PROMOTECH®

WELDING



WELDING



CUTTING



CUTTING



smart tools for heavy tasks WELDING & CUTTING TRACTORS





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, shippards 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



























32

OSC-8 PRO

WELDING & CUTTING TRACTORS

pages 1-36

www.promotech.eu



WELDING AND CUTTING TRACTORS



MINI SPIDER BATTERY



GECKO



GECKO HS



GECKO BATTERY 2



LIZARD



SCORPIO BATTERY



RAIL TUG



RAIL BULL



RAIL TITAN 2



OSC-8 PRO



VACUUM TRACK SYSTEM



DRAGON



DRAGON HS



DRAGON BATTERY

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 placement on either side
- · Welding edge to edge (e.g. welding of stiffeners for bridge structures)
- · Consistent heat input reduces distortion



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

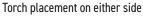
Benefits:

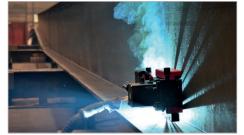
- · over discharge protection
- · extended battery life
- · high level of safety for both tractor and operator











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



Horizontal speed 0-110 cm/min welding



Torch placement on either side





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 on both sides

The regular configuration of the tractor allows the torch to be mounted on the preferred side of the tractor. Either left or right. No optional accessories are required to change the torch position side.



Cross-slide with torch holder on the left

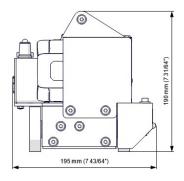


Universal cross-slide with torch holder and bracket are included in standard shipping set



Cross-slide with torch holder on the right

Dimensions:



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.



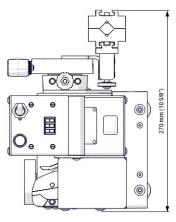
Torch to be hold on one side



Optional universal cross-slide



Torch to be hold on both sides





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



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	W0Z-0772-10-20-00-0
Product Code (115-230 V, 50-60 Hz, plug UK)	W0Z-0752-10-20-01-0	W0Z-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")

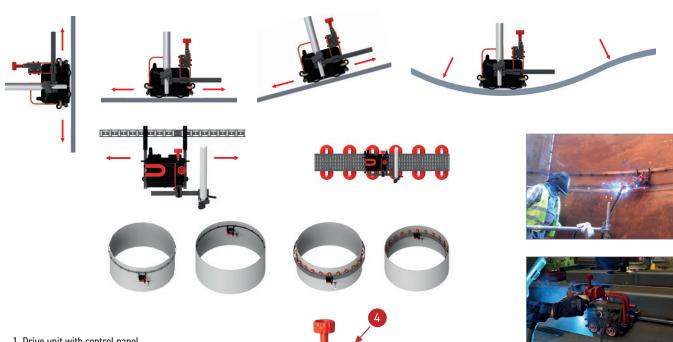


Min. path concave radius 800 mm (31.5")



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-0752-17-00-00-0



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



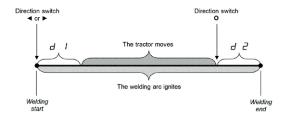
Dual arc ignition cable of 6.5 m (21 ft) KBL-0466-17-00-00-0

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
- · 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	
0-5 s [step: 0.5 s]		Tractor movement delay time. When the direction switch is set to ◀ or ►: d != 0 s - the arc ignites and the tractor starts immediately, d!>0 s - the arc ignites and the tractor starts after the set time (see drawing above)	
0-5 s [step: 0.5 s]		Arc out delay time. When the direction switch is set to 0: d = 0 s - the tractor stops and the arc goes out immediately, d = > 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.







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

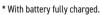
Benefits:

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

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 PF / 3G (ask dealer)	
	Vertical		
Minimum path curve radius	Outer	600 mm (23-5/8")	
Millimulii patri cui ve raulus	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	





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")

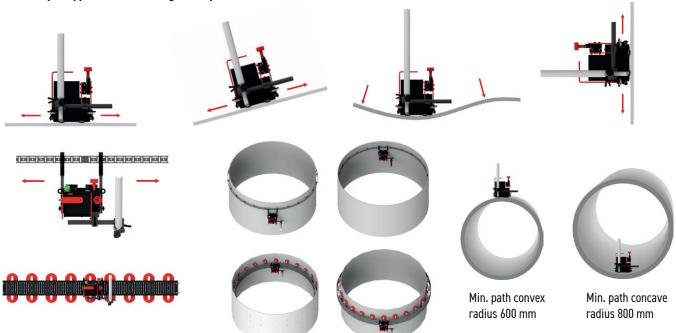


Min. path concave radius 800 mm (31-1/2")



