# PROMOTECH®

WELDING



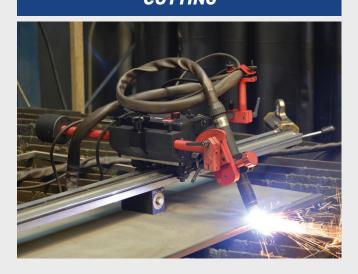
WELDING



**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 power tools, welding automation equipment and industrial systems tailored 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 tractors
- welding and cutting automation equipment

### **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

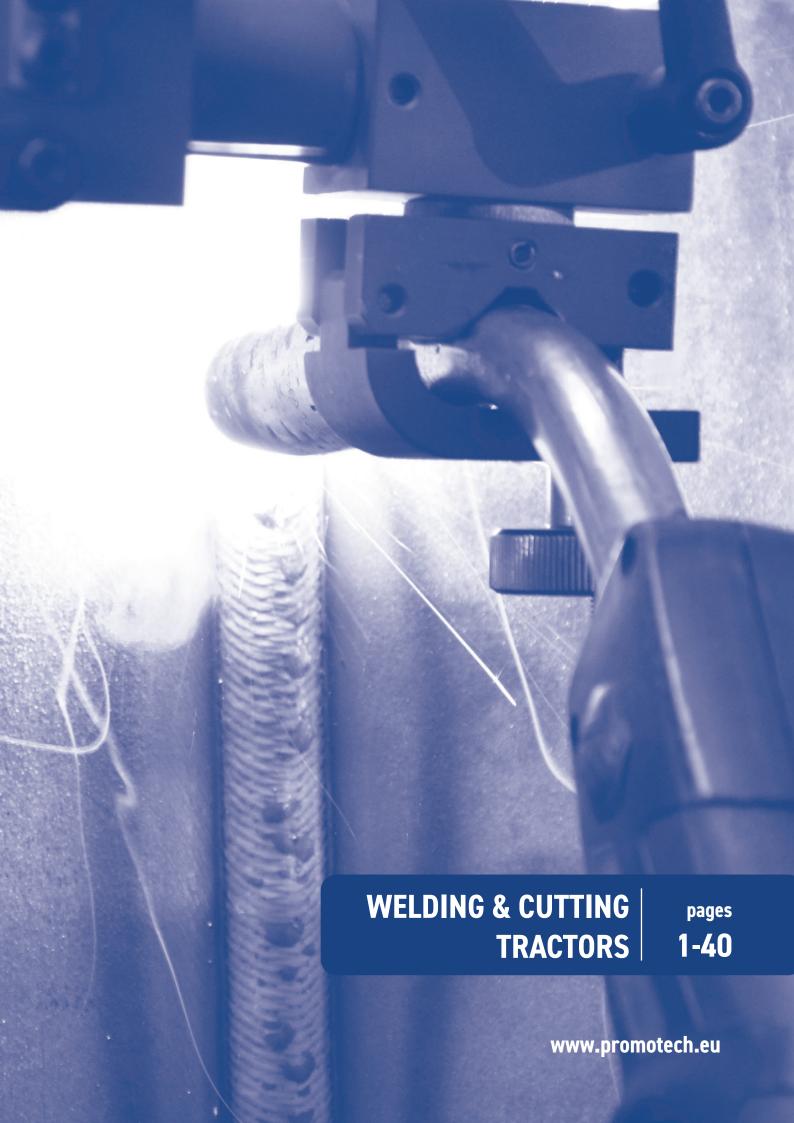














### **WELDING AND CUTTING TRACTORS**





**MINI SPIDER** 



**GECKO** 



**GECKO HS** 



**GECKO BATTERY** 



LIZARD with oscillator



OSC-8 Pendulum weave welder







**RAIL TITAN** 



**VACUUM TRACK SYSTEM** 



**DRAGON** 



**DRAGON HS** 

## MINI SPIDER | FILLET WELDING TRACTOR



The Mini Spider is a battery-powered welding tractor designed to produce continuous fillet welds using MIG/MAG torches. The torch can be easily swapped from one side of Mini Spider to another.

4-wheel drive system with magnetic traction and a feedback loop provides highly efficient speed stabilization.

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.

### Features and benefits:

- · Compact and lightweight design to weld in narrow spaces
- · Convenient 18 V DC battery supply (the same battery for both Mini Spider and Gecko Battery)
- · Torch placement on either side
- · Welding edge to edge
- · Closed-loop speed control system based on electric motor with encoder ensures increased speed accuracy
- · Consistent heat input reduces distortion
- · Reduces wasted filler metal eliminates over welding
- · Digital LED display for presetting of travel speed and diagnostic messages
- · Low-battery indicator
- · Built-in guide rollers

### 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

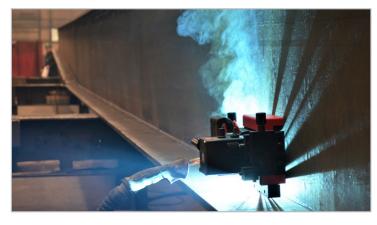
### Benefits:

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



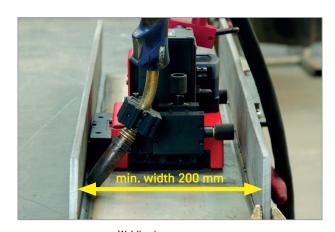






Welding edge to edge

MINI SPIDER TECHNICAL SPECIFICATION		
Voltage	18 V DC, 4.0 Ah	
Power	25 W	
Welding position (according to EN ISO 6947 and AWS/ASME)	PB / 2F PD / 4F	
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	
Vertical pulling force	100 N	
Horizontal speed *	0-110 cm/min (0-43.3 in/min)	
Vertical speed *	0-100 cm/min (0-39.4 in/min)	
Weight (w/o battery)	7.6 kg (22 lbs)	
Product code	WOZ-0735-10-00-00-0	



Welding in narrow spaces





Vertical speed 0-110 cm/min



Torch placement on either side



Welding in narrow spaces



Weight 7,6 kg

<sup>\*</sup> With battery fully charged

### Standard accessories:



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



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



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

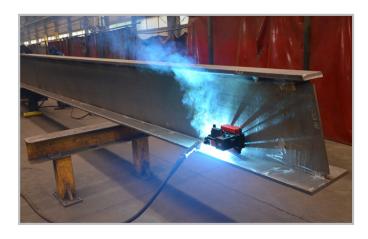


Cable anchor UCW-0655-08-00-00-0



Auxiliary magnet blocks ZST-0655-09-00-00-0

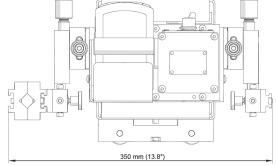
### Torch placement on either side

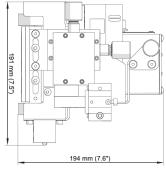




## Standard shipping set: • Mini Spider tractor

- Foam-filled cardboard box
- · Battery 4.0 Ah (2 pcs)
- 4 mm hex wrench
- · 3 mm hex wrench
- · Operator's Manual









## **GECKO** | COMPACT WELDING TRACTOR



Gecko is a portable mini fillet welder designed to produce consistent high-quality welds.

It features 4-wheel drive system with magnetic traction and a control loop feedback mechanism which 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.

