vacuum modular units for flexible trackway
DYS-0466-71-04-00-0

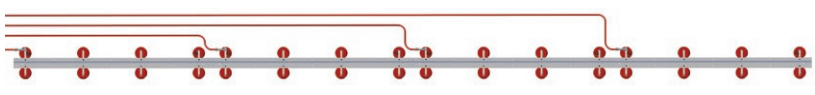
System configuration for serial connection

System includes:

- Entry vacuum unit (1 unit per rail track)
- Middle vacuum units (up to 5 units per rail track)
- Extension vacuum unit (for serial connection)

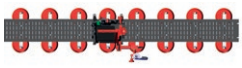


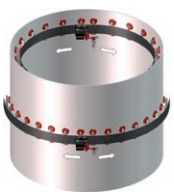






4 vacuum units are required per rail track placed in horizontal position





Vacuum units in use on stainless steel or aluminum tanks



7 vacuum units are required per rail track placed on walls or curvatures



Minimal OD is 10 m (32 ft)



Minimal OD is 3 m (10 ft)



DRAGON | CUTTING TRACK TRACTOR

Dragon is intended to transport different types of oxy-fuel cutting torches with a grip diameter 28-35mm (1-1/8" to 1-3/8") to perform machine quality cutting and beveling processes in a variety of applications.



DRAGON
Cutting tractor for Oxy-Fuel

42V AC version available



DRAGON HS
Cutting tractor for plasma



DRAGON BATTERY
Cordless cutting tractor

Common features and benefits of the DRAGON family:

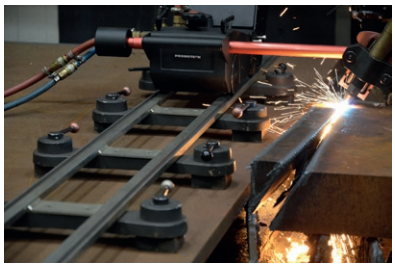
- Oxy-fuel and plasma cutting
- Digital speed control and stabilization for high quality cuts
- Cutting and bevelling up to 45° (also parallel, using 2 torches)
- LED display with readouts of both actual and set speeds, as well as report messages
- Runs on a rail or directly on a workpiece
- Quick drive release switch for easy re-positioning
- Ergonomic handles on both sides make it easy to carry the tractor
- Wide assortment of optional accessories like machine barrel torch holders, manifolds, circle cutting attachment make it useful for variety of applications.
- Track sections can be joined together for the required run length
- The tracks can be fixed on both ferrous and non-ferrous materials by means of magnetic or vacuum units
- Various power supply options: 115–230 V, 50–60 Hz, 42V AC or 18V DC battery

DRAGON HS more:

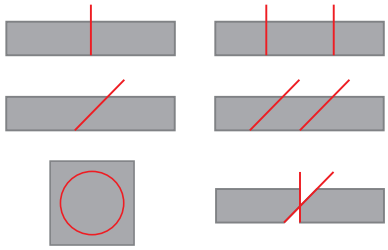
- High travel speed of up to 300 cm/min to increase plasma cutting capacity

DRAGON BATTERY more:

- Ideal for use in the field - no need for mains power and one less cable to carry around
- Convenient 18 V DC battery supply (same 4.0 Ah battery as other PROMOTECH battery-powered tractors)
- The LiHD battery, supported by intelligent battery management, ensures maximum power availability for an extended period







TECHNICAL SPECIFICATIONS			
	Dragon	Dragon HS	Dragon Battery
Voltage	1~ 115–230 V, 50–60 Hz 42 V, 50–60 Hz	~ 115–230 V, 50–60 Hz	18 V DC, 4 Ah
Power	20 W	20 W	20 W
Operating position	horizontal	horizontal	horizontal
Torch diameter	28–35 mm (1.10–1.38")	28–35 mm (1.10–1.38")	28–35 mm (1.10–1.38")
Ground clearance	8 mm (0.31")	8 mm (0.31")	8 mm (0.31")
Speed	0–150 cm/min (0–59 in/min)	10–300 cm/min (4–118 in/min)	0–150 cm/min (0–59 in/min)
Weight	16.8 kg (37.0 lbs)	16.8 kg (37.0 lbs)	15.2 kg (33.5 lbs)
P. Code (115–230 V, 50–60 Hz, plug EU)	WOZ-0475-10-20-00-3	WOZ-0527-10-20-00-1	-
P. Code (115–230 V, 50–60 Hz, plug UK)	WOZ-0475-10-10-00-3	WOZ-0527-10-10-00-1	-
P. Code (42 V, 50–60 Hz)	WOZ-0711-10-04-00-0	-	-
P. Code (18 V DC, 4 Ah)	-	-	WOZ-0788-10-00-00-0

Standard accessories for both Dragon, Dragon HS and Dragon Battery



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



Counterweight 1.3 kg (2.9 lbs)
PWG-0753-09-00-00-0



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



Battery 4.0 Ah (Dragon Battery only)
AKM-0738-10-00-01-0
(2 pcs included)

Optional accessories for both Dragon, Dragon HS and Dragon Battery



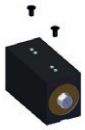
1000 mm (39.4")
Geared Rack
RAM-0753-13-00-00-0



Large Counterweight
2,6 kg (5,7lbs)
PWG-0753-12-00-00-0



Track Assembly 1800 mm (70,9")
V" Groove Center Line 152 mm (6")
TRO-0475-13-00-00-0



Magnetic Narrow Unit
with hexagon
PDS-0582-10-00-02-0



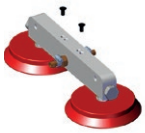
Magnetic unit
ZSP-0475-92-00-00-0



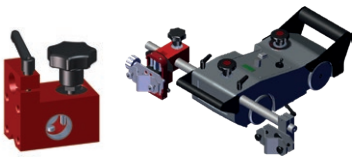
Lightweight Magnetic Unit
MST-0677-00-00-00-0



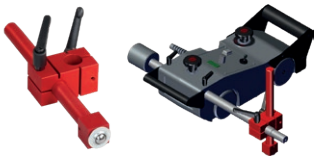
Heat-resistant magnetic unit
ZSP-0475-93-00-00-0



Vacuum Modular Unit
MST-0541-10-02-00-0



Slide Rack Holder
UCW-0475-15-00-00-1



Roller Support
PDT-0475-26-00-00-0

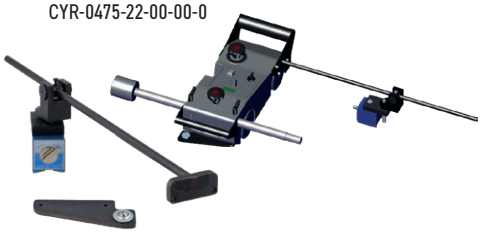


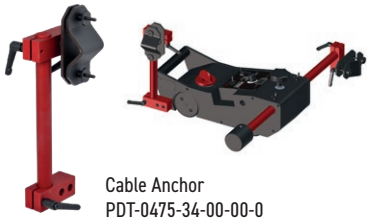
Precise Torch Holder with angle
and height adjustment
UCW-0753-08-00-00-0



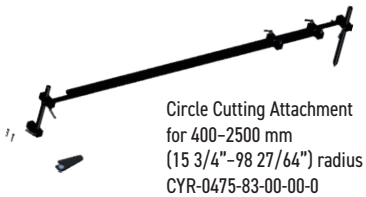
Standard Torch Holder
28–35 mm (1.10–1.38")
ZCS-0475-28-10-00-0

Circle Cutting Attachment
CYR-0475-22-00-00-0





Cable Anchor
PDT-0475-34-00-00-0



Circle Cutting Attachment
for 400–2500 mm
(15 3/4"–98 27/64") radius
CYR-0475-83-00-00-0



Heat Protection Shields
left: OSL-0475-54-00-00-0
right: OSL-0475-55-00-00-0



Enlarged Battery Shield
(Dragon Battery only)
OSL-0788-08-00-00-0



Heat Protection Shield
(bottom)
OSL-0753-20-00-00-0



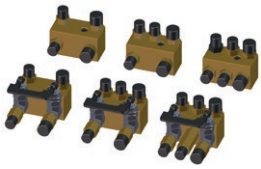
Battery Charger
(Dragon Battery only)
LDW-0738-10-00-30-0 (EU)
LDW-0738-04-00-30-0 (UK)



Battery 10.0 Ah
(Dragon Battery only)
AKM-0738-10-00-02-0

Optional accessories for Oxy-fuel

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



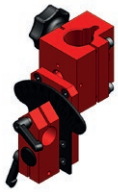


Gas Manifold Bracket
for Oxy-fuel Cutting
PDT-0475-87-00-00-0



Machine Barrel Torch Holder
Ø 30 mm (1.18")
UCW-0475-61-00-00-0

Machine Barrel Torch Holder
Ø 35 mm (1.38")
UCW-0475-29-00-00-1



Precise Machine Torch Holder
Ø 30 mm (1.18")
UCW-0753-22-00-00-0

Precise Machine Torch Holder
Ø 35 mm (1.38")
UCW-0753-24-00-00-0

Optional accessories for Plasma (Dragon HS)



Plasma Arc Ignition
ZSP-0475-58-00-00-0



Plasma Arc Ignition Cable
KBL-0475-58-05-00-0



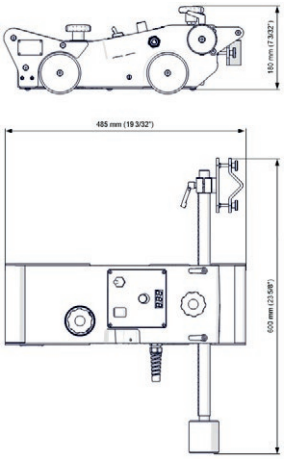
New control system of battery pack:

Detection and supervised parameters:

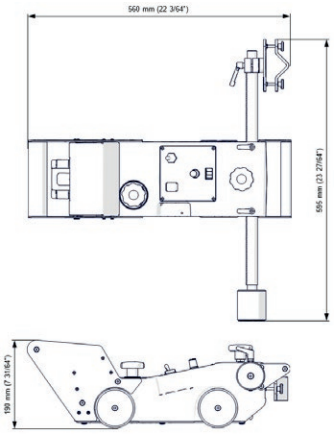
- too low and too high voltage
- too low and too high temperature
- failure of the temperature sensor
- internal battery failure

Benefits:

- over discharge protection
- extended battery life
- high level of safety for both tractor and operator

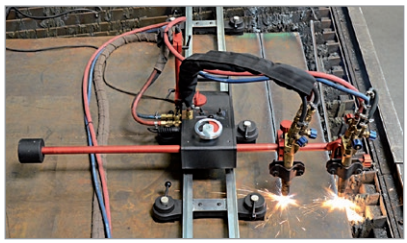


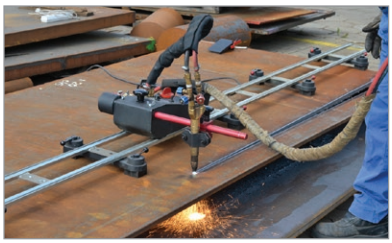
DRAGON / DRAGON HS



DRAGON BATTERY











PROMOTECH®

RING TRACK



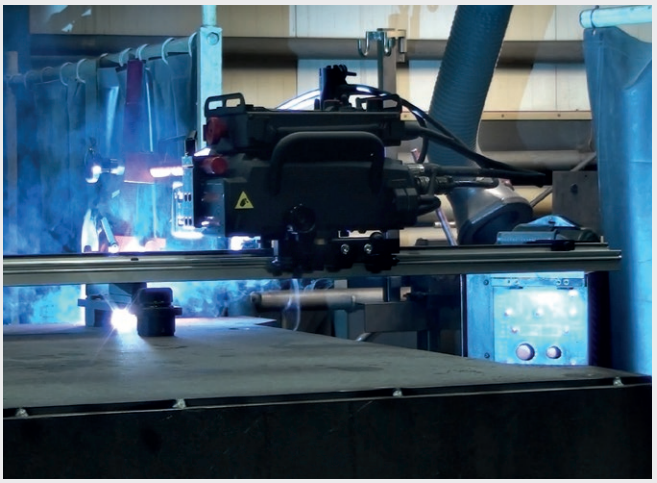
HI-FLEX TRACK



SEMI-FLEXIBLE TRACK



RIGID TRACK



smart tools
for heavy tasks

TRACKS & ACCESSORIES

CATALOGUE

PROMOTECH®

FM 37982

PROMOTECH – PROFESSIONAL MANUFACTURER OF PREMIUM MACHINES FOR METALWORKING INDUSTRY

Promotech is an innovation driven ISO 9001:2015 manufacturer of professional metalworking machines, welding automation equipment and industrial systems designed for structural steel fabricators, heavy machinery manufacturers, shipyards and other metal machining companies

Main product lines:

- mag drills, pneumatic drills, rail drills and hydraulic punchers
- weld preparation/portable and stationary bevellers for plates and pipes
- welding and cutting portable mechanisation equipment
- welding and cutting automated systems

Our products:

- offer solutions to reduce cost and increase productivity
- are designed and engineered for long term use in tough industrial conditions
- meet the requirements of the most demanding clients and markets worldwide
- are made in Poland according to the highest quality standards
- include top quality components
- are thoroughly tested for quality approval
- proved to be extremely reliable with a variety of practical applications in most difficult climatic environments





FM 37982

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

American Welding Society Supporting Company Member

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TRACKS AND ACCESSORIES pages **1-32**


Speedglas
3M

TRACKS FOR RAIL TRACTORS

Promotech offers a wide range of tracks suitable for straight line, circumferential and irregular surface applications down to min. radius of 100 mm (4"). The tracks can be fixed on both ferrous and non-ferrous materials by means of magnetic or vacuum units. Single track sections can be joined together to accomplish the required working track length.

- **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.