Weight 8 kg (18 lbs)

Versatility of applications including out-of-position use

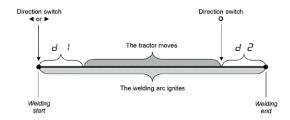


Primary features and benefits:

- 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
- $\bullet \ \ \text{Automatic arc on/off system initiates welding with travel, simultaneously}$
- · Capable of carrying and controlling two torches
- · Self-guiding roller arms eliminate the need for track
- $\bullet \quad \text{Multi-surface guiding with user-friendly adjustment of tractor position} \\$
- · 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



Standard guide arms (set of 2 pcs) ZST-0752-17-00-00-0



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



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

Parameter	Value	Description	
d !	0-5 s [step: 0.5 s]	Tractor movement delay time. When the direction switch is set to ◀ or ►: d != 0 s - the arc ignites and the tractor starts immediately, d !> 0 s - the arc ignites and the tractor starts after the set time (see drawing above)	
0-5 s [step: 0.5 s]		Arc out delay time. When the direction switch is set to 0: ・ dz = 0 s - the tractor stops and the arc goes out immediately, ・ dz > 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
- · 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")	
Thinnian pain our to radias	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	











welding



Stitch welding



Welding path





Dual torch welding





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



Min. path concave radius 1250 mm (49 7/32")



Min. path convex radius 1000 mm (39 3/8")



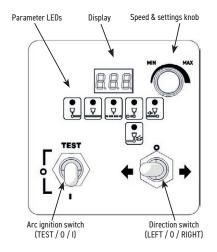
Weight



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



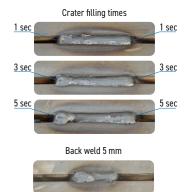
Dual arc ignition cable of 6.5 m (21 ft) KBL-0466-17-00-00-0



Standard guide arms (set of 2 pcs) ZST-0752-17-00-00-0

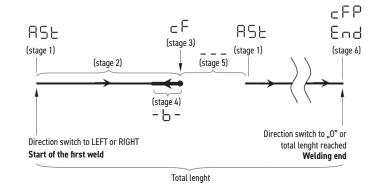


Ultra-short rod torch holder with clamp 16-22 mm UCW-0757-09-00-00-0





	Crater fill time Arc stabilization	85E itime	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]
රී ර්ථ	Crater fill	C F P	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	٥٥	Full current from Welding Source
	Reverse filling length	-6-	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

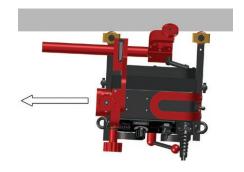


Stage 1	Arc stabilization and crater filling at the beginning of the weld
Stage 2	Tractor moves with the set speed and creates the weld of a defined length
Stage 3	Crater filling at the end of the weld
Stage 4	Back weld (Reverse filling length)
Stage 5	Tractor skips between welds. Next steps 1,2,3,4 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-0752-17-00-00-0

Optional accessories for multi-surface guiding and variety of applications



Low guide arms (set of 2 pcs) PRW-0752-12-00-00-0



High guide arms (set of 2 pcs) PRW-0752-13-00-00-0





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-0752-10-00-00-0



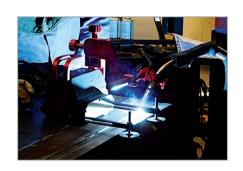
Magnet guide arms (set of 2 pcs) PRW-0752-11-00-00-0





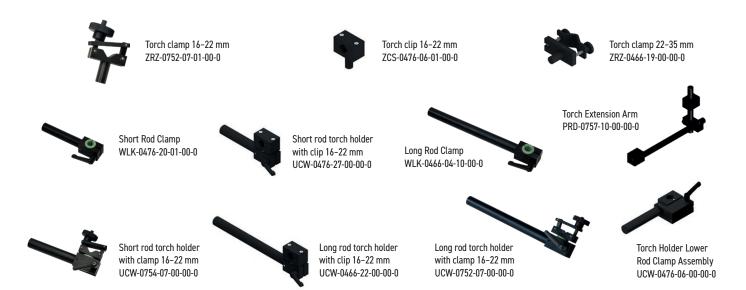
Track following guide arms (set of 2 pcs) PRW-0752-14-00-00-0