Lots of optional accessories make Gecko fit for a specific use including cutting and welding of stainless steel constructions.

GECKO compact welding tractor weighs only 8 kg (17 lbs).

### **Applications:**

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



### **GECKO HS (High Speed)**

New special version for specific applications is available now

### **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 35mm (1.38") option	16-22 mm (0.63-0.87"); up to 35mm (1.38") option
Minimum radius of curved workpiece surface	1000 mm (3.5 ft)	1000 mm (3.5 ft)
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-0466-10-20-00-0	WOZ-0528-10-20-00-0
Product Code (115-230 V, 50-60 Hz, plug UK)	WOZ-0466-10-10-00-0	WOZ-0528-10-10-00-0
Product Code (42 V, 50-60 Hz)	W0Z-0621-10-04-00-0	W0Z-0622-10-04-00-0



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 1000 mm (3.5 ft)

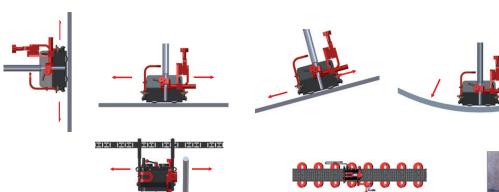


Min. path concave radius 1000 mm (3.5 ft)



Weight 8 kg (18 lbs)

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











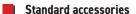






- 1. Drive unit with control panel
- 2. Magnetic adhesion release lever
- 3. Weld contact / Arc ignition socket
- 4. Power supply coupling
- 5. Adjustable guide arm
- 6. Quick clamp torch holder
- 7. Main power switch (0/I)
- 8. Cross slide assembly







Standard guide arms (set of 2 pcs) PRW-0466-67-00-00-0



Power cord 3m (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)



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



Torch Holder Long Rod Clamp Assembly UCW-0466-04-00-00-0

### Primary features and benefits of Gecko welding tractor:

- · Compact, lightweight design with 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
- Maintenance free 4-wheel drive with worm gear reduction
- 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
- Multifunctional LED display presetting of travel speed, error codes information

- Closed loop speed control system stabilizes travel speed to reduce weld defects and costly rework
- · 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 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
- Plasma cutting possible

## GECKO BATTERY | MOBILE WELDING TRACTOR



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

4-wheel drive system with magnetic traction and a feedback loop provide 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 substantially decreasing filler metal usage.

Optional accessories make Gecko Battery fit for various applications with carbon steel, stainless steel and aluminum.







### 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		
Voltage	18 V DC, 4.0 Ah	
Power	20 W	
Welding position (according to EN ISO 6947 and AWS/ASME)	PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G	
Torch diameter	16-22 mm (0.63-0.87"); up to 35mm (1.38") option	
Minimum radius of curved workpiece surface	1000 mm (3.5 ft)	
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	8.6 kg (19 lbs)	
Welding settings storage	1 (last used)	
Product Code	WOZ-0734-10-00-00-0	

<sup>\*</sup> 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 1000 mm (3.5 ft)



Min. path concave radius 1000 mm (3.5 ft)

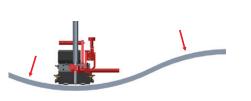


Weight 8.6kg (19 lbs)

### Versatility of applications including out-of-position use





















### Primary features and benefits of Gecko Battery Welding tractor:

- · Compact, lightweight design with durable aluminum cast housing
- · Convenient 18 V DC battery supply
- · Strong magnetic traction permits out of position use
- Magnet on/off lever permits easy set up and adjustment on work piece
- · Maintenance free 4-wheel drive with worm gear reduction
- · 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
- · Multifunctional LED display presetting of travel speed, units, error codes information
- · Closed loop speed control system stabilizes travel speed to reduce weld defects and costly rework
- · 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





### Standard accessories:



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



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



Torch holder long rod clamp assembly UCW-0466-04-00-00-0

### **Optional accessories:**



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



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



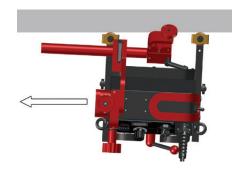


Stainless steel driving wheel KOL-0466-72-00-00-0

### Joint accessories for Gecko, Gecko HS and Gecko Battery

The newest improved guide arms family makes a proper welding tractor positioning even easier.

- 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-0466-67-00-00-0

### Optional accessories for multi-surface guiding and variety of applications



Low guide arms (set of 2 pcs) PRW-0466-65-00-00-1



High guide arms (set of 2 pcs) PRW-0466-66-00-00-1



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





Adjustable guide arms (set of 2 pcs) PRW-0466-42-00-00-1





Magnet guide arms (set of 2 pcs) PRW-0466-52-00-00-1



Track following guide arms (set of 2 pcs) PRW-0466-50-02-00-1







### Optional accessories for variety of applications



Extended cross-slide 0-76 mm (0-3") up-down, 0-35 mm (0-1.38") left-right ZSP-0466-46-00-00-1



Display shield OSL-0466-29-00-00-0



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



Fall arrester device URZ-000001



Cable anchor PDT-0466-55-00-00-0



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





PDT-0466-40-00-00-0









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



Magnet blocks (front) M5x25 BLO-0466-44-01-00-0



Magnet blocks (front) with increased power M5x25 BLO-0466-47-01-00-0





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



Magnet blocks (back) M6x25 incl. additional spacer plate required for Gecko Battery only BLO-0466-45-01-00-0

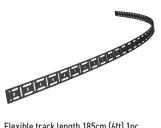


Magnet blocks (back) with increased power M6x25 BLO-0466-48-01-00-0









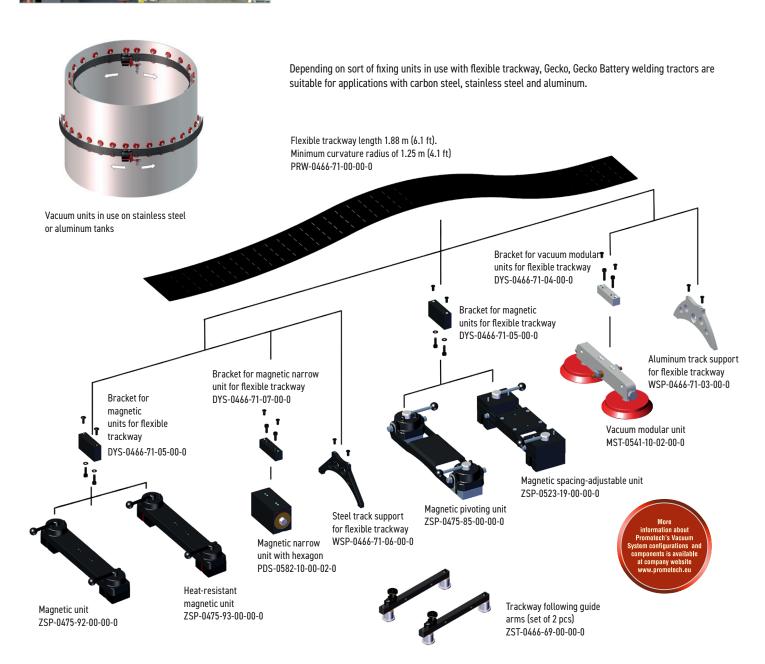
Flexible track length 185cm (6ft) 1pc Minimum curvature radius of 1.0 m (3.3 ft) PRW-0466-50-01-01-0



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









### **LIZARD** | PROGRAMMABLE WELDING TRACTOR

LIZARD is a portable, programmable welding tractor designed to produce consistently high-quality welds. Friction drive and control loop feedback mechanism provides speed stabilization in all positions.