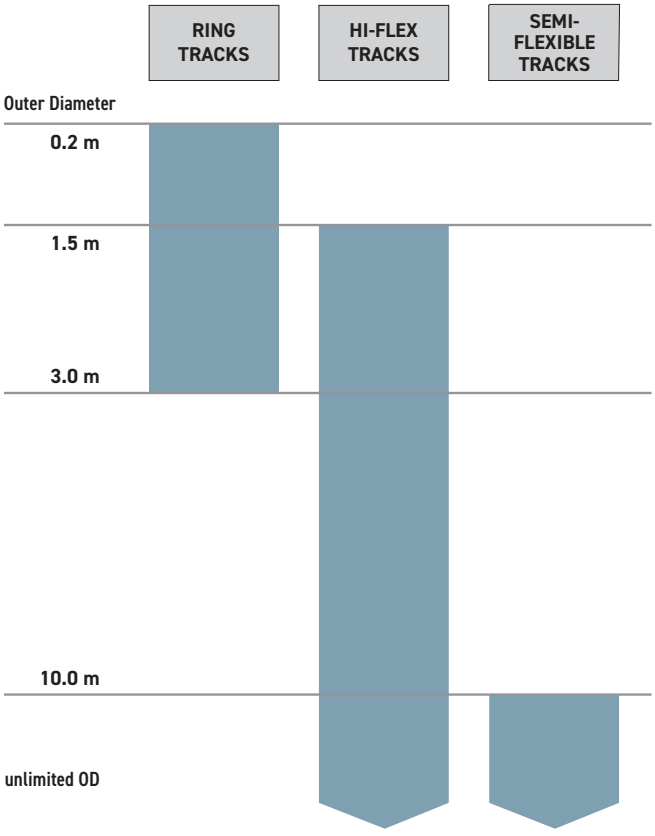
- **Hi Flex tracks**
  For lots of circumferential and irregular applications down to 750 mm (30") radius.

- **Semi-flexible tracks**
  For straight line and irregular surface applications. It can be flexed to minimum radius of 5 m (16 ft) without permanent deformation.

- **Rigid tracks**
  For straight line applications and for going beyond workpiece and continuous welding edge to edge.

- **V-tracks**
  Customized tracks for Dragon, Dragon HS and Dragon Battery cutting tractors.

Tracks for circumferential and irregular applications





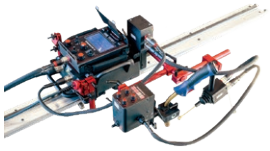
RING TRACKS

- For circumferential applications from 200 mm OD up to 3000 mm OD (from 8" to 10 ft)
- Consists of either two, three or four segments depending on the workpiece diameter
- Nominal OD diameter can be adjusted upwards by 50 mm
- Nominal OD diameter can be adjusted downward by 50 mm by means of optional bracket for ring track supports
- Can be fixed on both ferrous and non-ferrous materials by means of 3 types of supports

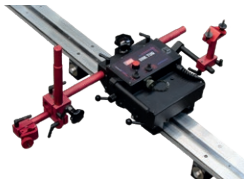


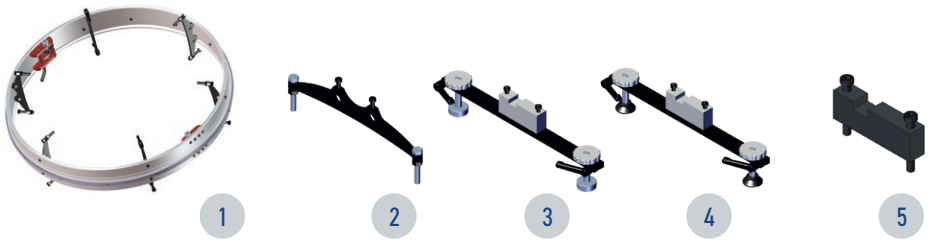
Applicable for:

RAIL TITAN 2

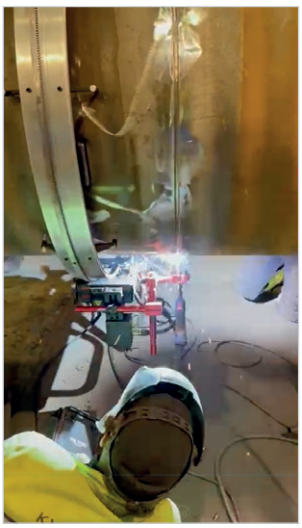
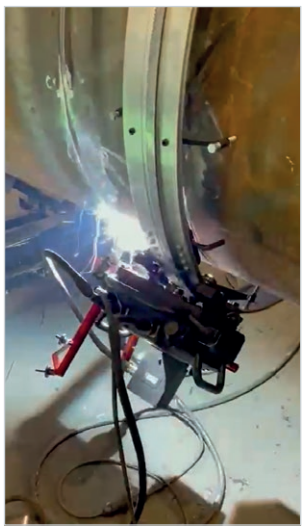


RAIL TUG





Ref.	Product code	Description
1	See tables on the right	Ring tracks
2	WSP-0654-11-00-00-0	Ring track support with bolts
3	WSP-0654-13-00-00-0	Ring track support with magnets
4	WSP-0654-12-00-00-0	Ring track support with plastic feet
5	DYS-0523-14-14-00-0	Bracket for ring track supports to expand pipe diameter range by 50 mm downwards




Min. pipe OD between 200 mm and 1000 mm

Pipe outer diameter		Product code	Ring segments	Ring track supports required
Min. [mm]	Max. [mm]			
200	250	TRO-0523-14-00-00-0	2	4
250	300	TRO-0523-78-00-00-0	2	4
300	350	TRO-0523-20-00-00-0	2	4
350	400	TRO-0523-21-00-00-0	2	4
400	450	TRO-0523-23-00-00-0	2	6
450	500	TRO-0523-24-00-00-0	2	6
500	550	TRO-0523-25-00-00-0	2	6
550	600	TRO-0523-26-00-00-0	2	6
600	650	TRO-0523-22-00-00-0	2	6
650	700	TRO-0523-28-00-00-0	2	6
700	750	TRO-0523-29-00-00-0	2	6
750	800	TRO-0523-30-00-00-0	2	6
800	850	TRO-0523-31-00-00-0	2	6
850	900	TRO-0523-32-00-00-0	2	6
900	950	TRO-0523-33-00-00-0	2	8
950	1000	TRO-0523-34-00-00-0	2	8
1000	1050	TRO-0523-35-00-00-0	2	8





Min. pipe OD between 1050 mm and 2000 mm

Pipe outer diameter		Product code	Ring segments	Ring track supports required
Min. [mm]	Max. [mm]			
1050	1100	TRO-0523-36-00-00-0	3	9
1100	1150	TRO-0523-37-00-00-0	3	9
1150	1200	TRO-0523-38-00-00-0	3	9
1200	1250	TRO-0523-39-00-00-0	3	9
1250	1300	TRO-0523-40-00-00-0	3	9
1300	1350	TRO-0523-41-00-00-0	3	12
1350	1400	TRO-0523-42-00-00-0	3	12
1400	1450	TRO-0523-43-00-00-0	3	12
1450	1500	TRO-0523-44-00-00-0	3	12
1500	1550	TRO-0523-45-00-00-0	3	12
1550	1600	TRO-0523-46-00-00-0	3	12
1600	1650	TRO-0523-47-00-00-0	3	12
1650	1700	TRO-0523-48-00-00-0	3	12
1700	1750	TRO-0523-49-00-00-0	3	12
1750	1800	TRO-0523-50-00-00-0	3	12
1800	1850	TRO-0523-51-00-00-0	3	12
1850	1900	TRO-0523-52-00-00-0	3	15
1900	1950	TRO-0523-53-00-00-0	3	15
1950	2000	TRO-0523-54-00-00-0	3	15
2000	2050	TRO-0523-55-00-00-0	3	15

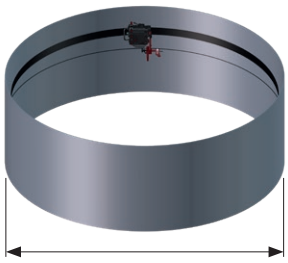
Min. pipe OD between 2050 mm and 3000 mm

Pipe outer diameter		Product code	Ring segments	Ring track supports required
Min. [mm]	Max. [mm]			
2050	2100	TRO-0523-56-00-00-0	4	16
2100	2150	TRO-0523-57-00-00-0	4	16
2150	2200	TRO-0523-58-00-00-0	4	16
2200	2250	TRO-0523-59-00-00-0	4	16
2250	2300	TRO-0523-60-00-00-0	4	20
2300	2350	TRO-0523-61-00-00-0	4	20
2350	2400	TRO-0523-62-00-00-0	4	20
2400	2450	TRO-0523-63-00-00-0	4	20
2450	2500	TRO-0523-64-00-00-0	4	20
2500	2550	TRO-0523-65-00-00-0	4	20
2550	2600	TRO-0523-66-00-00-0	4	20
2600	2650	TRO-0523-67-00-00-0	4	20
2650	2700	TRO-0523-68-00-00-0	4	20
2700	2750	TRO-0523-69-00-00-0	4	20
2750	2800	TRO-0523-70-00-00-0	4	20
2800	2850	TRO-0523-71-00-00-0	4	20
2850	2900	TRO-0523-72-00-00-0	4	20
2900	2950	TRO-0523-73-00-00-0	4	20
2950	3000	TRO-0523-74-00-00-0	4	20
3000	3050	TRO-0523-75-00-00-0	4	20

HI-FLEX TRACK

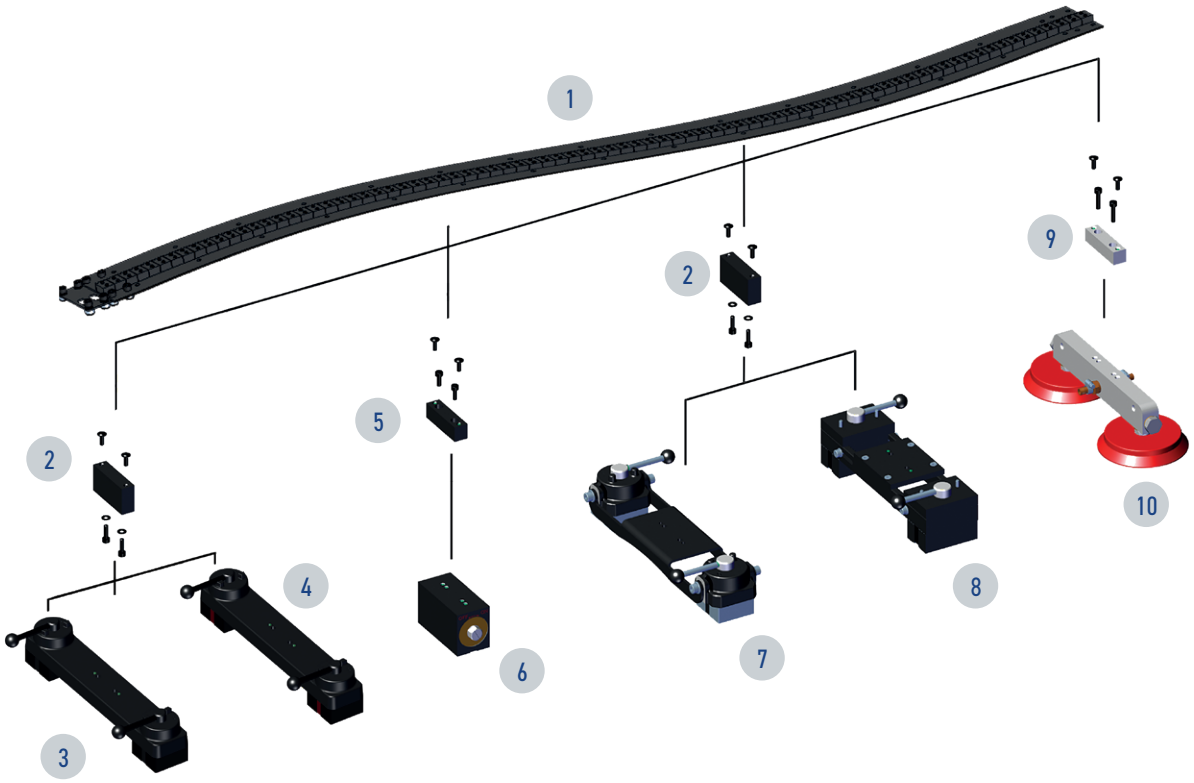
- For circumferential, irregular and straight line applications
- Minimum curve radius on convex surface is 0.75 m (30")
- Minimum curve radius on concave surface is 1.7 m (67")
- Minimum OD 1.5 m (60") for external run
- Length of a single rail 1.52 m (5 ft)
- The maximum number of units is 15 pcs (if narrow magnetic units are in use)
- Joinable for unlimited run length
- Can be fixed on both ferrous and non-ferrous materials by means of magnetic or vacuum units to allow travel in any plane or position





Min OD	Rail Titan 2	1500 mm
	Rail Tug	1500 mm

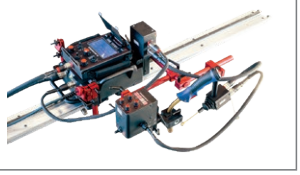
Min ID	Rail Titan 2	3400 mm
	Rail Tug	3400 mm



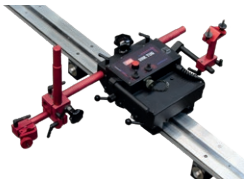
Ref.	Product code	Description
1	TRO-0673-00-00-00-0	Hi-Flex Track min OD 1500 mm
2	DYS-0482-19-00-00-0	Bracket for magnetic unit for semi-flexible track and Hi-Flex track
3	ZSP-0475-92-00-00-0	Magnetic unit
4	ZSP-0475-93-00-00-0	Heat-resistant magnetic unit
5	DYS-0582-10-00-00-0	Bracket for magnetic narrow unit for semi-flexible track and Hi-Flex track
6	PDS-0582-10-00-02-0	Narrow magnetic unit with hexagon
7	ZSP-0475-85-00-00-0	Pivoting magnetic unit
8	ZSP-0523-19-00-00-0	Spacing-adjustable magnetic unit
9	DYS-0541-11-01-00-0	Bracket for vacuum modular unit for semi-flexible track and Hi-Flex track
10	MST-0541-10-02-00-0	Vacuum modular unit

Applicable for:

RAIL TITAN 2

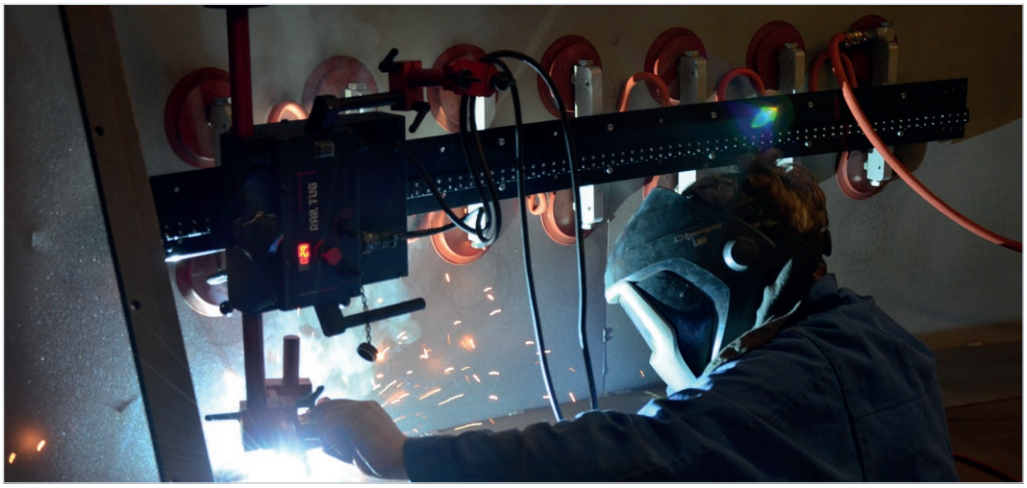


RAIL TUG



Welding position	Qty. of units per track
PA/ 1G	min. 8 pcs
PB/2F	min. 8 pcs
PC/2G	max 15 pcs*
PD/4F	max 15 pcs*
PE/4G	max 15 pcs*
PF/3F	max 15 pcs*
PF/3G	max 15 pcs*

* using the narrow magnetic units

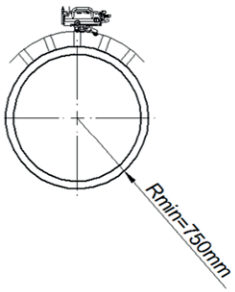




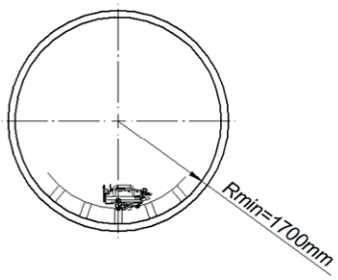
ACCESSORIES FOR HI-FLEX TRACK



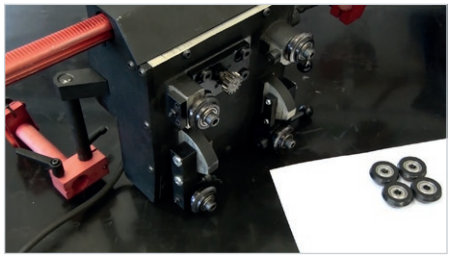
Set of Hi Flex Track Guiding Rollers (4 pcs)
for Rail Tug and Rail Titan 2
Product code: ZSP-0673-07-00-00-0

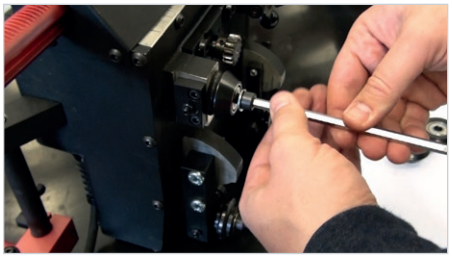


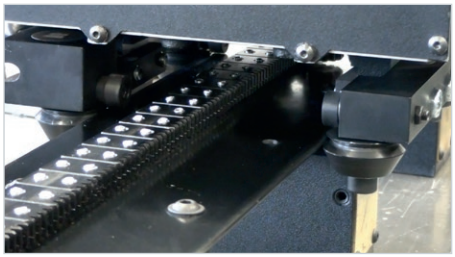
Fixing on convex surface



Fixing on concave surface

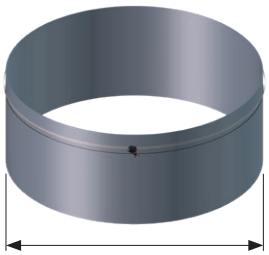




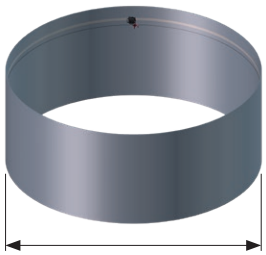


SEMI-FLEXIBLE TRACK

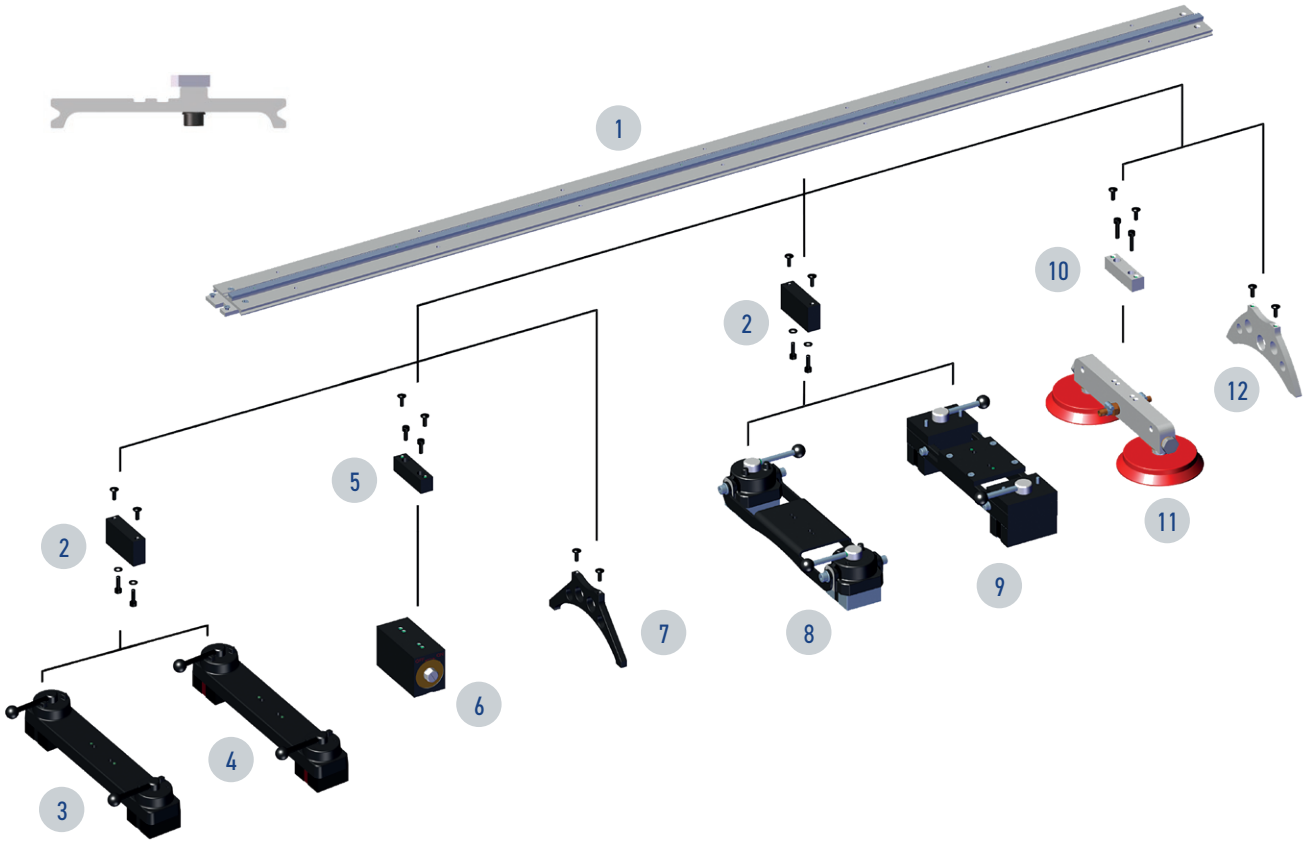
- For circumferential, irregular and straight line applications
- Minimum radius of 5.0 m (16 ft) or 10.0 m (32 ft) diameter without permanent deformation
- Length of a single rail 2 m (6.5 ft)
- Joinable for unlimited run length
- Can be fixed on both ferrous and non-ferrous materials by means of magnetic or vacuum units to allow travel in any plane or position



Min OD	Rail Titan 2	10000 mm
	Rail Tug	10000 mm
	Rail Bull	10000 mm



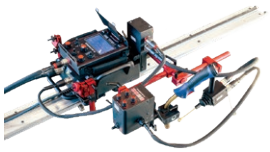
Min ID	Rail Titan 2	10000 mm
	Rail Tug	10000 mm
	Rail Bull	10000 mm



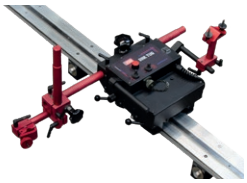
Ref.	Product code	Description
1	PRW-0482-15-05-00-0	Semi-flexible track length 2 m (6.5 ft). Minimum 5 m (16 ft) curvature radius required
2	DYS-0482-19-00-00-0	Bracket for magnetic unit for semi-flexible track and Hi Flex track
3	ZSP-0475-92-00-00-0	Magnetic unit
4	ZSP-0475-93-00-00-0	Heat-resistant magnetic unit
5	DYS-0582-10-00-00-0	Bracket for magnetic narrow unit for semi-flexible track and Hi Flex track
6	PDS-0582-10-00-02-0	Narrow magnetic unit with hexagon
7	WSP-0523-12-01-00-1	Steel support for semi-flexible track
8	ZSP-0475-85-00-00-0	Pivoting magnetic unit
9	ZSP-0523-19-00-00-0	Spacing-adjustable magnetic unit
10	DYS-0541-11-01-00-0	Bracket for vacuum modular unit for semi-flexible track and Hi Flex track
11	MST-0541-10-02-00-0	Vacuum modular unit
12	WSP-0541-11-02-00-0	Aluminum track support for semi-flexible track

Applicable for:

RAIL TITAN 2



RAIL TUG



RAIL BULL

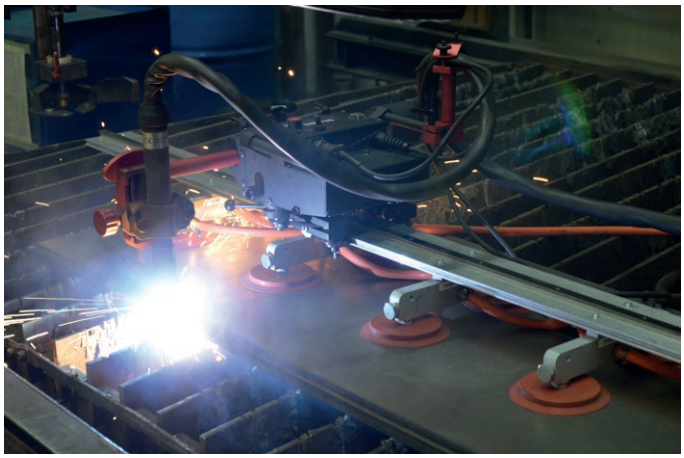


Welding position	Qty. of units per track
PA/ 1G	min. 4 pcs
PB/2F	min. 4 pcs
PC/2G	5 - 7 pcs
PD/4F	5 - 7 pcs
PE/4G	5 - 7 pcs
PF/3F	5 - 7 pcs
PF/3G	5 - 7 pcs









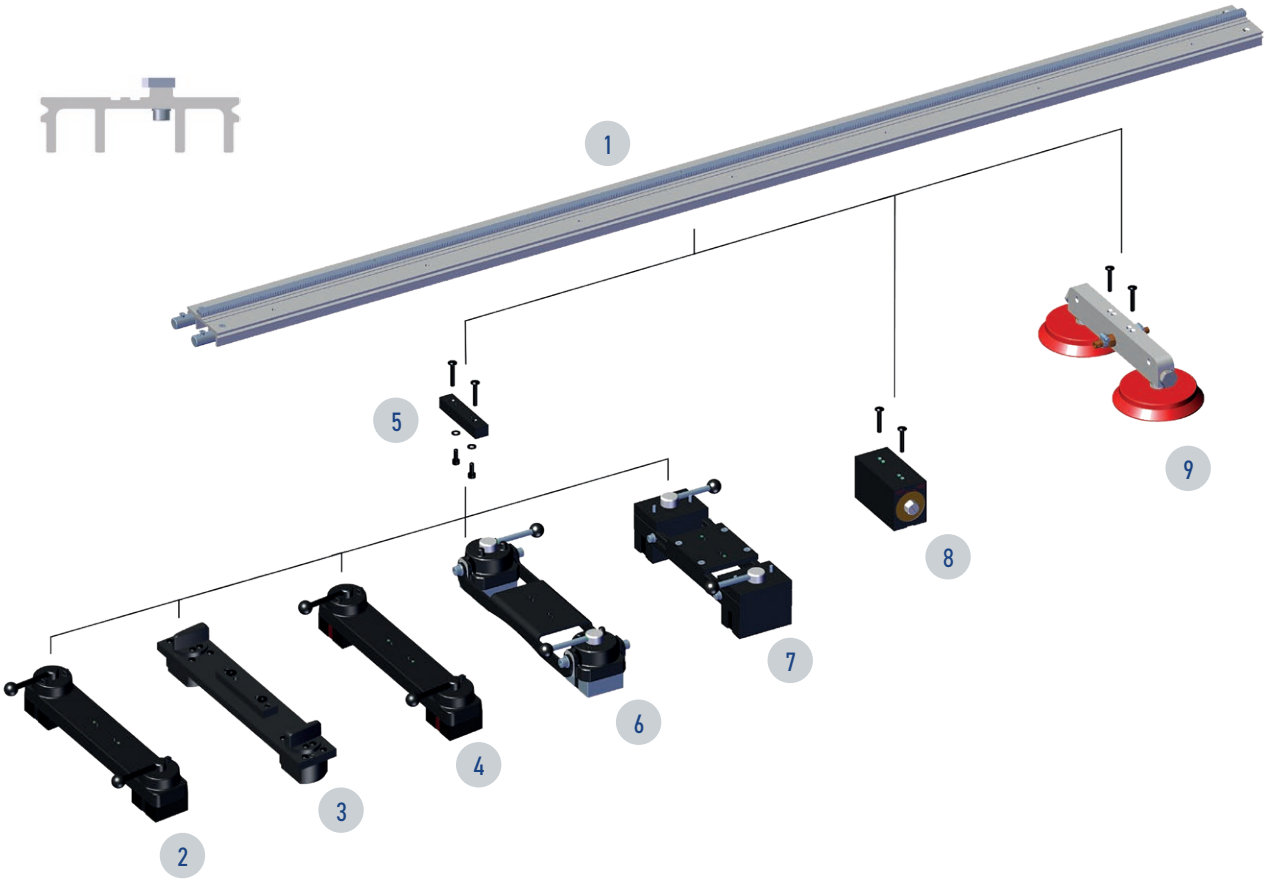


RIGID TRACK

- For straight line applications incl. out of workpiece position
- Length of a single rail 2 m (6.5 ft)
- Cannot be bent at all
- Joinable for unlimited run length
- Can be fixed on both ferrous and non-ferrous materials by means of magnetic or vacuum units to allow travel in any plane or position