Optional accessories for variety of applications





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



Fall arrester device URZ-000001



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







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



Oscillator support (incl. two M6x14 screws) KTW-0805-99-01-00-0



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



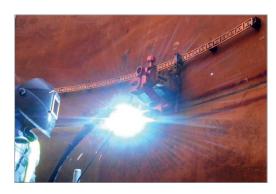
Magnet blocks (back) clamping force 80 N BLO-0466-48-01-00-0

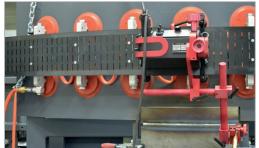


Display shield (Gecko) OSL-0466-29-00-00-0



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





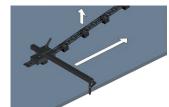


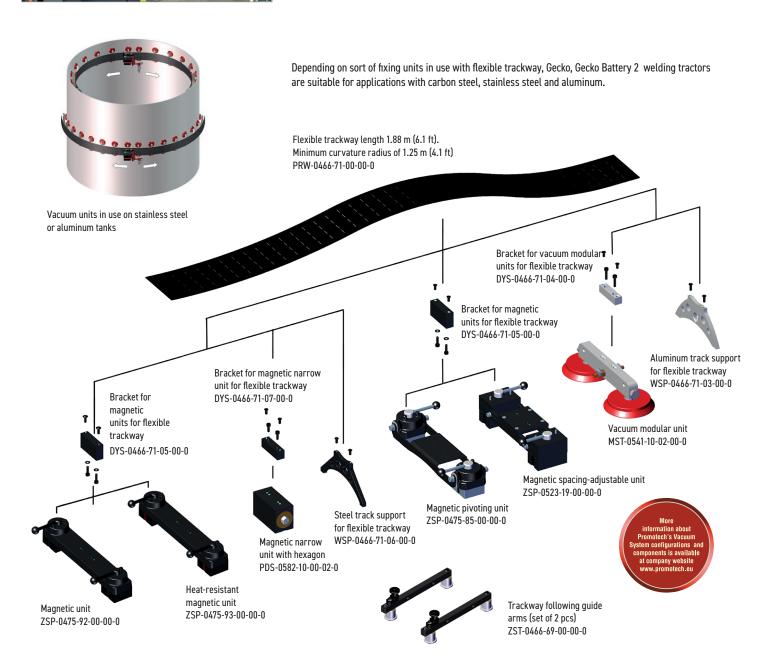
Flexible track length 185cm (6ft) 1pc Minimum curvature radius of 1.0 m (3.3 ft) PRW-0466-50-01-01-0



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











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-ofposition 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)

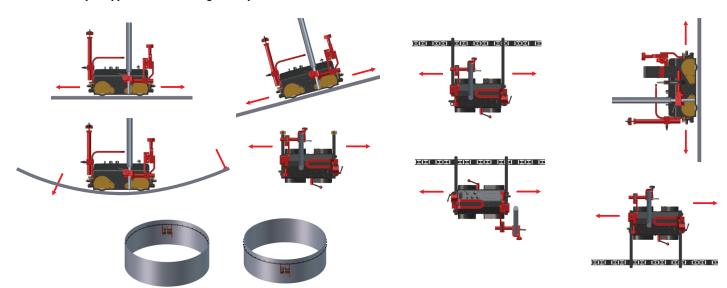


Stitch welding



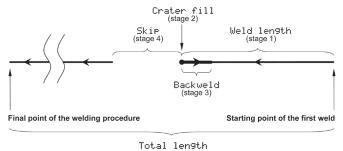
Weight 14 kg (31 lbs)

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



local lenach

Programmable variables diagram











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

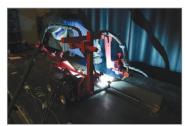


Extended cross-slide 0-76 mm (0-3") either up-down or left-right ZSP-0466-46-00-00-1



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)



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



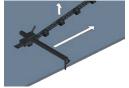
Magnetic block for flexible track box of 10 pcs BLO-0466-68-00-00-0



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.



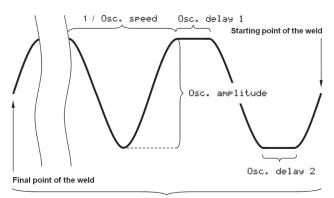
Oscillator ZSP-0477-10-00-00-0



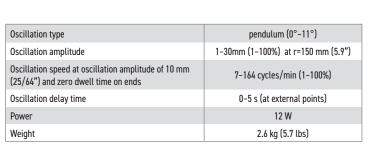
Torch Holder Lower Rod Clamp Assembly UCW-0476-06-00-00-0



Oscillator settings diagram



Weld len9th







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.