The unit enables weld bead geometry that is exact to the required specifications, substantially reducing costly over welding and decreasing filler metal usage.

LIZARD can be programmed in continuous or stitch welding modes. Welder friendly two function buttons enable programming of selected welding patterns and parameters such as weld length, distance between welds, reverse fill, crater fill time and others.

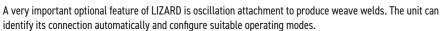
LIZARD travels at full speed between stitches, which saves valuable welding time.

### **Applications:**

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







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	0-120 cm/min (0-47.2 in/min)		
Vertical speed	0-110 cm/min (0-43.3 in/min)		
Limit switch	at both sides		
Weight	14 kg (31 lbs)		
Product Code (115-230 V, 50-60 Hz, plug EU)	WOZ-0476-10-20-01-0		
Product Code (115-230 V, 50-60 Hz, plug UK)	WOZ-0476-10-10-01-0		
Product Code (42 V, 50-60 Hz)	W0Z-0623-10-04-00-0		



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 0-120 cm/min (0-47.2 in/min)



Stitch welding

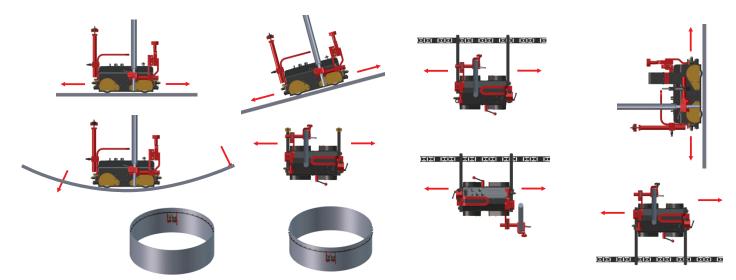


Vertical speed 0-110 cm/min (0-43.3 in/min)



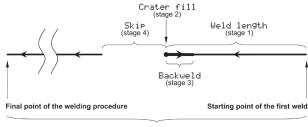
Weight 14 kg (31 lbs)

### Versatility of applications including out-of-position use



### Primary features and benefits:

- · Compact, lightweight design with durable aluminum cast housing
- · Convenient Power Supply 115-230 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
- · Maintenance free 4-wheel drive with worm gear reduction
- · 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
- Multifunctional LCD display and 2 function buttons for welding pattern programming
- Up to 40 complete programs may be stored in non-volatile memory
- · Closed loop speed control system stabilizes travel speed to reduce weld defects and costly repair work
- · 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



Total length Programmable variables diagram









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

### Standard accessories



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





Cable anchor PDT-0466-55-00-00-0



Power cord 3m (9,7 ft)



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



Holder Short Rod Clamp Assembly UCW-0476-20-00-00-0 Torch

### Optional accessories



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



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



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



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



Extended Cross-Slide 0-76 mm (0-3") up-down, 0-35 mm (0-1.38") left-right ZSP-0466-46-00-00-1



Knurled Nut SRB-0476-08-00-00-0







### 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



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



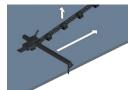
Magnetic block for flexible track box of 10 pcs BLO-0466-68-00-00-0



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.



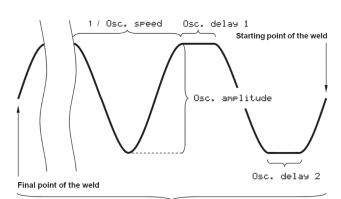
**Oscillator** ZSP-0477-10-00-00-0



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



### Oscillator settings diagram



Weld len9th



Butt joint welding with oscillator



Oscillation type	pendulum (0°-11°)
Oscillation (weaving) pattern	trapezoid, triangle, c-type straight line
Oscillation width	1-30mm (1-100%) at r=150 mm (5.9")
Oscillation speed	100-2200 mm/min (1-100%) at r=150 mm (5.9")
Oscillation delay time	0-5 s (at external points)
Power	12 W
Weight	2 kg (4 lbs)



Fillet Welding with oscillator





## 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.



### **Applications:**

- Trailer manufacturing
- Truck tanks
- · Oil tanks
- · Water storage tanks
- · Pressure vessels
- · Bridge girders
- · Structural steel
- · Structural towers
- · Panel welding
- Transformers
- Shipyards
- Any application demanding long continuous welds







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)	
	Ring tracks	from 200 mm (8") OD up to 3 m (10ft) OD	
Fixing on pipes and round workpieces	Hi-flex 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")	
	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") 0D up to 3 m (10 ft) 0D



Hi Flex Track min OD 1500 mm (59")



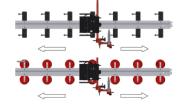
Min. path convex radius for semi-flexible tracks is 5 m (16 ft)

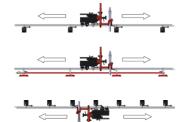
Rail Tug can work in various welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.







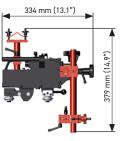


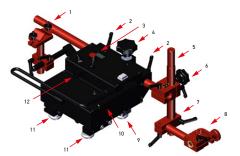


### Primary features and benefits

- 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

- 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

Counterweight

1.3 kg (2.9 lbs)



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



UCW-0523-05-01-00-0

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



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

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-0475-23-00-00-0



Large Counterweight

PWG-0475-10-00-00-0

2,6 kg (5,7lbs)

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



Clamp ZRZ-0466-19-00-00-0



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

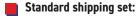
Machine Barrel Torch Holder Ø 35 mm (1.38") UCW-0475-29-00-00-1



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



- · 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 BULL | TRACK WELDING TRACTOR WITH OSCILLATOR

The Rail Bull is a track welding tractor designed to produce butt and fillet welds with or without oscillation.

The tractor can work in PA (flat), PB (horizontal vertical), PC (horizontal), PD (overhead horizontal-vertical), PE (overhead), PF (vertical-up) and PG (vertical-down) welding positions.



- Trailer manufacturing
- · Truck tanks
- · Oil tanks
- · Water storage tanks
- · Pressure vessels
- · Vessel overlay/Hard facing
- Bridge girders
- · Structural steel
- · Structural towers
- · Panel welding
- Transformers
- Shipyards
- · Any application demanding long, continuous welds



Rail Bull moves along either rigid or semi-flexible track on both ferromagnetic and nonferromagnetic materials thanks to rack and pinion drive and tracks fixed to flat or curved surfaces by means of various magnetic or vacuum units.

The minimum curvature radius required for semi-flexible track is  $5\ m$  (16 ft).