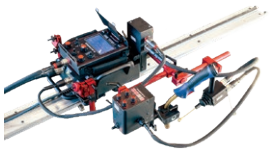
Length of 1 segment is 2m (6.5 ft)



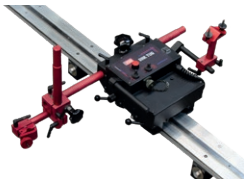
Ref.	Product code	Description
1	PRW-0482-47-00-00-0	Rigid track length 2 m (6.5 ft)
2	ZSP-0475-92-00-00-0	Magnetic unit
3	MST-0677-00-00-00-0	Lightweight Magnetic Unit
4	ZSP-0475-93-00-00-0	Heat-resistant magnetic unit
5	DYS-0482-21-00-00-0	Bracket for magnetic units for rigid track
6	ZSP-0475-85-00-00-0	Pivoting magnetic unit
7	ZSP-0523-19-00-00-0	Spacing-adjustable magnetic unit
8	PDS-0582-10-00-02-0	Narrow magnetic unit with hexagon
9	MST-0541-10-02-00-0	Vacuum modular unit

Applicable for:

RAIL TITAN 2



RAIL TUG

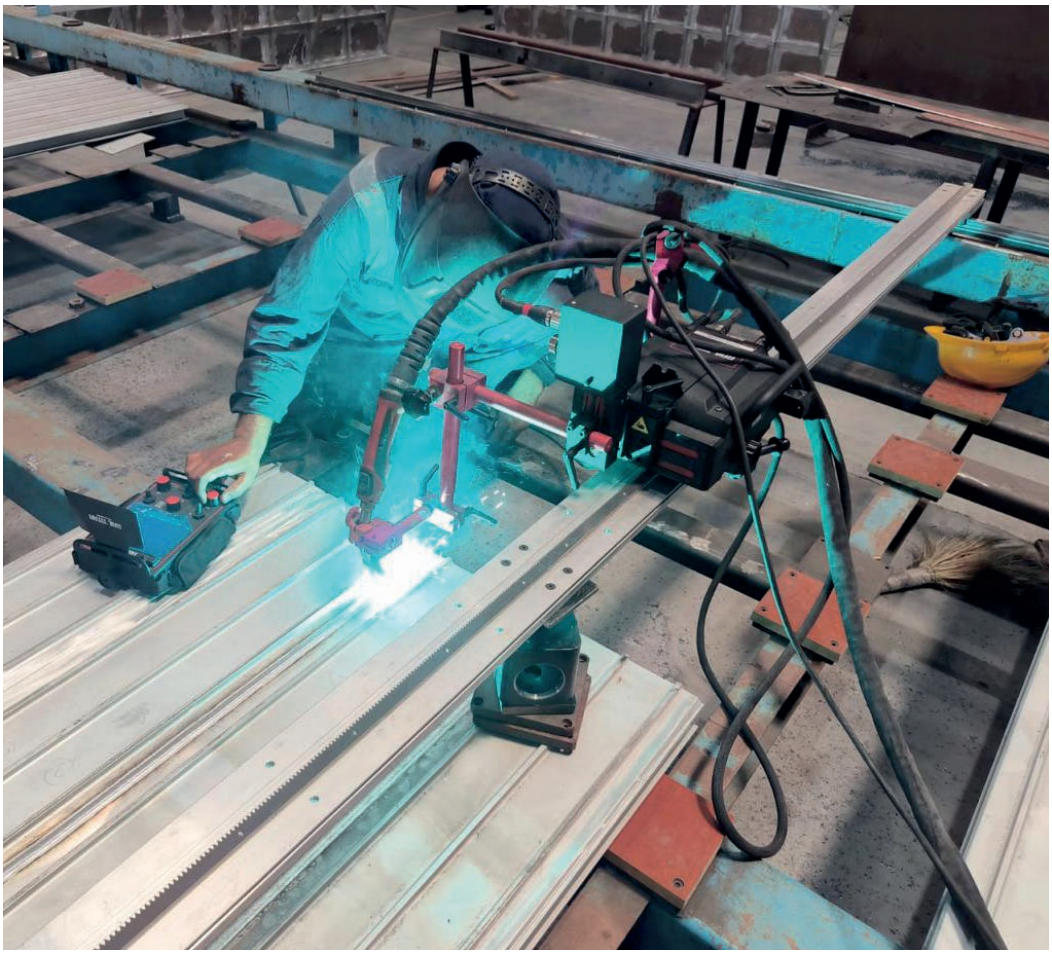


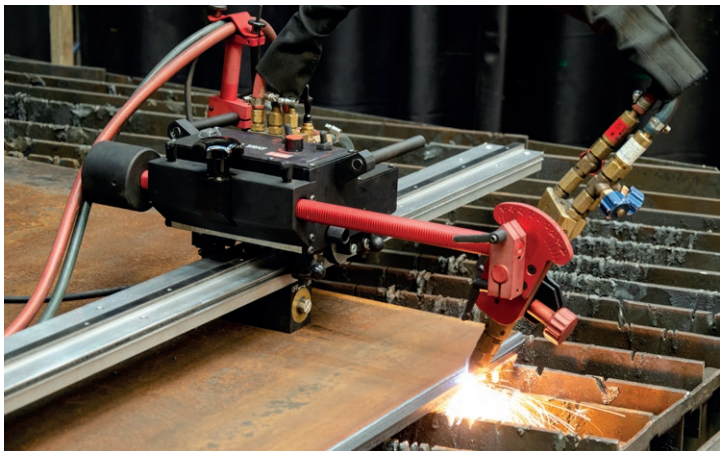
RAIL BULL



Welding position	Qty. of units per track
PA/ 1G	min. 4 pcs
PB/2F	min. 4 pcs
PC/2G	5 - 7 pcs
PD/4F	5 - 7 pcs
PE/4G	5 - 7 pcs
PF/3F	5 - 7 pcs
PF/3G	5 - 7 pcs





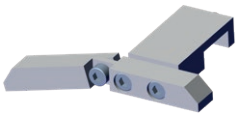




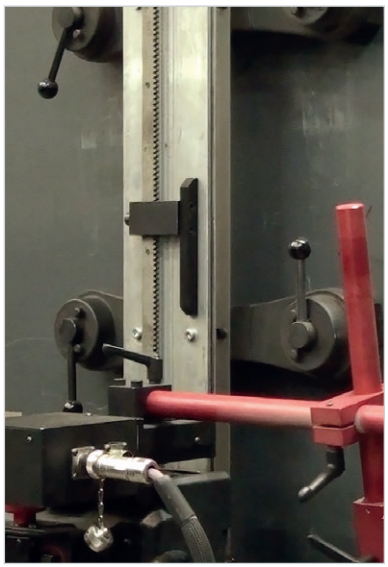
ACCESSORIES FOR RIGID AND SEMI-FLEXIBLE TRACKS

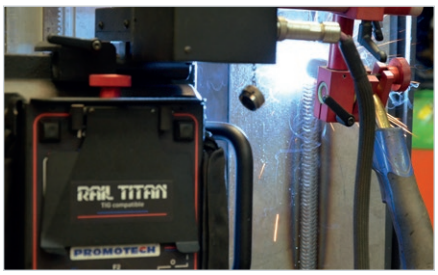


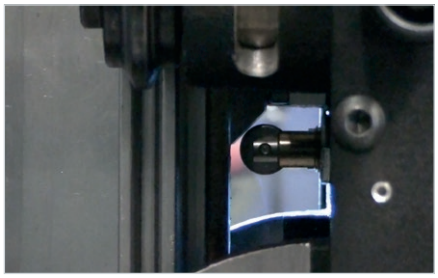
Contact block to adjust range of the Rail Titan 2 movement for rigid and semi-flexible tracks
Product code: ZDR-0523-76-00-00-0



Contact block to adjust range of the Rail Titan 2 movement for Hi-Flex track
Product code: ZDR-0673-08-00-00-0







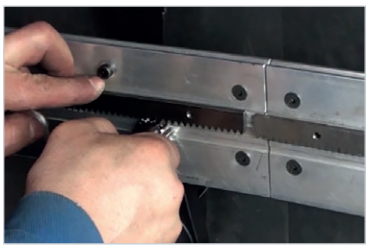
Contact blocks protect Rail Titan 2 from falling off a track with open ends. When the tractor reaches the block, the limit switch is activated.

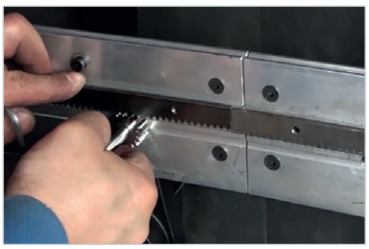


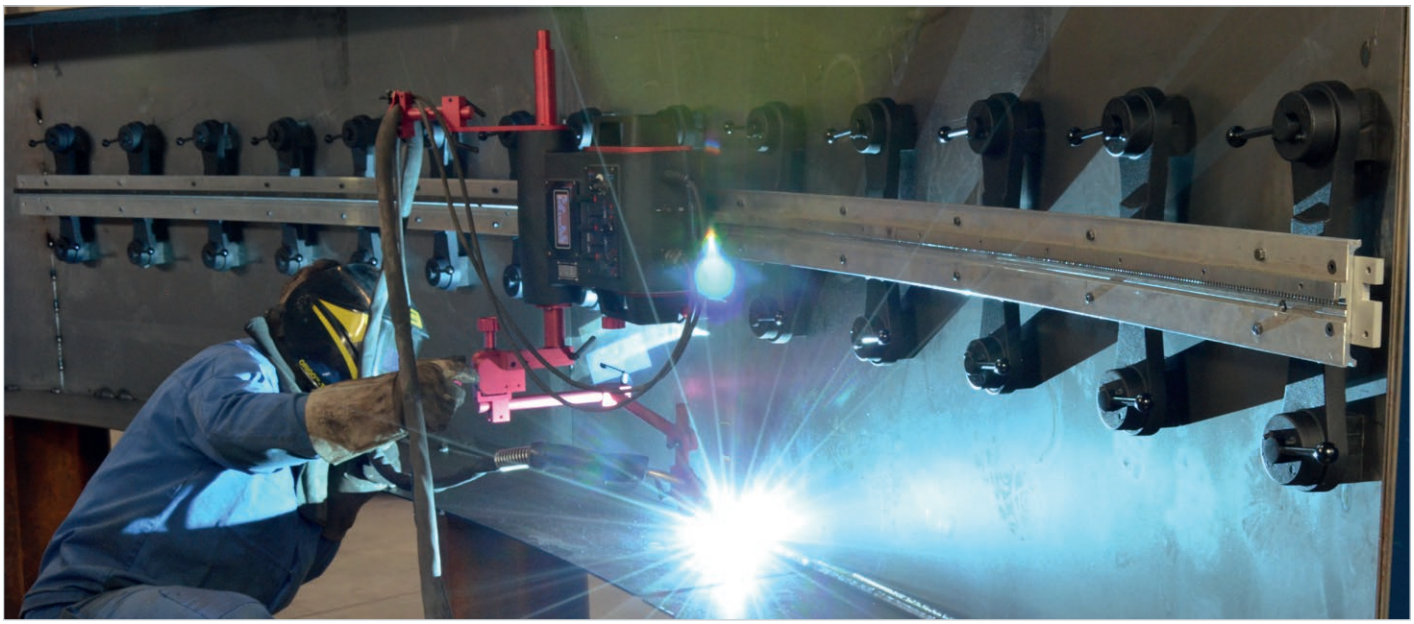
Gear rack adjustment tool. The tool removes the gap between gear racks
Product code: PKT-0341-13-00-00-0











V-TRACK

- For straight line applications
- “V” Groove center line 152 mm (6”)
- Length of a single rail 1.8 m (5.9 ft)
- Joinable for unlimited run length
- Can be fixed on both ferrous and non-ferrous materials by means of magnetic or vacuum units



Length of 1 segment is
1.8 m (5.9 ft)

Applicable for:

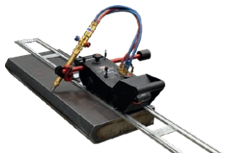
DRAGON

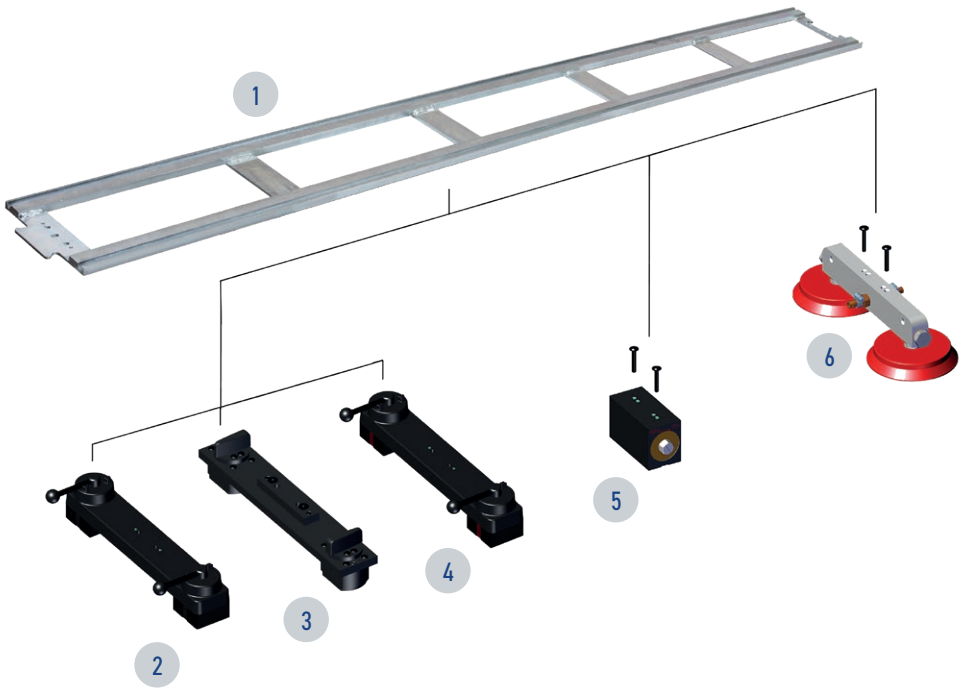


DRAGON HS



DRAGON BATTERY





Ref.	Product code	Description
1	TRO-0475-13-00-00-0	Track Assembly 1800 mm (70,9”) V” Groove Center Line 152 mm (6”)
2	ZSP-0475-92-00-00-0	Magnetic unit
3	MST-0677-00-00-00-0	Lightweight Magnetic Unit
4	ZSP-0475-93-00-00-0	Heat-resistant magnetic unit
5	PDS-0582-10-00-02-0	Narrow magnetic unit with hexagon
6	MST-0541-10-02-00-0	Vacuum modular unit