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	
voltage		42 V, 50-60 Hz	
Power		100 W	
		PA/1F/1G	
		PB/2F	
l	Horizontal	PC/2G	
Welding position		PD/4F PE/4G	
(according to EN ISO 6947 and AWS/ASME)		PF/3G	
	Vertical	PG/3F (contact your dealer)	
	VCI ticat	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)		W0Z-0624-10-04-00-0	









Continuous welding



Horizontal speed 0-120 cm/min



Vertical speed 0-110 cm/min



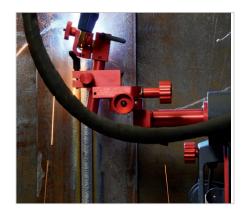
Linear oscillation with trapezoid and straight line paths

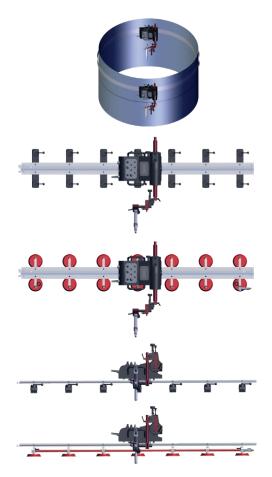


Min. path convex radius 5000 mm



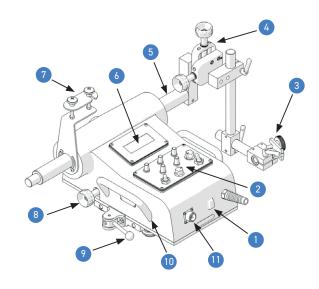
Min. path concave radius 5000 mm







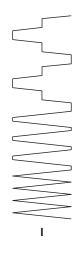
- · Carton box
- · Cross slide assembly
- Short rod torch holder with clamp
- $6.5 \, \mathrm{m}$ (21 ft) arc ignition cable
- 3 mm hex wrench
- · 4 mm hex wrench
- · Operator's Manual



- 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.

Ш

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

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).

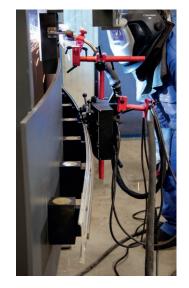
Using a vacuum system allows the tracks to be clamped to non-ferrous surfaces (stainless steel, aluminum etc.)

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



Primary features and benefits

- Compact, lightweight design
- Closed-loop speed control system based on electric motor with encoder - ensures increased accuracy of speed
- Rack and pinion drive
- Consistent heat input reduces distortion
- Reduces wasted filler metal eliminates over welding
- Digital LED display for presetting of travel speed
- Automatic arc on/off initiates welding and travel simultaneously
- Oxy-fuel and plasma cutting possible with optional accessories
- Suitable for variety of circumferential and irregular surface applications down to minimum radius of 100 mm (4")
 - Ring tracks on diameters from 200 mm (8") OD up to 3 m 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)	
Finite or airconnel arms	Ring tracks	from 200 mm (8") OD up to 3 m (10ft) OD	
Fixing on pipes and round workpieces	Hi-flex tracks	lex tracks Minimum curvature radius of 750 mm (30")	
Workpieces	Semi-flexible track	Minimum curvature radius of 5 m (16 ft)	
Torch type		MIG/MAG, SAW, Plasma, Oxy-fuel	
Torch diameter	MIG/MAG SAW, Plasma	16-22 mm (0.63-0.87")	
	0xy-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 H	lz, 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") 0D up to 3 m (10 ft) 0D



Hi Flex Track min OD 1500 mm (59")



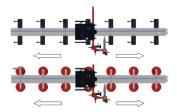
Min. path convex radius for semi-flexible tracks is 5 m (16 ft)

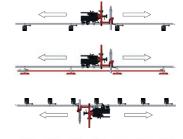
Rail Tug can work in various welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.