TECHNICAL SPECIFICATIONS RAIL BULL		
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)	PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G PF / 3G PG / 3G	
Torch diameter	16-22 mm (0.63-0.87"); up to 35mm (1.38") option	
Minimum radius of curved workpiece surface	5000 mm (16 ft)	
Minimum workpiece thickness	5 mm (0.2")	
Horizontal pulling force	350 N	
Vertical pulling force	150 N	
Cross slide adjustment range	0-35 mm (0-1.38") up-down, left-right	
Horizontal speed	0-120 cm/min (0-47.2 in/min)	
Vertical speed	0-110 cm/min (0-43.3 in/min)	
Weight	20 kg (44 lbs)	
Welding settings storage	1 (last used)	
Oscillation type	linear (0 - 100 mm)	
Oscillation (weaving) pattern	trapezoid, straight line	
Oscillation width	0-50 mm (0-1.9")	
Oscillation speed	0-1500 mm/min (0-59 in/min)	
Oscillation delay time	0-5 s (at external and central points)	
Product Code (115-230 V, 50-60 Hz, plug EU)	W0Z-0482-10-20-01-0	
Product Code (115-230 V, 50-60 Hz, plug UK)	W0Z-0482-10-10-01-0	
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



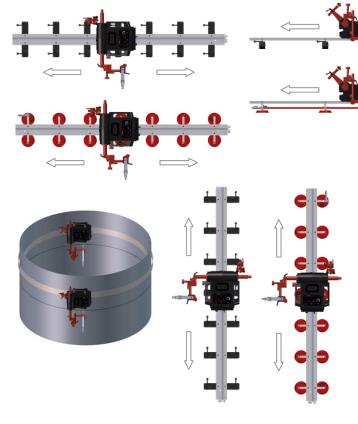
Linear oscillation with trapezoid, triangle and straight line paths



Min. path convex radius 5000 mm



Min. path concave radius 5000 mm





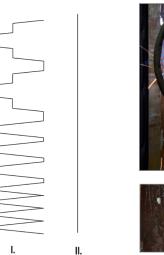
- 2. Control panel
- 3. Torch holder with clamp
- 4. Oscillator arm
- 5. Display
- 6. Cable anchor
- 7. Drive clutch knob
- 8. Mounting lever
- 9. Carrying handle
- 10. Arc ignition socket



### Primary features and benefits:

- · Compact, lightweight design with durable aluminum cast housing
- Convenient Power Supply 115–230 V, 50–60 Hz or 42 V, 50–60 Hz
- 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
- · Multifunctional LED display (process parameters & warnings)
- · Consistent heat input reduces distortion
- · Reduce wasted filler metal eliminates over welding
- · Automatic arc on/off initiates welding and travel, simultaneously
- Closed loop position control system based on electrical motor with encoder, ensures increased accuracy of speed and positioning
- Improves working environment removes operator from heat and fumes
- · Linear torch oscillator to produce weave welds
- · Menu in English (other languages on request)
- · Rack and pinion drive
- · Continuous welding
- · Rigid rail track system

### Weld paths:







The Rail Bull welding tractor is supplied in a metal box including:

- · welding tractor
- · metal box
- · cross slide assembly
- · short rod torch holder with clamp
- · cable anchor
- power cord 3 m (10 ft)
- arc ignition cable of 6.5 m (21 ft)
- · 3 mm hex wrench
- · 4 mm hex wrench
- · operator's manual

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 accessories:



Power Cord 3 m (10 ft)



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



Holder Short Rod Clamp Assembly UCW-0476-20-00-00-0 Torch



Cable Anchor UCW-0482-17-00-00-0



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

Rail Titan is fully modular mechanized tractor that can be custom configured for TIG-MIG-MAG welding, oxy-fuel or plasma cutting and gouging applications on flat or curved plate, tube and pipe. Linear torch oscillator produces straight, triangle, trapezoid and square weld paths.

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

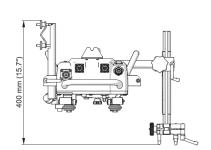
### Primary features and benefits:

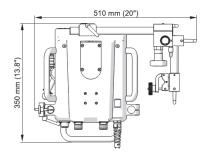
- · Suitable for TIG welding (HF resistant)
- · Robust design with die-cast aluminum housing
- · Ergonomic remote control pendant with simple and easy to find control knobs makes adjustments possible without lifting of the operators welding hood
- · Programmable path of stitch welds
- · Suitable for 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
  - O Semi-flexible tracks can be flexed to minimum radius of 5 m (16 ft) without permanent
- · Seam tracking enables active compensation of torch position vertically and horizontally with and without oscillation
- · New type of 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 produces consistent high quality welds and cuts in a fraction of the time required by manual operations
- · Wide input voltage range: 100-240V, 50-60Hz 1ph (single phase)

RAIL TITAN 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	
dilu AWS/ASME)	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-0654-10-20-00-0	



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



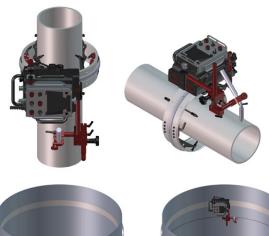
Horizontal speed 0-250 cm/min

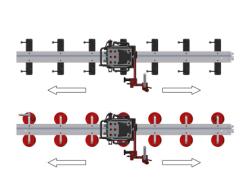


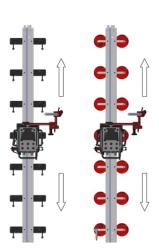
Vertical speed 0-250 cm/min

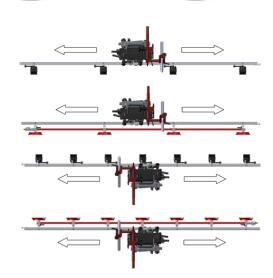
Rail Titan can work in all welding positions on both ferromagnetic and non-ferromagnetic materials by using rack and pinion drive and various tracks equipped with magnetic or vacuum units.













Single lever with lock to position  $\operatorname{\sf Rail}$  Titan to track



Silicone covers protect against dirt and spatter



New type of signal sockets and plugs

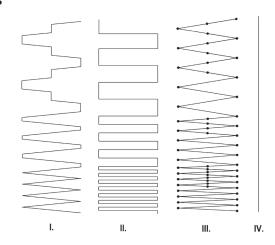


TIG welding of titanium plate



Seam tracking works with and without oscillation

### 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.

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



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 fits-all clamp UCW-0476-20-00-00-0



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



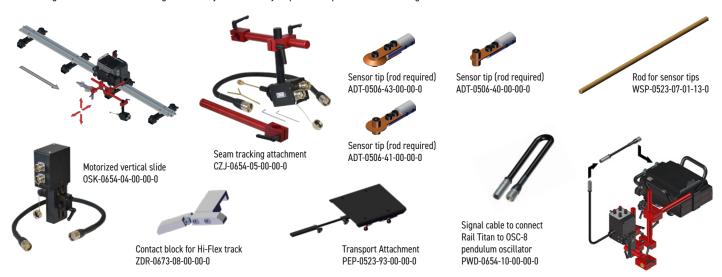
Cable anchor UCW-0654-02-00-00-0



300 mm (12") rod 300 mm (12") rack RAM-0523-17-00-00-0 WSP-0523-16-00-00-0

### **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 tractor
- · Plastic box
- · Remote control pendant
- 5 m (16.5 ft) remote control cable
- · 3 m (10 ft) remote control cable
- · 0.5 m (1.5 ft) remote control cable
- · Power cord
- 6.5 m (21 ft) arc ignition cable
- · 300 mm (12") rod
- 300 mm (12") rack with 180 mm (7") adjustment

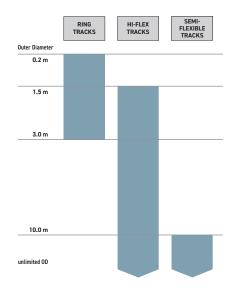
- Rack holder
- · Clamping block with levers
- Short rod torch holder with fits-all clamp
- · Cable anchor
- · Contact block
- · 6 mm hex wrench
- · Operator's manual

### Applications:

- · Trailer manufacturing
- Truck tanks
- Oil tanks
- Water storage tanks
- Pressure vesselsVessel 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 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.