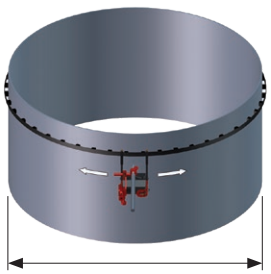




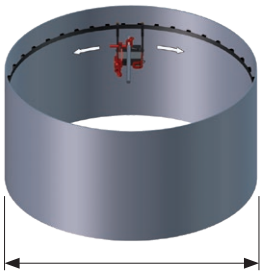


36 MM WIDE FLEXIBLE TRACK

- For circumferential, irregular and straight line applications
- Minimum curve radius is 1 m (3.3 ft)
- Length of a single track 1.85 m (6 ft)
- Joinable for unlimited run length
- Can be mounted to ferromagnetic work surface with magnetic blocks



Min OD		
	Gecko	2000 mm
	Gecko Battery 2	2000 mm
	Lizard	3000 mm
	Scorpio Battery	2000 mm



Min ID		
	Gecko	2000 mm
	Gecko Battery 2	2000 mm
	Lizard	3000 mm
	Scorpio Battery	2500 mm

Applicable for:

GECKO



GECKO BATTERY 2

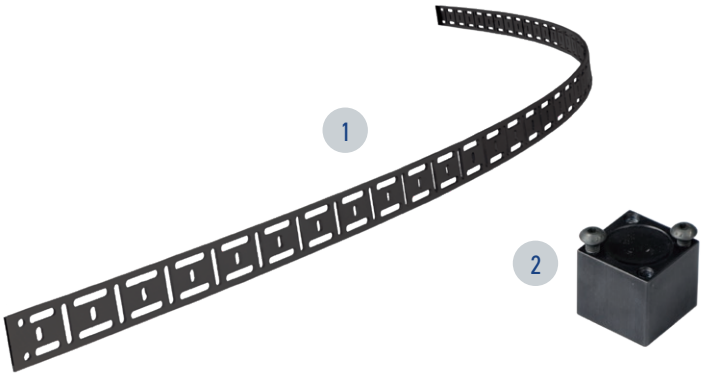


SCORPIO BATTERY



LIZARD



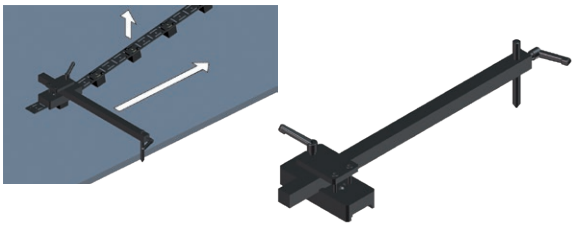


Ref.	Product code	Description
1	PRW-0466-50-01-01-0	36 mm wide flexible track, minimum curve radius is 1 m (3.3 ft), length of a single track 1.85 m (6 ft)
2	BLO-0466-68-00-00-0	Magnetic block for 36 mm wide flexible track (sold box of 10 pcs)

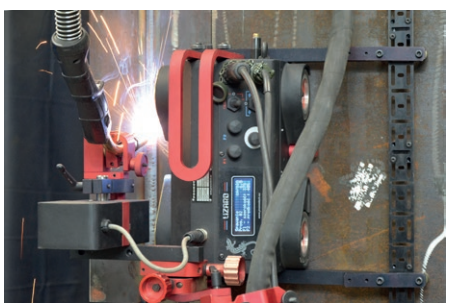
ACCESSORIES for 36 MM WIDE FLEXIBLE TRACK



Following guide arms for 36 mm wide flexible track (set of 2 pcs)
Product code: PRW-0752-14-00-00-1
for Gecko / Gecko HS / Gecko Battery 2 / Scorpio Battery
Product code: PRW-0476-50-01-00-1 for Lizard



Guide adjustment tool for 36 mm wide flexible track parallel to the edge
Product code: UST-0466-53-00-00-0

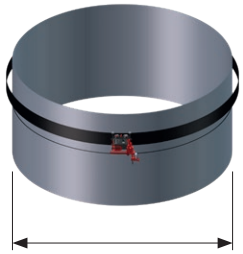




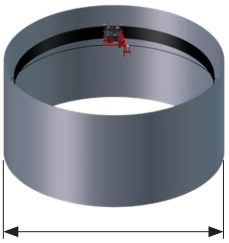


160 MM WIDE FLEXIBLE TRACK

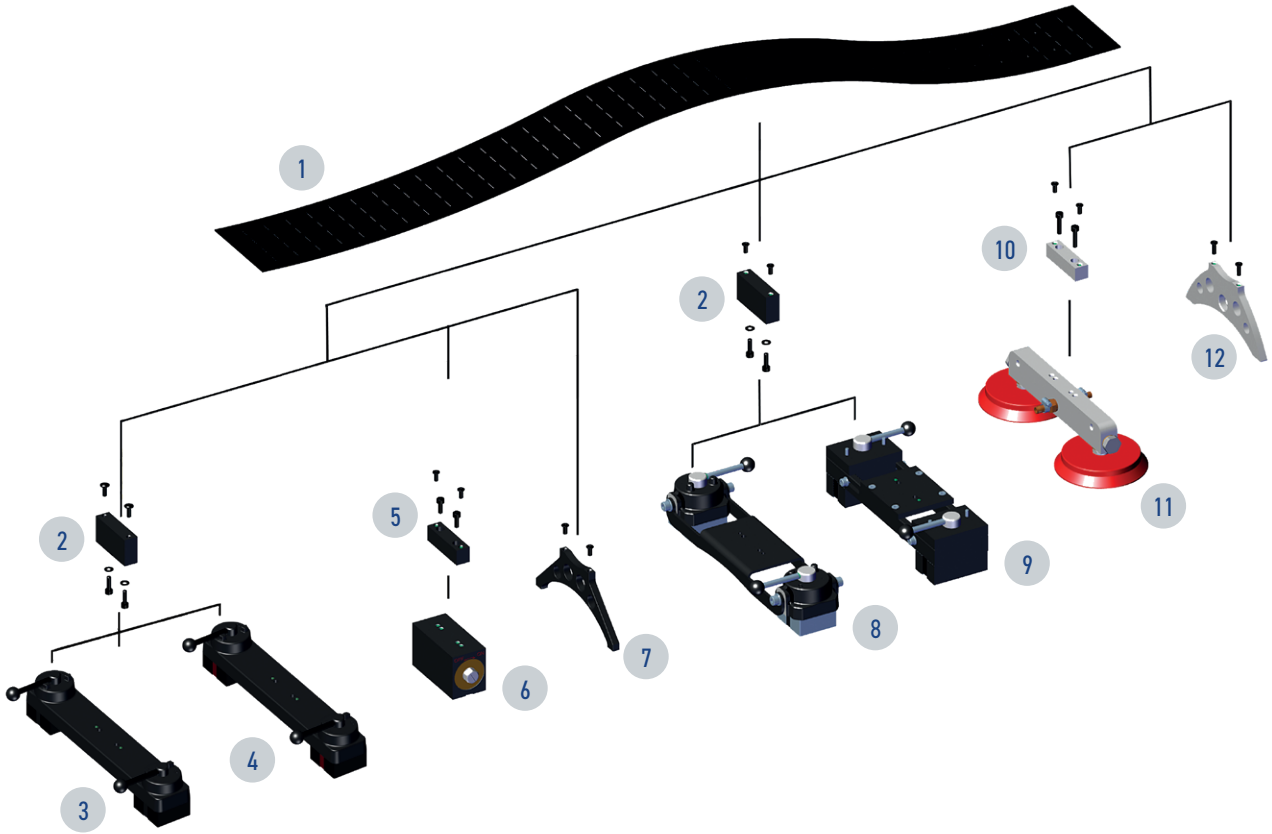
- For circumferential, irregular and straight line applications
- Minimum curve radius is 1.25 m (4.1 ft)
- Length of a single 160 mm wide flexible track 1.88 m (6.1 ft)
- Joinable for unlimited run length
- Can be fixed on both ferrous and non-ferrous materials by means of magnetic or vacuum units



Min OD		
	Gecko	2500 mm
	Gecko Battery 2	2500 mm
	Scorpio Battery	2500 mm



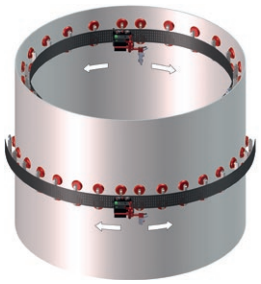
Min ID		
	Gecko	2500 mm
	Gecko Battery 2	2500 mm
	Scorpio Battery	2500 mm



Ref.	Product code	Description
1	PRW-0466-71-00-00-0	160 mm wide flexible track length 1.88 m (6.1 ft), minimum curvature radius of 1.25 m (4.1 ft)
2	DYS-0466-71-05-00-0	Bracket for magnetic units for 160 mm wide flexible track
3	ZSP-0475-92-00-00-0	Magnetic unit
4	ZSP-0475-93-00-00-0	Heat-resistant magnetic unit
5	DYS-0466-71-07-00-0	Bracket for narrow magnetic unit for 160 mm wide flexible track
6	PDS-0582-10-00-02-0	Narrow magnetic unit with hexagon
7	WSP-0466-71-06-00-0	Steel support for 160 mm wide flexible track
8	ZSP-0475-85-00-00-0	Pivoting magnetic unit
9	ZSP-0523-19-00-00-0	Spacing-adjustable magnetic unit
10	DYS-0466-71-04-00-0	Bracket for vacuum modular unit for 160 mm wide flexible track
11	MST-0541-10-02-00-0	Vacuum modular unit
12	WSP-0466-71-03-00-0	Aluminium support for 160 mm wide flexible track

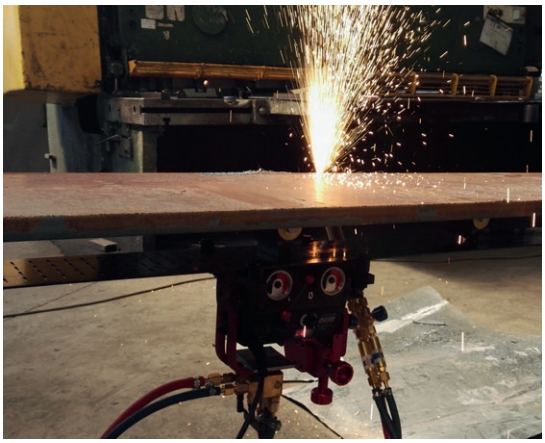
Applicable for:

GECKO	GECKO BATTERY 2	SCORPIO BATTERY
		



Welding position	Qty. of units per track
PA/ 1G	min. 4 pcs
PB/2F	min. 4 pcs
PC/2G	9 pcs
PD/4F	9 pcs
PE/4G	9 pcs





ACCESSORIES for 160 MM WIDE FLEXIBLE TRACK



Following guide arms for 160 mm wide flexible track (set of 2 pcs)
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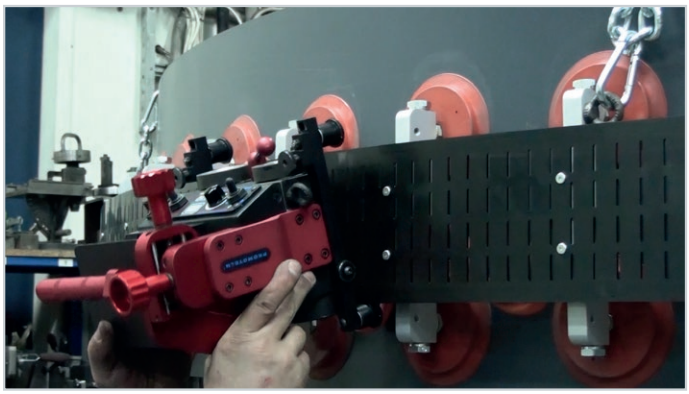
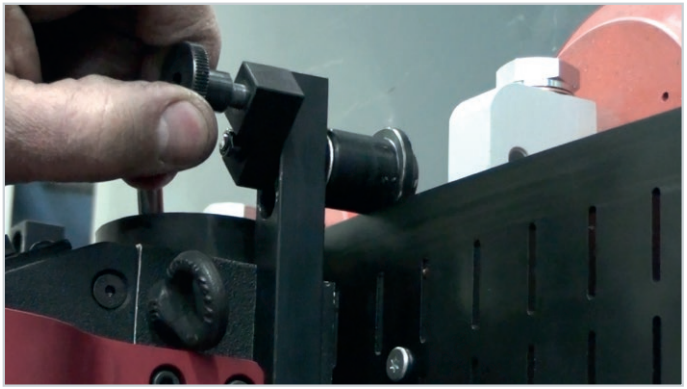
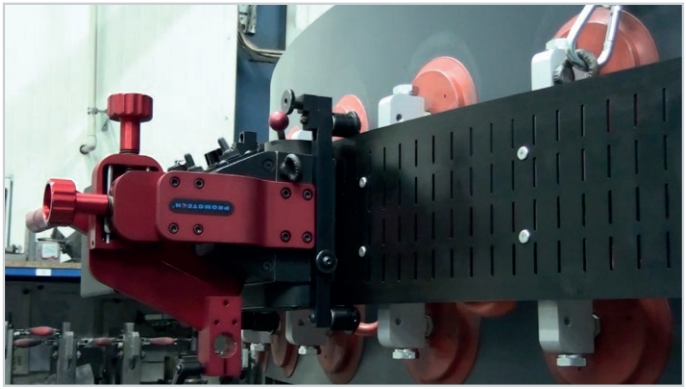