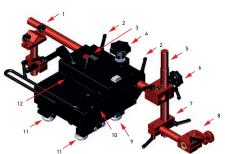


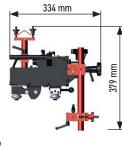






- 1. 540 mm (21") rack
- 2. Rack Locking Levers
- 3. Control panel
- 4. Rack adjustment knob
- 5. 300 mm (12") rack with 180 mm (7") adjustment
- 6. Rack holder
- 7. Clamping block with levers
- 8. Short rod torch holder with fits-all clamp
- 9. Guiding Roller
- 10. Carrying handle
- 11. Adjustable Roller
- 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-0466-23-00-00-0 (230 V UK)



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



540 mm (21") Geared Rack RAM-0525-07-00-00-0



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



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



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

Geared Rack

RAM-0475-23-00-00-0



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



Geared Rack

RAM-0475-07-03-00-0

PWG-0475-09-00-00-0 1000 mm (39.4") 700 mm (25.6")





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-0475-08-00-00-0



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





Precise Machine Torch Holder Ø 30 mm (1.18") UCW-0475-59-00-00-0 Precise Machine Torch Holder Ø 35 mm (1.38") UCW-0475-42-00-00-1



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.

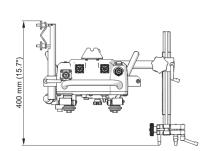
Primary features and benefits:

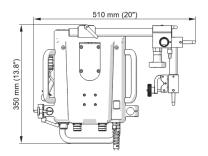
- Suitable for TIG welding (HF resistant)
- · Robust design with die-cast aluminum housing
- · Ergonomic remote control pendant with simple and easy to find control knobs makes adjustments possible without lifting of the operators welding hood
- · Programmable path of stitch welds
- Suitable for variety of circumferential and irregular surface applications down to min. radius of 100 mm (4")
- O Ring tracks on diameters from 200 mm (8") OD up to 3 m (10 ft) OD
- O 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	
diu AW3/ASML)	Vertical	PF/3G PG/3F (contact your dealer) PG/3G	
	Ring tracks (OD)	200 mm (8") – 3 m (10 ft)	
Fixing on pipes and round	Hi-flex tracks (OD)	Minimum 1.5 m (5 ft)	
workpieces	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



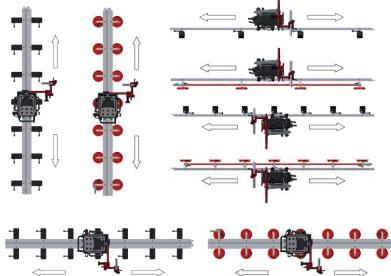
Vertical speed 0-250 cm/min



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



Reliable signal sockets and plugs

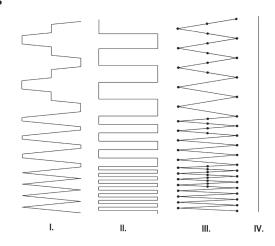


TIG welding of titanium plate



Seam tracking works with and without oscillation

Weld paths



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 $% \left(1\right) =\left(1\right) \left(1\right) \left$

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



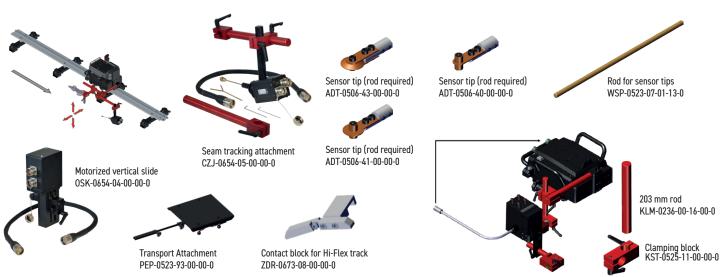
Cable anchor UCW-0654-02-00-00-0



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



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

Magnetic unit

ZSP-0475-92-00-00-0

magnetic unit

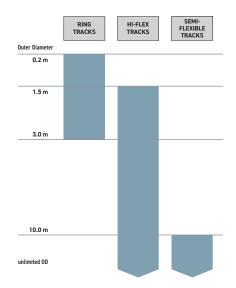
ZSP-0475-93-00-00-0

- 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 wrenchOperator'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