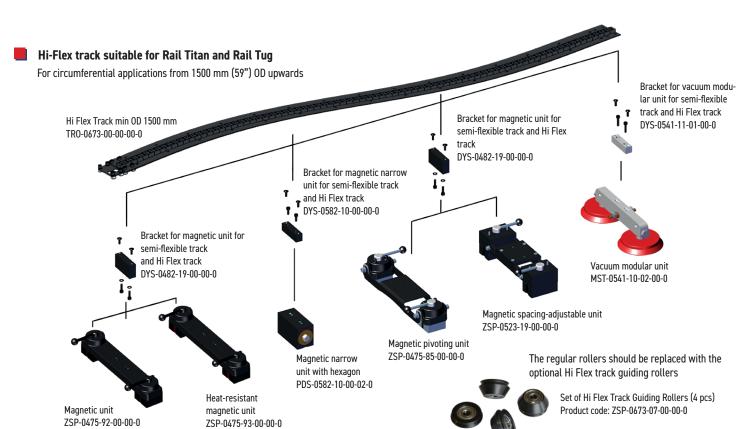


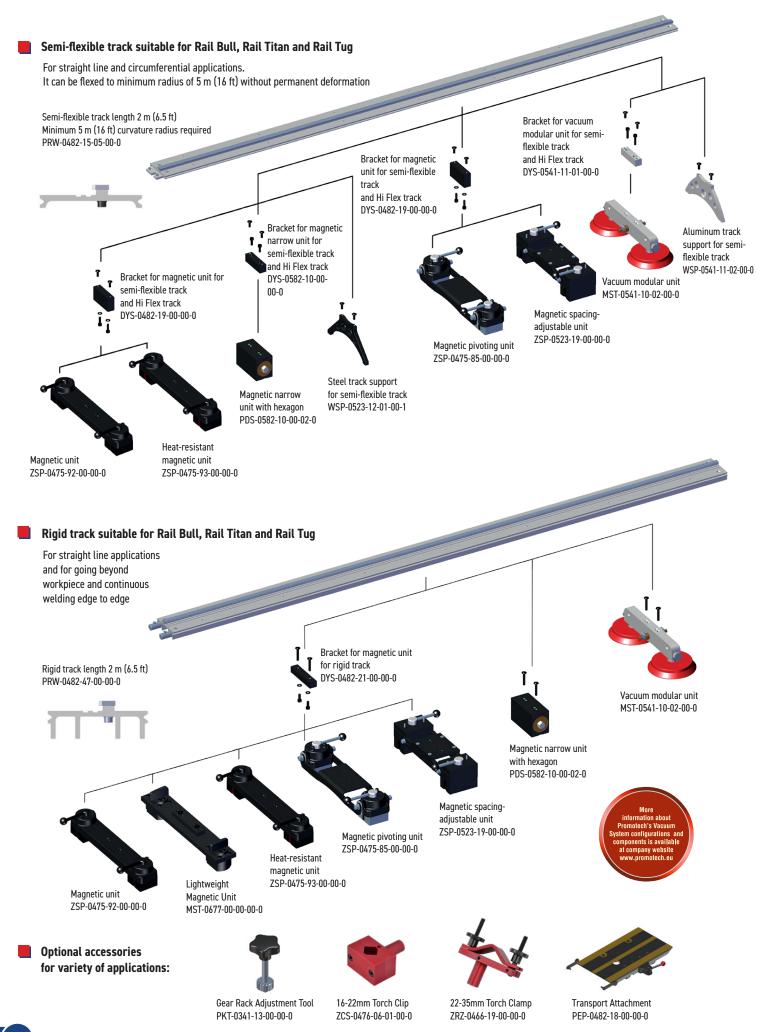
Bracket for ring track supports to expand pipe diameter range by 50 mm downwards DYS-0523-14-14-00-0



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

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





### **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
- · 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.

inst accidental fall.

Safety eye bolts are provided to suspend vacuum rail tracks and protect them agai				
VACUUM TRACK SYSTEM PARAMETERS				
Maximum number of va per vacuum pump	acuum units		21	
Minimum curvature rac track	dius of semi-flexible		5 m (16 ft)	
Vacuum unit holding fo	rce	(at gauge pr	1400 N essure of -0.7 ba	r / -10 psig)
Working positions		flat, horizontal, vertical		cal
Maximum permitted track 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 units	Semi-Flex Track	4	7	7
	Rigid Track	4	7	-
Permitted ambient temperature near vacuum units			rom -20°C to 200° rom -4°F to 392°	

PORTABLE VACUUM PUMP PARAMETERS		
Voltage	1~ 230 V, 50-60 Hz 1~ 115 V, 50-60 Hz	
Power	400 W	
Gauge pressure obtainable	<ul><li>-0.8 bar (-11.5 psig)</li><li>(where 0 is for atmospheric pressure, and -1 is for perfect vacuum)</li></ul>	
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)	







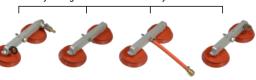
### Portable vacuum pump with safety reservoir



- 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

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



end

unit

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





Hose clamp OPS-000005

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



2-meter / 7-foot hose

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







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



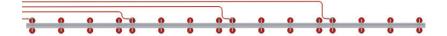
Bracket for vacuum modular units for flexible trackway DYS-0466-71-04-00-0

### 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)





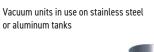




4 vacuum units are required per rail track placed in horizontal position



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)

## **OSC-8** | PENDULUM WEAVE WELDER



The OSC 8 pendulum oscillator is designed to oscillate MIG/MAG torches with the diameter of 16-22 mm (5/8-7/8").

The oscillator is installed onto a 22 mm (7/8") diameter rod and connected to a welding device.

It can be controlled manually or by using an external START-STOP switch.

Using an optional freestanding support allows welding of rotating pipes or moving plates. An optional power supply allows connecting the oscillator to a 230 V or 115V power source.

OSC-8 is suitable for MIG/MAG automate processes in heavy fabrication industries such as: pipeline and bridge construction, shipbuilding and tank welding.

### Features & Benefits:

- · lightweight and compact design
- · two control modes: manual and external start
- four adjustable parameters (oscillation width, oscillation speed, oscillation dwell time on ends)
- · simple control panel (four knobs)
- can work as stand-alone device or be a part of more advanced welding system
- · optimal solution for various welding applications
- $\cdot$  real improvement of the welding process
- · uniform and high quality welding
- supply voltage 14-24 V (direct connection to the welding tractor or an external automation system)
- · optional power supply 115 VAC or 230 VAC

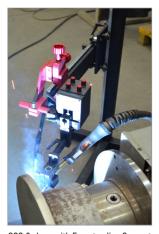


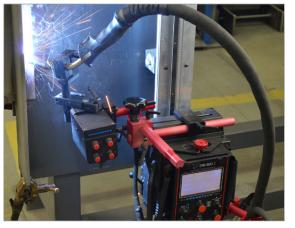
OSC-8 can work either as stand-alone Pendulum Weave Welder or along with freestanding support or along with welding tractors.