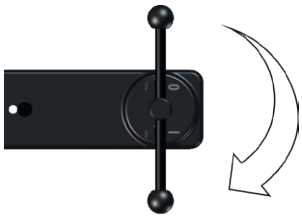
MAGNETIC UNIT

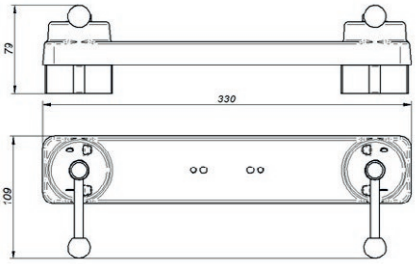


ZSP-0475-92-00-00-0

- Allows clamping tracks to ferromagnetic surfaces
- Maximum holding force up to 2500 N
- Intermediate position (between OFF/ON) with partial holding force helps to adjust the right track position

- Suitable for:
  - Hi-Flex track (Rail Tug, Rail Titan 2)
  - Semi-flexible track (Rail Bull, Rail Tug, Rail Titan 2)
  - Rigid track (Rail Bull, Rail Tug, Rail Titan 2)
  - V-track (Dragon, Dragon HS, Dragon Battery)
  - 160 mm wide flexible track (Gecko, Gecko HS, Gecko Battery 2, Scorpio Battery)







0. Resting position
- No magnetic force

I. End lever position
- Full magnetic force

Holding force on a 5 mm (0.2") thick surface	Temperature
1200 N (100%)	20°C (68°F)
900 N (75%)	80°C (176°F)
600 N (50%)	120°C (248°F)

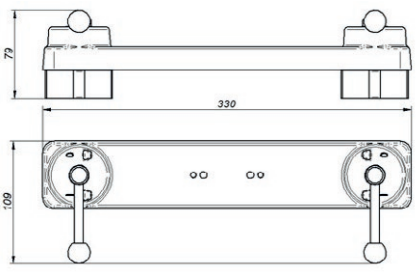
HEAT-RESISTANT MAGNETIC UNIT

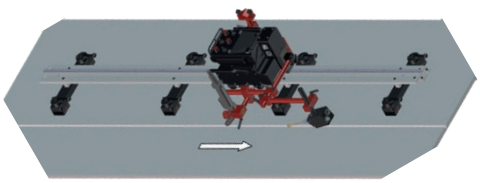


ZSP-0475-93-00-00-0

- Suitable for working on more heated ferromagnetic surfaces
- Maximum holding force up to 2500 N
- Intermediate position (between OFF/ON) with partial holding force helps to adjust the right track position

- Suitable for:
  - Hi-Flex track (Rail Tug, Rail Titan 2)
  - Semi-flexible track (Rail Bull, Rail Tug, Rail Titan 2)
  - Rigid track (Rail Bull, Rail Tug, Rail Titan 2)
  - V-track (Dragon, Dragon HS, Dragon Battery)
  - 160 mm wide flexible track (Gecko, Gecko HS, Gecko Battery 2, Scorpio Battery)





Holding force on a 5 mm (0.2") thick surface	Temperature
1200 N (100%)	80°C (176°F)
900 N (75%)	160°C (320°F)
600 N (50%)	200°C (392°F)

LIGHTWEIGHT MAGNETIC UNIT



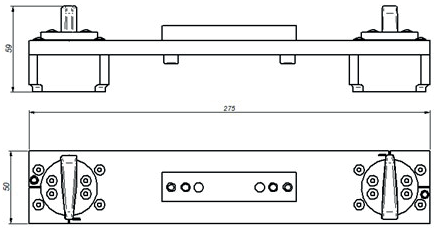
MST-0677-00-00-00-0

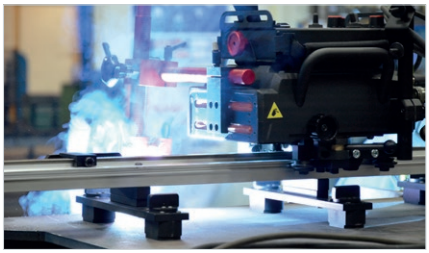
- Allows clamping tracks to ferromagnetic surfaces in horizontal position
- lower weight (1.3 kg vs 2.7 kg) and smaller dimensions comparing to regular magnetic unit
- Maximum holding force up to 980 N
- Intermediate position (between OFF/ON) with partial holding force helps to adjust the right track position

- Suitable for:
  - Rigid track (Rail Bull, Rail Tug, Rail Titan 2)
  - V-track (Dragon, Dragon HS, Dragon Battery)

Rigid track
- with lightweight magnetic units 11,5 kg
- with magnetic units 15,7 kg







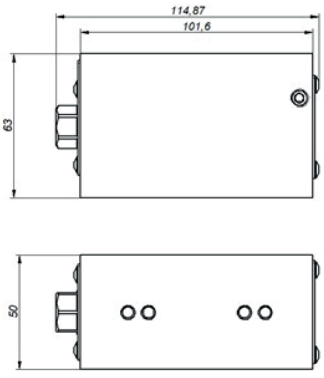
NARROW MAGNETIC UNIT WITH HEXAGON

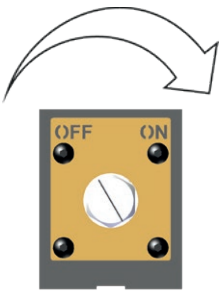


PDS-0582-10-00-02-0

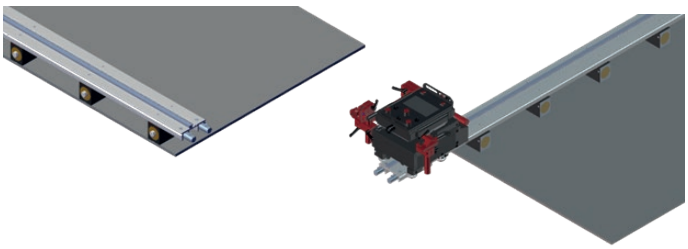
- Allows clamping tracks to ferromagnetic surfaces and very close to their edges
- Maximum holding force up to 1500 N
- Intermediate position (between OFF/ON) with partial holding force helps to adjust the right track position

- Suitable for:
  - Hi-Flex track (Rail Tug, Rail Titan 2)
  - Semi-flexible track (Rail Bull, Rail Tug, Rail Titan 2)
  - Rigid track (Rail Bull, Rail Tug, Rail Titan 2)
  - V-track (Dragon, Dragon HS, Dragon Battery)
  - 160 mm wide flexible track (Gecko, Gecko HS, Gecko Battery 2, Scorpio Battery)



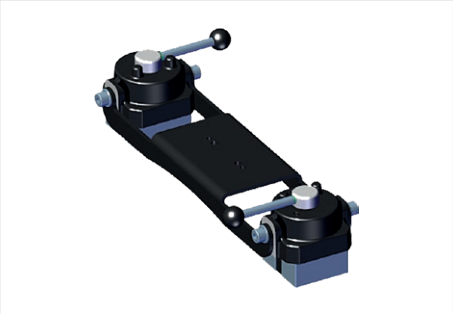


Magnetic force



Holding force on a 5 mm (0.2") thick surface	Temperature
1000 N (100%)	20°C (68°F)
750 N (75%)	80°C (176°F)
500 N (50%)	120°C (248°F)

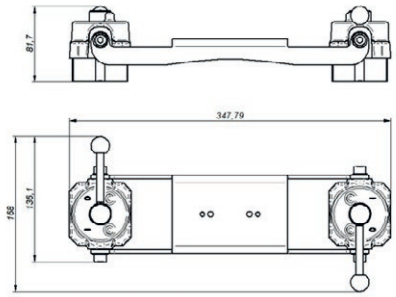
PIVOTING MAGNETIC UNIT



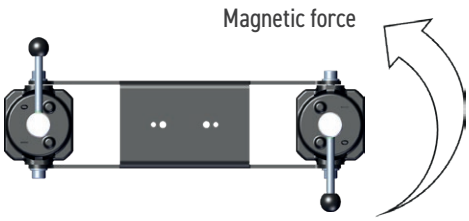
ZSP-0475-85-00-00-0

- Allows clamping tracks to flat, concave or convex ferromagnetic surfaces and pipes ID of at least 800 mm (31.5")
- May also be fixed on surfaces that differ in height up to 80 mm (3.1")
- Maximum holding force up to 2500 N
- Intermediate position (between OFF/ON) with partial holding force helps to adjust the right track position

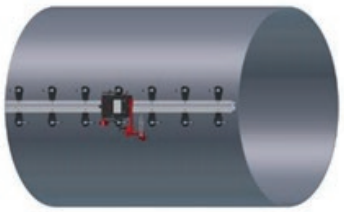
- Suitable for:
  - Hi-Flex track (Rail Tug, Rail Titan 2)
  - Semi-flexible track (Rail Bull, Rail Tug, Rail Titan 2)
  - Rigid track (Rail Bull, Rail Tug, Rail Titan 2)
  - 160 mm wide flexible track (Gecko, Gecko HS, Gecko Battery 2, Scorpio Battery)

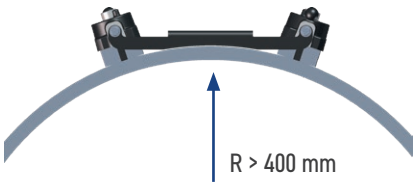


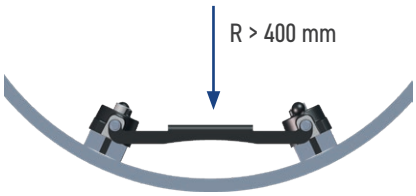
Holding force on a 5 mm (0.2") thick surface	Temperature
1200 N (100%)	20°C (68°F)
900 N (75%)	80°C (176°F)
600 N (50%)	120°C (248°F)

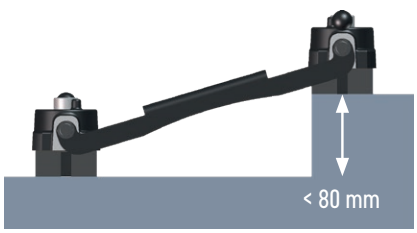


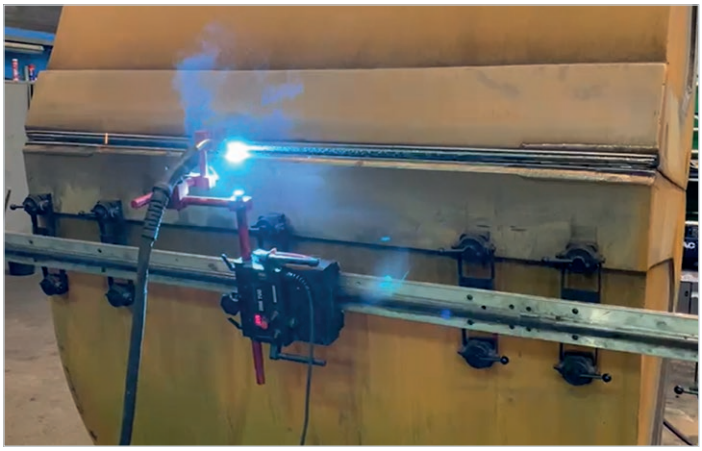




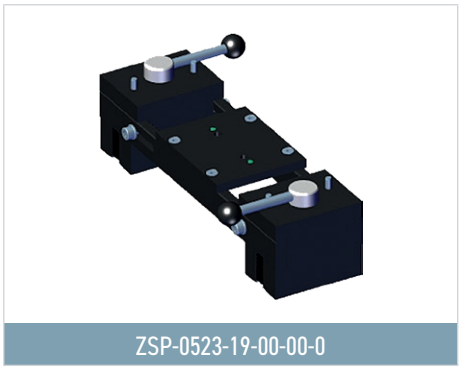








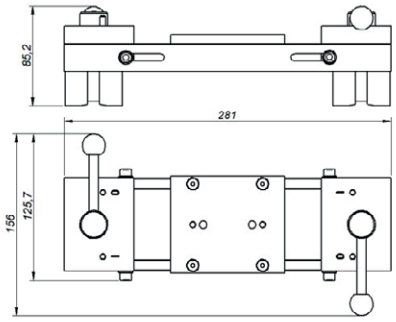
SPACING-ADJUSTABLE MAGNETIC UNIT



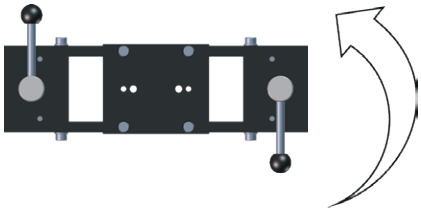
ZSP-0523-19-00-00-0

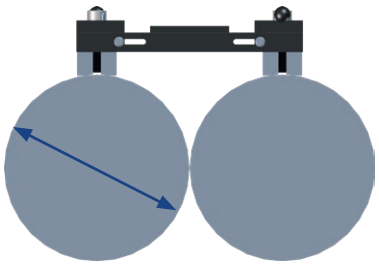
- Allows clamping tracks to ferromagnetic pipes with diameters of 25–230 mm (1–9") and the distance between pipe axes of 170–230 mm (6.7–9.1")
- Maximum holding force up to 2500 N
- Intermediate position (between OFF/ON) with partial holding force helps to adjust the right track position

- Suitable for:
  - Hi-Flex track (Rail Tug, Rail Titan 2)
  - Semi-flexible track (Rail Bull, Rail Tug, Rail Titan 2)
  - Rigid track (Rail Bull, Rail Tug, Rail Titan 2)
  - 160 mm wide flexible track (Gecko, Gecko HS, Gecko Battery 2, Scorpio Battery)