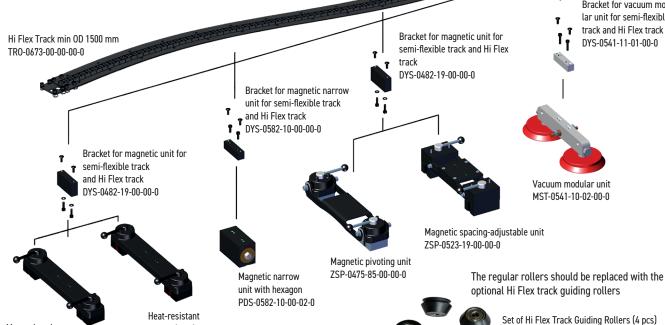


Support with bolts Support with magnets WSP-0654-11-00-00-0 WSP-0654-13-00-00-0

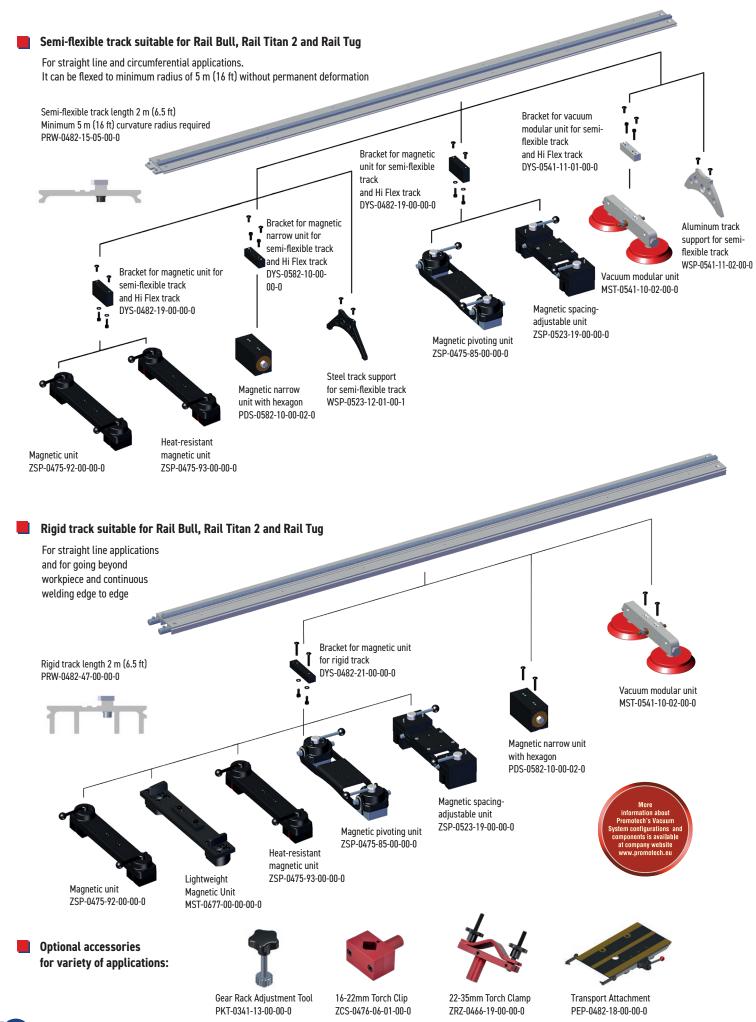


WSP-0654-12-00-00-0





ZSP-0673-07-00-00-0



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 tra	ack load	30 kg (66 lbs)		
	Track type	Horizontal position	Wall position	Curve
Minimum number of vacuum units	Hi-Flex Track	8	8	8
or vacuum umis	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 m³/h (141 ft³/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)		







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





Modular vacuum unit

consists of 2 vacuum pads and manifold block

MST-0541-10-02-00-0

entry unit

middle unit

extension unit

end unit 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



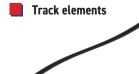
Hose fitting KRC-000013



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



Safety eye bolt SRB-000365



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)



Vacuum units in use on stainless steel

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





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.







Cutting tractor for plasma DRAGON

Common features and benefits of the DRAGON family:

- Oxy-fuel and plasma cutting
- · Digital speed control and stabilization for high quality cuts

Cutting tractor for Oxy-Fuel

- · 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 batterypowered tractors)
- The LiHD battery, supported by intelligent battery management, ensures maximum power availability for an extended period

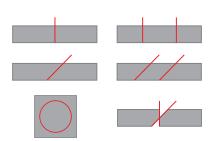
TECHNICAL SPECIFICATIONS				
	Dragon	Dragon HS	Dragon Battery	
Voltage	1~ 115-230 V, 50-60 Hz 42 V, 50-60 Hz	~ 115-230 V, 50-60 Hz	18 V DC, 4 Ah	
Power	20 W	20 W	20 W	
Operating position	horizontal	horizontal	horizontal	
Torch diameter	28-35 mm (1.10-1.38")	28-35 mm (1.10-1.38")	28-35 mm (1.10-1.38")	
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)	W0Z-0475-10-20-00-3	W0Z-0527-10-20-00-1	-	
P. Code (115-230 V, 50-60 Hz, plug UK)	WOZ-0475-10-10-00-3	W0Z-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	