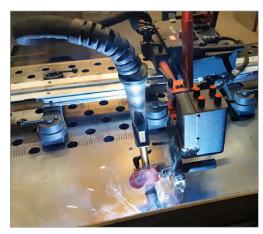










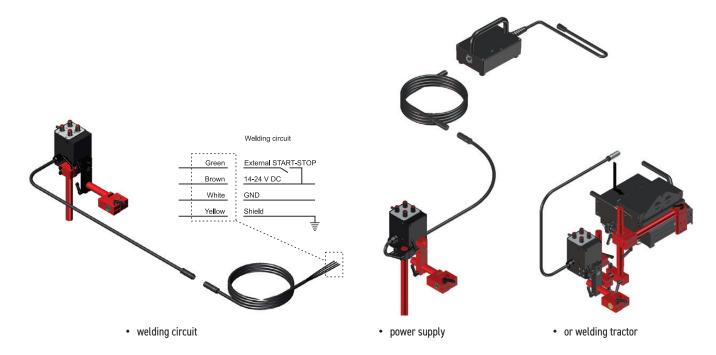


OSC-8 along with Freestanding Support

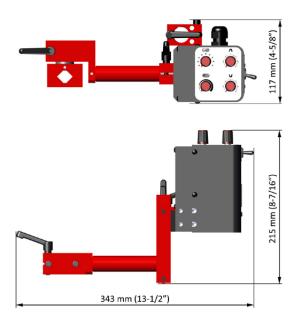
OSC-8 along with Rail Bull 2 tractor

OSC-8 along with Rail Tug tractor

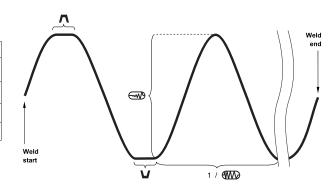
Depending on welding system configuration in use the oscillator can work in either manual or external start mode and be connected to:



OSC-8 TECHNICAL SPECIFICATION		
Voltage	14-24 V DC	
Power	50 W	
Torch type	MIG/MAG	
Torch diameter	16-22 mm (5/8-7/8")	
Oscillation type	Pendulum	
Oscillation width at r=150 mm (6")	1-30 mm (1-100%) 1/32-1-3/16" (1-100%)	
Oscillation speed at oscillation width of 10 mm (3/8") and zero dwell time on ends	12-115 cycles/min (1-100%)	
Oscillation dwell time on ends	0-3 s	
Maximum torque	8 N·m (5.7 lb·ft)	
Required ambient temperature	0-50°C (32-122°F)	
Weight	2 kg (4 lbs)	
Product code:	OSC-0497-10-00-00-0	



Parameter	Value	Description
~~\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0–100%	Oscillation width.
<b>W</b>	0–100%	Oscillation speed.
Λ	0–3 s	Oscillation dwell time in the top position.
V	0–3 s	Oscillation dwell time in the bottom position.





### Optional equipment:

Power Supply (to be chosen from available voltage versions)

Product codes:

ZSL-0497-16-00-00-0 (230 V CEE)

ZSL-0497-16-00-01-0 (115 V USA)

ZSL-0497-16-00-02-0 (230 V AU)

ZSL-0497-16-00-03-0 (230 V UK, type G)

ZSL-0497-16-00-04-0 (230 V IN, type D)

### Freestanding Support:

 Holds the oscillator to allow oscillation welding of rotating pipes or moving plates

Product code: STJ-0629-10-00-00-0	
Product code: 513-0629-10-00-0	Arm
	Weig

Torch type	MIG/MAG
Torch handle diameter	16-22 mm (5/8-7/8")
Arm horizontal stroke	560 mm (22")
Arm vertical stroke	640 mm (25")
Weight	15.3 kg (34 lbs)



### Rail Bull 2 accessories:





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

### Standard shipping set:

- Oscillator 1 unit
- 2 m (6.5 ft) power cord 1 unit
- Low rod torch holder with clip 1 unit
- · Oscillator arm 1 unit
- Clamping block 1 unit
- M6x40 screw 2 units
- 80 mm (3") rod 1 unit
- 5 mm hex wrench 1 unit
- Operator's Manual 1 unit





## **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.

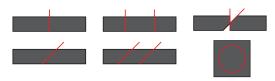


High speed plasma cutting and beveling is available by means of Dragon HS



### Primary features and benefits:

- State-of-the-art, digitally controlled track torch
- Cutting and beveling up to 45° (also parallel by means of 2 torches)
- Quick clamping torch holder for torch diameter from 28 mm to 35 mm
- · Advanced speed control system with implemented digital PID regulator
- LED display with readout of actual and set speed, and report messages
- · Rigid heat-proof design
- · 2-wheel drive with auto braking drive unit
- · Quick drive release switch for easy re-positioning
- · Runs on a rail or directly on a workpiece
- · Connectable rails to form various lengths
- · Wide assortment of optional accessories for variety of applications, like machine barrel torch holders, manifolds, circle cutting attachment etc.

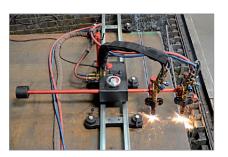


TECHNICAL SPECIFICATIONS		
	Dragon	Dragon HS
Voltage	1~ 115-230 V, 50-60 Hz 42 V, 50-60 Hz	~ 115-230 V, 50-60 Hz
Power	20 W	20 W
Operating position	horizontal	horizontal
Torch diameter	28-35 mm (1.10-1.38")	28-35 mm (1.10-1.38")
Ground clearance	8 mm (0.31")	8 mm (0.31")
Speed	0-150 cm/min (0-59 in/min)	10-300 cm/min (4-118 in/min)
Weight	16.8 kg (37.0 lbs)	16.8 kg (37.0 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)	W0Z-0475-10-10-00-3	W0Z-0527-10-10-00-1
P. Code (42 V, 50-60 Hz)	W0Z-0711-10-04-00-0	-













### Standard accessories for both Dragon and Dragon HS



580 mm (22.8") Geared Rack RAM-0475-07-00-00-0



Counterweight 1.3 kg (2.9 lbs) PWG-0475-09-00-00-0



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



Power cord 3m (9,7 ft)

### Optional accessories for both Dragon and Dragon HS



1000 mm (39.4") **Geared Rack** RAM-0475-23-00-00-0



Large Counterweight 2,6 kg (5,7lbs) PWG-0475-10-00-00-0



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



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



PDS-0582-10-00-02-0

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



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



Precise Torch Holder with angle and height adjustment UCW-0475-08-00-00-0



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



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



Heat Protection Shield (bottom) OSL-0475-53-00-00-0



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

### Optional accessories for Oxy-fuel

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





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

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



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



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

### 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





# PRO-WP 150 PRO-WP 300

### **WELDING POSITIONERS**

The welding positioners enable round or tubular pieces of metal to be rotated easily, provide better weld seam accessibility, can help produce high quality welds and increase deposition rates.

Frequency inverter ensures continuous speed adjustment and speed stabilization at the set value.

They reduce time and effort for the welders, who can focus on their job with no need to constantly move around their workspace in order to get the best position.

The compact design takes up minimal floor space and tilting up to 90 degrees improves ergonomics of the workspace.