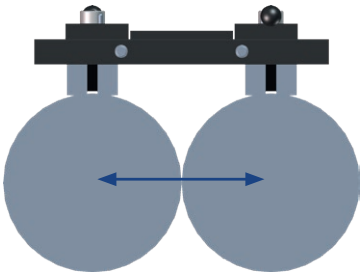


Holding force on a 5 mm (0.2") thick surface	Temperature
1200 N (100%)	20°C (68°F)
900 N (75%)	80°C (176°F)
600 N (50%)	120°C (248°F)



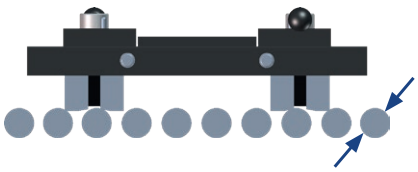


OD < 230 mm (9")

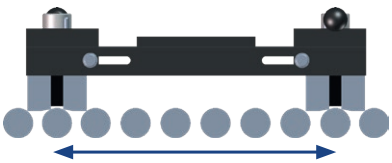


Spacing > 170 mm (6.7")

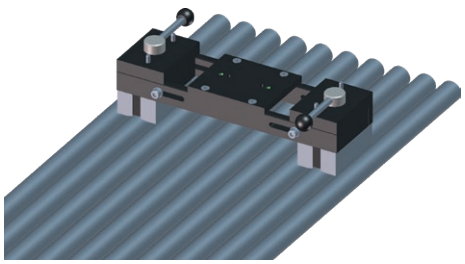


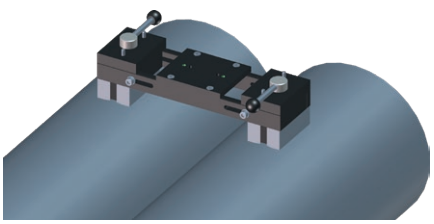


OD > 25 mm (1")

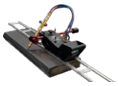


Spacing < 230 mm (9.1")





UNITS / TRACKS	Rigid track PRW-0482-47-00-00-0	Semi-flexible track PRW-0482-15-05-00-0	Hi-Flex track TRO-0673-00-00-00-0	V-track TRO-0475-13-00-00-0	36 mm wide flexible track PRW-0466-50-01-01-0	160 mm wide flexible track PRW-0466-71-00-00-0
 Magnetic unit	● together with bracket DYS-0482-21-00-00-0	● together with bracket DYS-0482-19-00-00-0	● together with bracket DYS-0482-19-00-00-0	●	-	● together with bracket DYS-0466-71-05-00-0
 Heat-resistant magnetic unit	● together with bracket DYS-0482-21-00-00-0	● together with bracket DYS-0482-19-00-00-0	● together with bracket DYS-0482-19-00-00-0	●	-	● together with bracket DYS-0466-71-05-00-0
 Lightweight magnetic unit	● together with bracket DYS-0482-21-00-00-0	-	-	●	-	-
 Narrow magnetic unit with hexagon	●	● together with bracket DYS-0582-10-00-00-0	● together with bracket DYS-0582-10-00-00-0	●	-	● together with bracket DYS-0466-71-07-00-0
 Pivoting magnetic unit	● together with bracket DYS-0482-21-00-00-0	● together with bracket DYS-0482-19-00-00-0	● together with bracket DYS-0482-19-00-00-0	-	-	● together with bracket DYS-0466-71-05-00-0
 Spacing-adjustable magnetic unit	● together with bracket DYS-0482-21-00-00-0	● together with bracket DYS-0482-19-00-00-0	● together with bracket DYS-0482-19-00-00-0	-	-	● together with bracket DYS-0466-71-05-00-0
 Vacuum modular unit	●	● together with bracket DYS-0541-11-01-00-0	● together with bracket DYS-0541-11-01-00-0	●	-	● together with bracket DYS-0466-71-04-00-0
 Magnetic block	-	-	-	-	●	-

TRACTORS / TRACKS	Rigid track PRW-0482-47-00-00-0	Semi-flexible track PRW-0482-15-05-00-0	Hi-Flex track TRO-0673-00-00-00-0	Ring tracks	V-track TRO-0475-13-00-00-0	36 mm wide flexible track PRW-0466-50-01-01-0	160 mm wide flexible track PRW-0466-71-00-00-0
 RAIL BULL	●	●	-	-	-	-	-
 RAIL TUG	●	●	●	●	-	-	-
 RAIL TITAN 2	●	●	●	●	-	-	-
 DRAGON DRAGON HS	-	-	-	-	●	-	-
 DRAGON BATTERY	-	-	-	-	●	-	-
 GECKO	-	-	-	-	-	●	●
 GECKO BATTERY 2	-	-	-	-	-	●	●
 SCORPIO BATTERY	-	-	-	-	-	●	●
 LIZARD	-	-	-	-	-	●	-

ACCESSORIES FOR RAIL TRACTORS	Magnetic unit	Heat-resistance magnetic unit	Light-weight magnetic unit	Narrow magnetic unit with hexagon	Pivoting magnetic unit	Spacing adjustable magnetic unit	Vacuum unit	Rigid track	Semi-flexible track	Hi-Flex track
 Bracket for magnetic units for rigid track DYS-0482-21-00-00-0	●	●	●	-	●	●	-	●	-	-
 Bracket for magnetic units for Hi-Flex and semi-flexible tracks DYS-0482-19-00-00-0	●	●	-	-	●	●	-	-	●	●
 Bracket for magnetic narrow unit for Hi-Flex and semi-flexible tracks DYS-0582-10-00-00-0	-	-	-	●	-	-	-	-	●	●
 Bracket for vacuum modular unit for Hi-Flex and semi-flexible tracks DYS-0541-11-01-00-0	-	-	-	-	-	-	●	●	●	●
 Steel support for semi-flexible track WSP-0523-12-01-00-1	-	-	-	-	-	-	-	-	●	=
 Aluminum track support for semi-flexible track WSP-0541-11-02-00-0	-	-	-	-	-	-	-	-	●	-
 Gear Rack Adjustment Tool for semi-flexible track PKT-0341-13-00-00-0	-	-	-	-	-	-	-	-	●	-
 Contact block to adjust range of the Rail Titan 2 movement for rigid and semi-flexible tracks ZDR-0523-76-00-00-0	-	-	-	-	-	-	-	●	●	-
 Contact block to adjust range of the Rail Titan 2 movement for Hi-Flex track ZDR-0673-08-00-00-0	-	-	-	-	-	-	-	-	-	●
 Set of Hi Flex track guiding rollers (4 pcs) for Rail Tug and Rail Titan 2 ZSP-0673-07-00-00-0	-	-	-	-	-	-	-	-	-	●

ACCESSORIES FOR WHEEL TRACTORS	Gecko / Gecko HS / Gecko Battery 2 / Scorpio Battery	Lizard	36 mm wide flexible track	160 mm wide flexible track	Magnetic unit	Heat-resistance magnetic unit	Narrow magnetic unit with hexagon	Pivoting magnetic unit	Spacing adjustable magnetic unit	Vacuum unit
 Magnetic block for flexible track box of 10 pcs BLO-0466-68-00-00-0	-	-	●	-	-	-	-	-	-	-
 Following guide arms 15 x 15 mm for 36 mm wide flexible track (set of 2 pcs) for Gecko/HS/ Gecko Battery 2, Scorpio Battery PRW-0752-14-00-00-1	●	-	●	-	-	-	-	-	-	-
 Following guide arms 20 x 20 mm for 36 mm wide flexible track (set of 2 pcs) for Lizard PRW-0476-50-01-00-1	-	●	●	-	-	-	-	-	-	-
 Guide adjustment tool for 36 mm wide flexible track parallel to the edge UST-0466-53-00-00-0	-	-	●	-	-	-	-	-	-	-
 Following guide arms for 160 mm wide flexible track (set of 2 pcs) ZST-0466-69-00-00-0	●	-	-	●	-	-	-	-	-	-
 Bracket for magnetic units for 160 mm wide flexible track DYS-0466-71-05-00-0	-	-	-	●	●	●	-	●	●	-
 Bracket for narrow magnetic unit for 160 mm wide flexible track DYS-0466-71-07-00-0	-	-	-	●	-	-	●	-	-	-
 Bracket for vacuum modular unit for 160 mm wide flexible track DYS-0466-71-04-00-0	-	-	-	●	-	-	-	-	-	●
 Steel support for 160 mm wide flexible track WSP-0466-71-06-00-0	-	-	-	●	-	-	-	-	-	-
 Aluminium support for 160 mm wide flexible track WSP-0466-71-03-00-0	-	-	-	●	-	-	-	-	-	-

VACUUM MODULAR UNIT

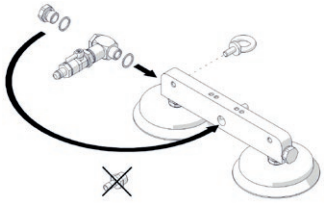
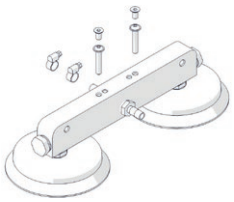
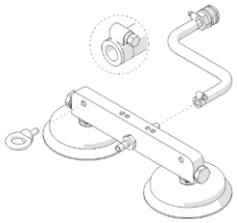
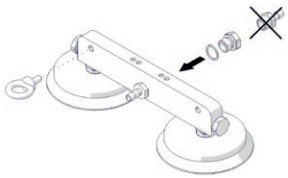


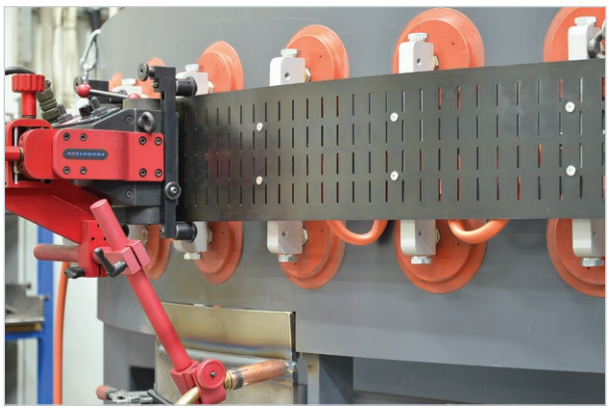
MST-0541-10-02-00-0

- Allows clamping tracks on both ferromagnetic and non-ferrous materials
- Maximum holding force up to 1400 N
- Consists of 2 vacuum pads and manifold block
- Can be easily assembled for 4 different purposes as entry unit, middle unit, extension unit or end unit

- Suitable for:
  - Hi-Flex track (Rail Tug, Rail Titan 2)
  - Semi-flexible track (Rail Bull, Rail Tug, Rail Titan 2)
  - Rigid track (Rail Bull, Rail Tug, Rail Titan 2)
  - V-track (Dragon, Dragon HS, Dragon Battery)
  - 160 mm wide flexible track (Gecko, Gecko HS, Gecko Battery 2, Scorpio Battery)

Modular vacuum unit can be easily configured in 4 different ways to perform the required function.

Entry Vacuum Unit (configuration)	Middle Vacuum Unit (no configuration required)	Extension Vacuum Unit (configuration)	End Vacuum Unit (configuration)
			
 Vacuum modular unit MST-0541-10-02-00-0	 Vacuum modular unit MST-0541-10-02-00-0	 Vacuum modular unit MST-0541-10-02-00-0	 Vacuum modular unit MST-0541-10-02-00-0
 Cut-off valve for entry vacuum unit ZWR-0541-10-01-30-0	It doesn't need any other accessories. It goes like it is.	 Coupled hose PWD-0541-10-04-00-0	 Threaded plug for end vacuum unit KRK-0541-99-00-00-0
 Safety eye bolt SRB-000365		 Safety eye bolt SRB-000365	 Safety eye bolt SRB-000365



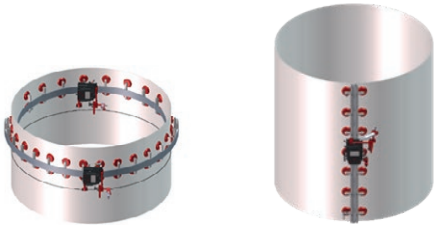


VACUUM TRACK SYSTEM

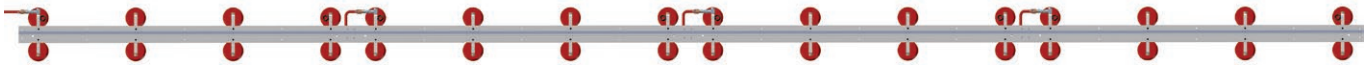


AGR-0541-10-20-00-0 for 230 V
AGR-0541-10-10-00-0 for 115 V with UK plug

- System provides firm grip on both ferromagnetic and non-ferromagnetic materials (aluminum or stainless steel constructions)
- 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)



Serial connection

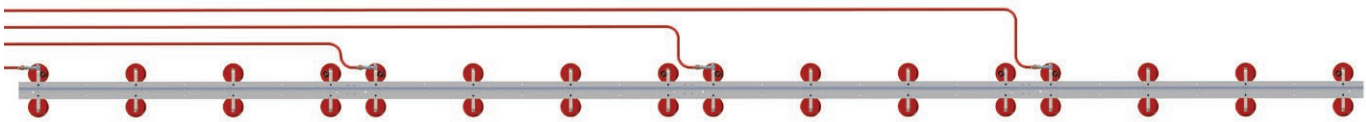






- Entry vacuum unit (1 unit per track)
- Middle vacuum units (up to 5 units per rail track or up to 7 units per 160 mm wide flexible track)
- Extension vacuum unit (for serial connection)

Parallel connection



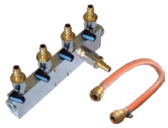




- Entry vacuum unit (1 unit per track)
- Middle vacuum units (up to 5 units per rail track or up to 7 units per 160 mm wide flexible track)
- End vacuum unit (for a single track or parallel connection)

Vacuum Track System specification				
Maximum number of vacuum units per vacuum pump		21		
Minimum curvature radius of 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)		
Minimum number of vacuum units	Track type	Horizontal position	Wall position	Curve
	Hi-Flex Track	8	8	8
	Semi-Flex Track	4	7	7
	Rigid Track	4	7	–
Permitted ambient temperature near vacuum units		from -20°C to 200°C (from -4°F to 392°F)		