DRAGON BATTERY Cordless cutting tractor







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



Power cord 3m (9,7 ft)



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-0475-08-00-00-0



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









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







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



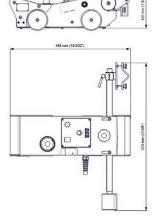
New control system of battery pack:

Detection and supervised parameters:

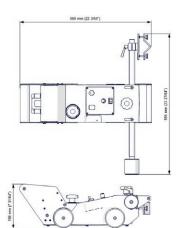
- too low and too high voltage
- too low and too high temperature
- failure of the temperature sensor
- internal battery failure

Benefits:

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



DRAGON / DRAGON HS



DRAGON BATTERY











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.





- · 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		











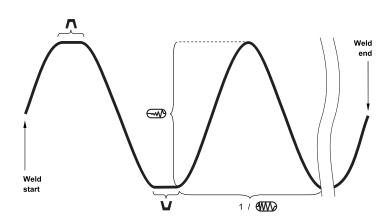
OSC-8 PRO configurations at glance:

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	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, TRIAN- GLE 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



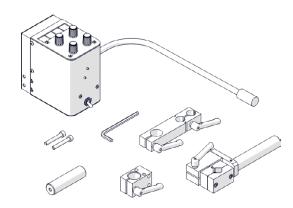
Troubleshooting:

The multi-functional LED display not only shows the oscillation parameters, but also indicates the current status of the OSC-8 PRO and provides safety and diagnostic information.

Message	Problem	Solution
5 /''ユーヨニワ	Displays not fully on after powering	Contact service center for check and repair
0b. 5Et 0	Control switch not set to center position when powering	Set the control switch to the center position
Ollo Vol	Power source voltage too low	Reconnect the oscillator to the power source
OZ.H , UoL	Power source voltage too high	Reconnect the oscillator to the power source
035En5or	Optical sensor error	Contact service center for check and repair
O4 dr iuE	Driver error	Contact service center for check and repair
OS EEPro	Memory error. The set parameters were not saved.	Contact service center for check and repair
O7 SLEEP	The oscillator got into power-saving mode	Press or turn any knob
OB. CAn	CAN connection error	Unplug the machine from the power source. Reconnect the oscillator to the machine.

Standard shipping set:

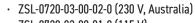
- Oscillator
- 5 mm hex wrench
- · Arm
- · Low rod torch holder with clip
- · Clamping block
- · M6x40 screw 2 pcs
- · 80 mm (3 5/32") rod
- · Operator's Manual

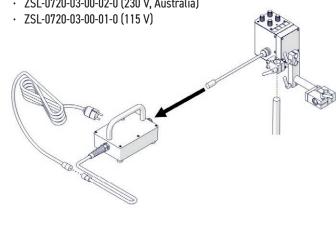


Optional Power Supply:

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)