Selection of various auxiliary accessories make it possible to create an advanced modular welding station and customize it depending on required welding or cutting applications to maximize production efficiency.

### Primary features and benefits:

- · Left or right rotation
- · Continuous speed adjustment
- Speed stabilization within full speed range from 0,12 rpm up to 2,4 rpm
- · Start/Stop (both controller and foot pedal)
- · Arc ignition
- · Remote control
- · Foot pedal for hands-free operation
- · Heavy duty construction
- Lots of auxiliary accessories enable building a modular welding station tailored for various welding and cutting applications





Technical specification	PRO-WP 150	PRO-WP 300
Voltage	1~ 220-240 V, 50-60 Hz 1~ 100-120 V, 50-60 Hz	1~ 220-240 V, 50-60 Hz 1~ 100-120 V, 50-60 Hz
Power	0,25 kW	0,25 kW
Speed range min/max	0,12 - 2,4 rpm	0,12 - 2,4 rpm
Max load capacity	150 kg (331 lbs)	300 kg (661 lbs)
Mass center offset from the table at a 90° tilt	up to 100 mm	up to 100 mm
Faceplate diameter	450 mm (17.7")	630 mm (24.8")
Hollow-shaft inside diameter	28 mm (1.1")	28 mm (1.1")
Tilting range with continuous angle adjustment	0-90°	0-90°
Tilting	manual	manual
Max. welding current transfer	400 A	400 A
Weight	115 kg (254 lbs)	150 kg (330 lbs)
Product code:	PZY-0681-10-10-00-0	PZY-0682-10-10-00-0





The arc ignition allows the welding torch to be switched on and off remotely.













### Optional accessories for various welding and cutting applications:

• Lathe self-centering chuck D250



External clamping diameter:  $\Phi$  90–250 mm Internal clamping diameter:  $\Phi$  6–110 mm,  $\Phi$  80-250 mm

UCW-0681-18-00-00-0





External clamping diameter:  $\Phi$  120–400 mm Internal clamping diameter:  $\Phi$  15–210 mm,  $\Phi$  120-400 mm

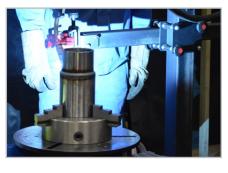
UCW-0681-17-00-00-0





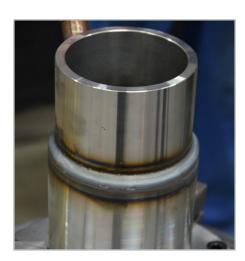
External clamping diameter:  $\Phi$  170 – 280 mm Internal clamping diameter:  $\Phi$  80 – 190 mm

UCW-0681-19-00-00-0









• Keyless self-centering chuck DD400



External clamping diameter:  $\Phi$  250 – 380 mm Internal clamping diameter:  $\Phi$  120 – 250 mm

UCW-0681-20-00-00-0





To be fixed directly on positioner UCW-0681-14-00-00-0











### • MINI C&B type PRO-WA 1X1







Product code: STJ-0709-10-00-00-0

MINI C&B type PRO-WA 1X1		
Height	1160 mm	
Length	1188 mm	
Width	500 mm	
Vertical movement range	810 mm	
Horizontal movement range	815 mm	
Maximum load with full extension of horizontal arm	7 kg	

• Cross slide assembly (option)



 $35 \ \text{mm} \ \text{x} \ 35 \ \text{mm} \ \text{(left \& right, up \& down)}$  ZSP-0466-14-00-00-0

Roller support



Load capacity: 1000 kg (2200 lbs) WSP-0681-16-00-00-0

### • Pendulum Oscillator OSC-8



Product code: OSC-0497-10-00-00-0

### Power Supply



Product codes: ZSL-0497-16-00-00-0 (230 V CEE) ZSL-0497-16-00-01-0 (115 V USA) ZSL-0497-16-00-02-0 (230 V AU) ZSL-0497-16-00-03-0 (230 V UK, type G) ZSL-0497-16-00-04-0 (230 V IN, type D)

Weld start	eld and
1/9	

H-BLOMORE B-BLOMORE

Parameter	Value	Description
~~\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0-100%	Oscillation width
<b>W</b>	0-100%	Oscillation speed
$\wedge$	0-3 s	Oscillation dwell time in the top position
V	0-3 s	Oscillation dwell time in the bottom position

OSC-8 PENDULUM V	/EAVER
Voltage	14-24 V DC
Power	50 W
Torch type	MIG/MAG
Torch diameter	16-22 mm (5/8-7/8")
Oscillation type	Pendulum
Oscillation width at r=150 mm (6")	1-30 mm (1-100%) 1/32-1-3/16" (1-100%)
Oscillation speed at oscillation width of 10 mm (3/8") and zero dwell time on ends	12-115 cycles/min (1-100%)
Oscillation dwell time on ends	0-3 s
Maximum torque	8 N·m (5.7 lb·ft)
Required ambient temperature	0-50°C (32-122°F)
Weight	2 kg (4 lbs)
Product code:	OSC-0497-10-00-00-0

### Clamping accessories for welding torches (to choose from)





Short rod torch holder with clamp 16-22 mm UCW-0476-20-00-00-0



Long rod torch holder with clamp 16-22 mm UCW-0466-04-00-00-0



Short low rod torch holder with clip 16-22 mm UCW-0476-06-00-00-0



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



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

### Clamping accessories for cutting torches (to choose from)





· Standard torch holder with clamp 28-35 mm and rough angle adjustment UCW-0475-28-00-00-0



· Precise torch holder with clamp 28-35 mm and precise angle adjustment UCW-0475-08-00-00-0



Rod 150 mm for cutting torch holders SLP-0233-13-02-00-1



· Standard machine torch holder for oxy-fuel cutting with vertical position setting and rough angle adjustment For 30 mm torch with rack: UCW-0475-61-00-00-0 For 35 mm torch with rack: UCW-0475-29-00-00-1



· Precise machine torch holder for oxy-fuel cutting with vertical position setting and precise angle adjustment. For 30 mm torch with rack: UCW-0475-59-00-00-0 For 35 mm torch with rack: UCW-0475-42-00-00-1

· Clamping set Product code: ZST-0681-15-00-00-0



Clamp 100mm x 32mm x 19mm (3 pcs)



Clamp 150mm x 32mm x 22mm (3 pcs)





Step block 28mm x 20mm - 38mm (4 pcs)





Step block 35mm x 28mm - 64mm (4 pcs)



Step block 98mm x 64mm - 152mm (4 pcs)



Flanged nut M10 x 15mm (6 pcs)



Extension nut M10 x 30mm long (4 pcs)



T-slot nut 12mm x 18mm x 14mm (6 pcs)

Double end stud bolt 75mm x 30mm (4 pcs) Double end stud bolt 100mm x 30mm (4 pcs) Double end stud bolt 125mm x 30mm (4 pcs) Double end stud bolt 150mm x 30mm (4 pcs) Double end stud bolt 175mm x 30mm (4 pcs) Double end stud bolt 200mm x 30mm (4 pcs)

## WIRE FEEDER BOOMS

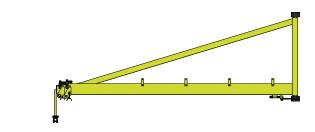
Highly useful devices that improve ergonomics and increase flexibility of welding stations.

### Main features and benefits:

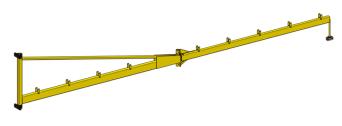
- · extended workspace
- more freedom of movement over significantly larger area comparing to the traditional setup
- · no wires on the floor
- no mess of tangled cables that in extreme cases can be outright dangerous
- · more convenient welding of bigger and complex constructions
- · simple and robust device
- can be easily mounted to the construction elements of the production halls with no need for any additional infrastructure
- permissible load: up to 50 kg



### Three types to choose from:



· Wall mounted telescopic wire feeder boom



· Wall mounted pivot wire feeder boom



· Hydraulic wire feeder boom

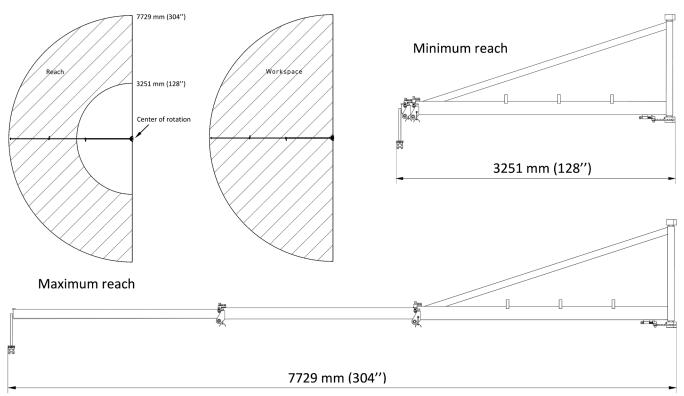
### ■ Wall mounted telescopic wire feeder boom

- can rotate up to 180° around the vertical axis
- adjustable reach of the boom from 3251 mm (128") to 7729 mm (304")
- product code: WSG-0569-00-00-00-0









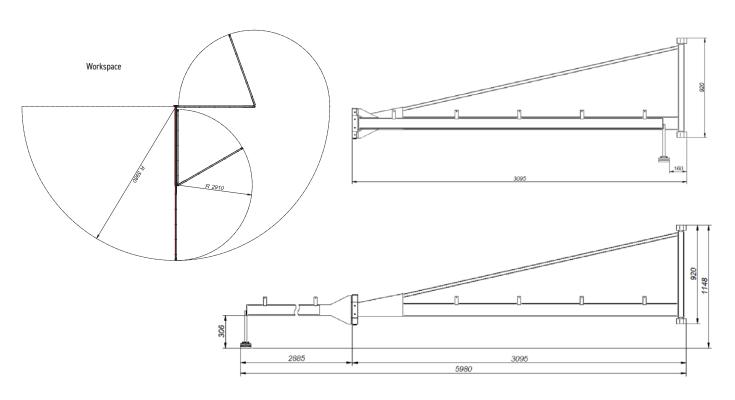
WALL MOUNTED TELESCOPIC WIRE FEEDER BOOM Technical specifications		
Reach	3251 – 7729 mm (128–304")	
Rotation angle	0-180°	
Maximum load (wire feeder, wire)	50 kg (110 lbs)	
Minimum dimensions	3251 mm × 1206 mm × 287 mm 128" × 47" × 11"	
Maximum dimensions	7729 mm × 1206 mm × 287 mm 304" × 47" × 11"	
Weight	98 kg (216 lbs)	

### ■ Wall mounted pivot wire feeder boom

- $\cdot\,\,$  can be rotated up to 180° around the vertical axis
- $\cdot\,$  additionally the movable arm can be rotated up to 180° around the pivot
- · adjustable reach of the boom from close proximity to vertical axis up to 6000 mm (236")
- product code: WSG-000002





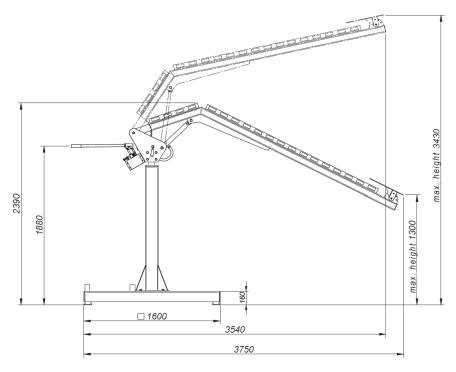


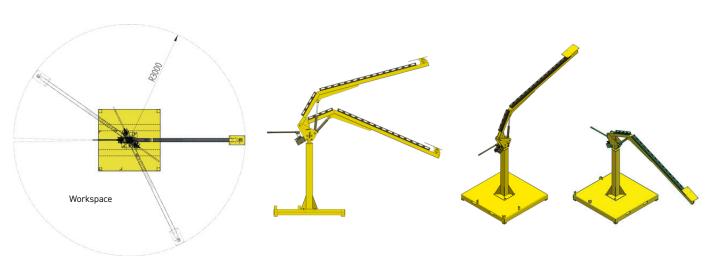
WALL MOUNTED PIVOT WIRE FEEDER BOOM Technical specifications	
Reach	160 – 5980 mm (6 – 235")
Rotation angle	0-180°
Maximum load (wire feeder, wire)	50 kg (110 lbs)
Minimum dimensions	3095 mm × 1148 mm × 176 mm 121" × 45" × 7"
Maximum dimensions	5980 mm × 1148 mm × 176 mm 235" × 45" × 7"
Weight	100 kg (220 lbs)

### Hydraulic wire feeder boom

- $\cdot\,\,$  can be rotated up to 360° around the vertical axis
- $\cdot$  adjustable height of the boom from 1300 mm (51") up to 3430 mm (135")
- product code: WSG-000003







HYDRAULIC WIRE FEEDER BOOM Technical specifications	
Reach	3000 mm (118")
Lifting height	1300 – 3430 mm (51 – 135")
Rotation angle	0-360°
Maximum load (wire feeder, wire)	50 kg (110 lbs)
Dimensions [L x W x H]	3750 mm × 1600 mm × 2390 mm (min) / 3430 mm (max) 148" x 63" x 94" (min) / 135" (max)
Weight	330 kg (733 lbs)

### Please visit Promotech's channel at YouTube and watch our welding & cutting tractors at work











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OSC-8 | Pendulum Weave Welder

7.6K views • 2 years ago



Rail Tug | Welding and Cutting Tractor

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Gecko | Fillet Welding Carriage

3.7K views • 3 years ago



Get your Gecko tractor ready for non ferrous metals...

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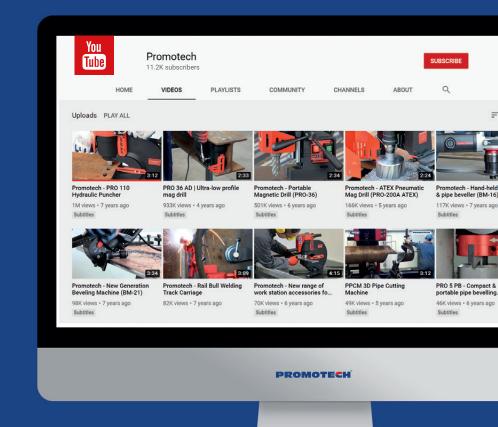


Horizontal Fillet Welds | Welding in PB / 2F position

2.4K views  $\cdot$  6 years ago



## PROMOTECH







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