Portable vacuum pump specification	
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^3/h (141 ft^3/h)
Ambient temperature	0-40°C (32-104°F)
Safety reservoir volume	10 l (0.35 ft3)
Weight (with safety reservoir)	23 kg (51 lbs)

Accessory		Product code	Notes
	Portable vacuum pump with safety reservoir	230V: AGR-0541-10-20-00-0 115V: AGR-0541-10-10-00-0 (UK plug)	generates vacuum and supports up to 21 vacuum units
	Pump connection hose 10 m (33 ft)	PWD-0541-06-00-00-0	Hose connecting vacuum pump to entry vacuum unit (10m, 33 ft) Required: 1 (for serial connection) 2–4 (for parallel connection)
	4-way manifold with connection cable 0.3 m (1ft)	RZD-0541-04-00-00-0	For separately connecting the vacuum units of different tracks Required: 1 per vacuum pump (parallel connection)
	2-meter / 7-foot hose	PWD-0541-10-07-00-0	Hose to connect the vacuum units of the same rail (2 m, 7 ft) Required: 1 per track (must be cut to the required length)
	Cut-off valve for entry vacuum unit	ZWR-0541-10-01-30-0	(seal included) Required: 1 per rail
	Safety eye bolt	SRB-000365	Required: 2 per rail
	Coupled hose for extension vacuum unit	PWD-0541-10-04-00-0	Hose to connect the vacuum units of different rails Required: 1 per additional track (for serial connection)
	Threaded plug (for end vacuum unit)	KRK-0541-99-00-00-0	Required: 1 for last rail in serial connection; 1 per each rail in parallel connection
	Hose extension adapter (compatible with quick connector)	LCZ-0541-05-00-00-0	Optional: up to 2 per vacuum pump (serial connection) up to 2 per manifold output used (parallel connection)
	Hose fitting	KRC-000013	Spare part
	Hose clamp	OPS-000005	Spare part
	Quick coupling	SZB-000018	Spare part
	Vacuum pad	SSW-0541-99-01-00-0	Spare part (seal included)

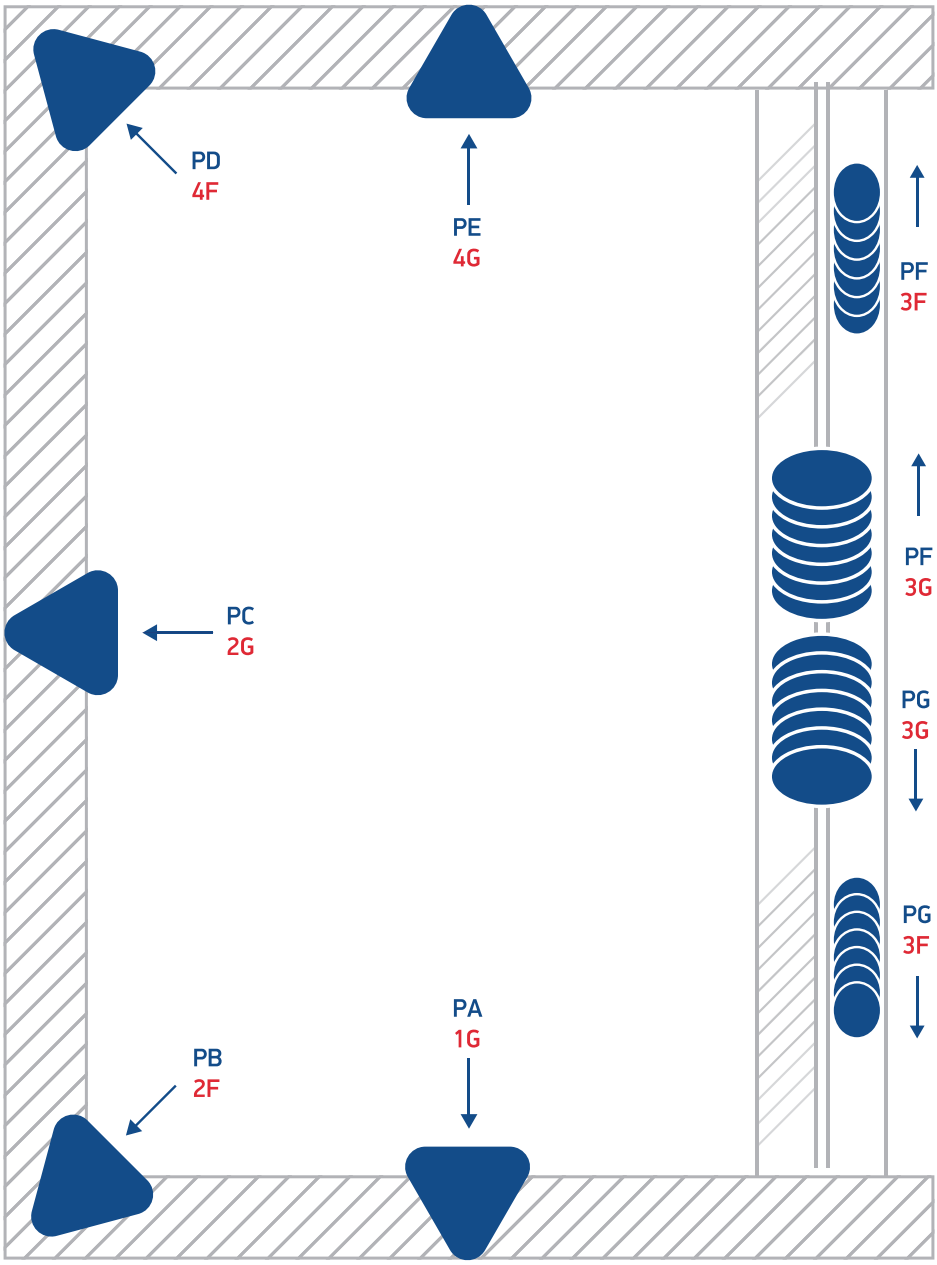
HI-FLEX TRACK			1 track		SERIAL CONNECTION					PARALLEL CONNECTION				
					2 tracks		3 tracks		4 tracks	2 tracks		3 tracks		4 tracks
System element:		Product code:	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position
	Hi-Flex track	TRO-0673-00-00-00-0	1	1	2	2	3	3	N/A	2	2	3	3	N/A
	Modular vacuum unit	MST-0541-10-02-00-0	8	8	15	15	21 max	21 max	N/A	15	15	21 max	21 max	N/A
	Bracket for vacuum modular unit for Hi-Flex and semi-flexible tracks	DYS-0541-11-01-00-0	8	8	15	15	21 max	21 max	N/A	15	15	21 max	21 max	N/A
	Portable vacuum pump with safety reservoir	230V: AGR-0541-10-20-00-0 115V: AGR-0541-10-10-00-0 (UK plug)	1	1	1	1	1	1	N/A	1	1	1	1	N/A
	Pump connection hose 10 m (33 ft)	PWD-0541-06-00-00-0	1	1	1	1	1	1	N/A	2	2	3	3	N/A
	4-way manifold with connection cable 0.3 m (1ft)	RZD-0541-04-00-00-0	0	0	0	0	0	0	N/A	1	1	1	1	N/A
	2-meter / 7-foot hose	PWD-0541-10-07-00-0	1	1	2	2	3	3	N/A	2	2	3	3	N/A
	Cut-off valve for entry vacuum unit	ZWR-0541-10-01-30-0	1	1	2	2	3	3	N/A	2	2	3	3	N/A
	Safety eye bolt	SRB-000365	0	2	0	4	0	6	N/A	0	4	0	6	N/A
	Coupled hose for extension vacuum unit	PWD-0541-10-04-00-0	0	0	1	1	2	2	N/A	0	0	0	0	N/A
	Threaded plug for end vacuum unit	KRK-0541-99-00-00-0	1	1	1	1	1	1	N/A	2	2	3	3	N/A

SEMI-FLEXIBLE TRACK			1 track		SERIAL CONNECTION					PARALLEL CONNECTION				
					2 tracks		3 tracks		4 tracks	2 tracks		3 tracks		4 tracks
System element:		Product code:	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position	on curvatures or in vertical position	in horizontal flat position
	Semi-flexible track	PRW-0482-15-05-00-0	1	1	2	2	3	3	4	2	2	3	3	4
	Modular vacuum unit	MST-0541-10-02-00-0	4 min.	7	8 min.	14	12 min.	21	16 min.	8 min.	14	12 min.	21	16 min.
	Bracket for vacuum modular unit for Hi-Flex and semi-flexible tracks	DYS-0541-11-01-00-0	4 min.	7	8 min.	14	12 min.	21	16 min.	8 min.	14	12 min.	21	16 min.
	Aluminum track support for semi-flexible track	WSP-0541-11-02-00-0	3 max	0	6 max	0	9 max	0	12 max	6 max	0	9 max	0	12 max
	Gear rack adjustment tool	PKT-0341-13-00-00-0	1	1	1	1	1	1	1	1	1	1	1	1
	Portable vacuum pump with safety reservoir	230V: AGR-0541-10-20-00-0 115V: AGR-0541-10-10-00-0 (UK plug)	1	1	1	1	1	1	1	1	1	1	1	1
	Pump connection hose 10 m (33 ft)	PWD-0541-06-00-00-0	1	1	1	1	1	1	1	2	2	3	3	4
	4-way manifold with connection cable 0.3 m (1ft)	RZD-0541-04-00-00-0	0	0	0	0	0	0	0	1	1	1	1	1
	2-meter / 7-foot hose	PWD-0541-10-07-00-0	1	1	2	2	3	3	4	2	2	3	3	4
	Cut-off valve for entry vacuum unit	ZWR-0541-10-01-30-0	1	1	2	2	3	3	4	2	2	3	3	4
	Safety eye bolt	SRB-000365	0	2	0	4	0	6	0	0	4	0	6	0
	Coupled hose for extension vacuum unit	PWD-0541-10-04-00-0	0	0	1	1	2	2	3	0	0	0	0	0
	Threaded plug for end vacuum unit	KRK-0541-99-00-00-0	1	1	1	1	1	1	1	2	2	3	3	4

RIGID TRACK			1 track		SERIAL CONNECTION					PARALLEL CONNECTION				
					2 tracks		3 tracks		4 tracks	2 tracks		3 tracks		4 tracks
System element:		Product code:	in horizontal flat position	in vertical position	in horizontal flat position	in vertical position	in horizontal flat position	in vertical position	in horizontal flat position	in horizontal flat position	in vertical position	in horizontal flat position	in vertical position	in horizontal flat position
	Rigid track	PRW-0482-47-00-00-0	1	1	2	2	3	3	4	2	2	3	3	4
	Modular vacuum unit	MST-0541-10-02-00-0	4 min.	7	8 min.	14	12 min.	21	16 min.	8 min.	14	12 min.	21	16 min.
	Portable vacuum pump with safety reservoir	230V: AGR-0541-10-20-00-0 115V: AGR-0541-10-10-00-0 (UK plug)	1	1	1	1	1	1	1	1	1	1	1	1
	Pump connection hose 10 m (33 ft)	PWD-0541-06-00-00-0	1	1	1	1	1	1	1	2	2	3	3	4
	4-way manifold with connection cable 0.3 m (1ft)	RZD-0541-04-00-00-0	0	0	0	0	0	0	0	1	1	1	1	1
	2-meter / 7-foot hose	PWD-0541-10-07-00-0	1	1	2	2	3	3	4	2	2	3	3	4
	Cut-off valve for entry vacuum unit	ZWR-0541-10-01-30-0	1	1	2	2	3	3	4	2	2	3	3	4
	Safety eye bolt	SRB-000365	0	2	0	4	0	6	0	0	4	0	6	0
	Coupled hose for extension vacuum unit	PWD-0541-10-04-00-0	0	0	1	1	2	2	3	0	0	0	0	0
	Threaded plug for end vacuum unit	KRK-0541-99-00-00-0	1	1	1	1	1	1	1	2	2	3	3	4

160 MM WIDE FLEXIBLE TRACK			1 track		SERIAL CONNECTION					PARALLEL CONNECTION				
					2 tracks		3 tracks		4 tracks	2 tracks		3 tracks		4 tracks
System element:		Product code:	in horizontal flat position	on curvatures	in horizontal flat position	on curvatures	in horizontal flat position	on curvatures	in horizontal flat position	in horizontal flat position	on curvatures	in horizontal flat position	on curvatures	in horizontal flat position
	160 mm wide flexible track	PRW-0466-71-00-00-0	1	1	2	2	3	N/A	4	2	2	3	N/A	4
	Modular vacuum unit	MST-0541-10-02-00-0	5 min.	9	10 min.	18	15 min.	N/A	20 min.	10 min.	18	15 min.	N/A	20 min.
	Bracket for vacuum modular unit for 160 mm wide flexible track	DYS-0466-71-04-00-0	5 min.	9	10 min.	18	15 min.	N/A	20 min.	10 min.	18	15 min.	N/A	20 min.
	Aluminium support for 160 mm wide flexible track	WSP-0466-71-03-00-0	4 max	0	8 max	0	12 max	N/A	16 max	8 max	0	12 max	N/A	16 max
	Portable vacuum pump with safety reservoir	230V: AGR-0541-10-20-00-0 115V: AGR-0541-10-10-00-0 (UK plug)	1	1	1	1	1	N/A	1	1	1	1	N/A	1
	Pump connection hose 10 m (33 ft)	PWD-0541-06-00-00-0	1	1	1	1	1	N/A	1	2	2	3	N/A	4
	4-way manifold with connection cable 0.3 m (1ft)	RZD-0541-04-00-00-0	0	0	0	0	0	N/A	0	1	1	1	N/A	1
	2-meter / 7-foot hose	PWD-0541-10-07-00-0	1	1	2	2	3	N/A	4	2	2	3	N/A	4
	Cut-off valve for entry vacuum unit	ZWR-0541-10-01-30-0	1	1	2	2	3	N/A	4	2	2	3	N/A	4
	Safety eye bolt	SRB-000365	0	2	0	4	0	N/A	0	0	4	0	N/A	0
	Coupled hose for extension vacuum unit	PWD-0541-10-04-00-0	0	0	1	1	2	N/A	3	0	0	0	N/A	0
	Threaded plug for end vacuum unit	KRK-0541-99-00-00-0	1	1	1	1	1	N/A	1	2	2	3	N/A	4

Welding positions according to PN-EN and AWS/ASME



All information is subject to change without notice 25.12

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