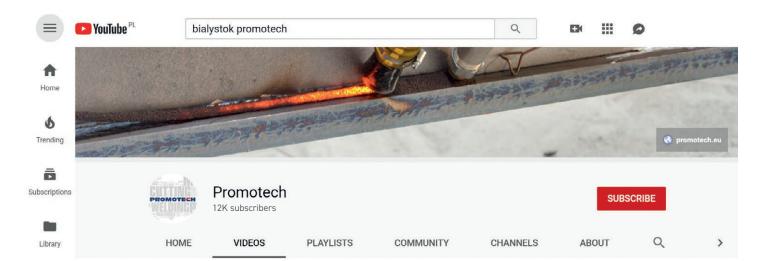














Promotech - Rail Bull Welding Track Carriage

90K views • 9 years ago



Flexible Track Welding System for Gecko and Lizard carriages

37K views • 7 years ago



Promotech - Gecko Fillet Welding Carriage

29K views • 9 years ago



Promotech - Dragon Cutting and Bevelling Carriage

18K views • 9 years ago



Lizard | Programmable Welding Carriage

17K views • 4 years ago



Vacuum Track System 14K views • 7 years ago

2:21

Rail Bull 2 - All position modular mechanized carriage

14K views • 6 years ago



Promotech - Lizard Programmable Welding Carriage 2013

13K views • 9 years ago



Mini Spider | Fillet Welding Tractor

13K views • 4 years ago



OSC-8 | Pendulum Weave Welder

11K views • 3 years ago



Promotech - Gecko Battery Powered Welding Carriage

10K views • 7 years ago



Easy Welding - Wire Feeder Booms

6.7K views • 4 years ago



Rail Tug | Welding and Cutting Tractor

6.1K views • 4 years ago



Gecko | Fillet Welding Carriage

4.7K views • 4 years ago



Rail Titan Modular TIG MIG MAG Welding and Cutting Rail Tractor

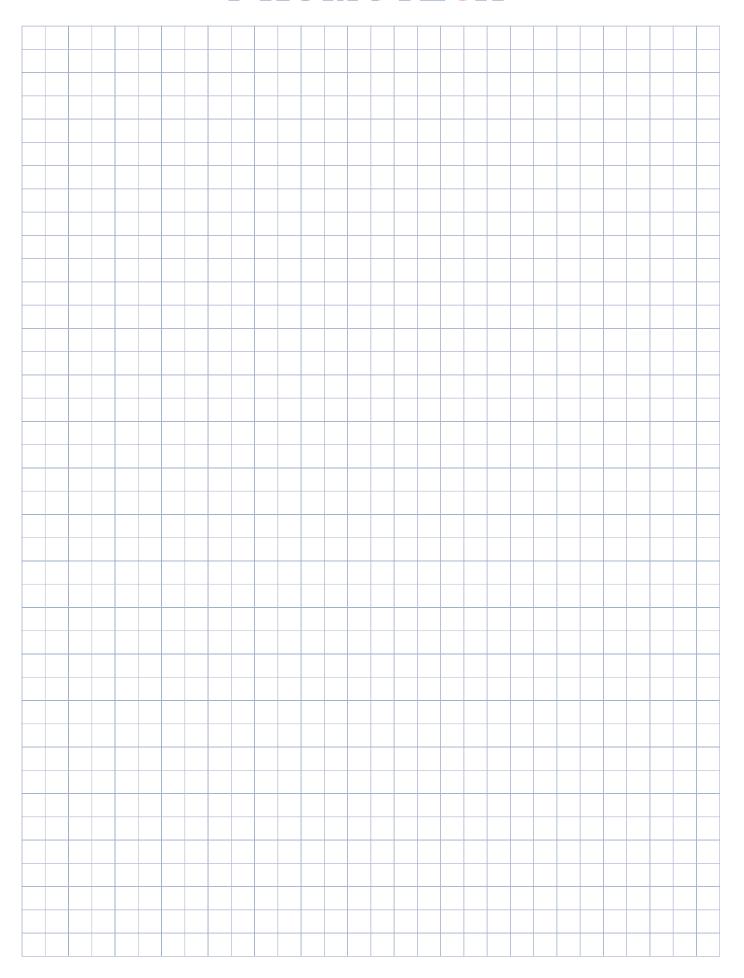
4.2K views • 1 year ago



Get your Gecko tractor ready for non ferrous metals welding

3.3K views • 6 years ago

PROMOTECH®



Phone: +48 85 678 34 05 marketing@promotech.eu www.promotech.eu

PROMOTECH DEUTSCHLAND GmbH

Riedweg 11 D-88339 Bad Waldsee/Gaisbeuren DEUTSCHLAND

Phone: +49 7525 507955-0 dach@pdg.promotech.eu www.promotech-deutschland.de PROMOTECH ME (FZE)

P6-111, Saif Zone P.O. Box. 514914 Sharjah, UAE

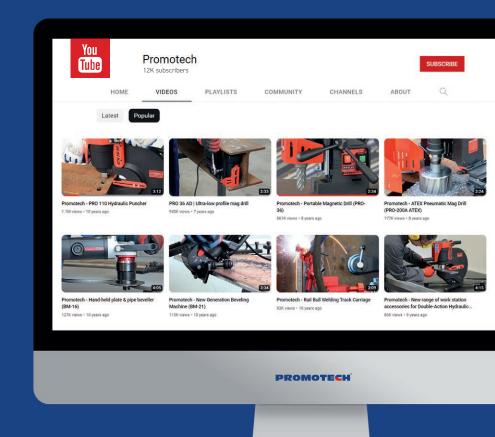
Phone: +9716 552 9493 akumar@pme.promotech.eu www.promotechme.ae PROMOTECH Fabrication Machines Pvt. Ltd.

Head Office: Plot 231, Phase-5, Sector 53

I/E HSIIDC Kundli, Sonipat Haryana-131028, INDIA

Phone: +91 966 766 0304 info@pfm.promotech.eu www.promotech-india.in

smart tools for heavy tasks











FOLLOW US FOR UPDATE AND MORE

www.promotech.eu









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





Your local dealer:

