# PROMOTEC





# 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 and DRAGON BATTERY tractors)
- High Density Lithium Ion battery (LiHD) ensures maximum power availability for extended periods
- Intelligent battery management for long-lasting performance
- 4-wheel drive system with magnetic traction for stable movement of the tractor
- Compact, lightweight design with durable aluminum cast housing
- Optional pendulum oscillator for producing weave welds
- Auxiliary accessories make SCORPIO BATTERY suitable for various applications with carbon steel, stainless steel and aluminium
- Equipped with limit switches



























welding welding

programming

Dual torch welding

**Dual Arc** Ignition

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

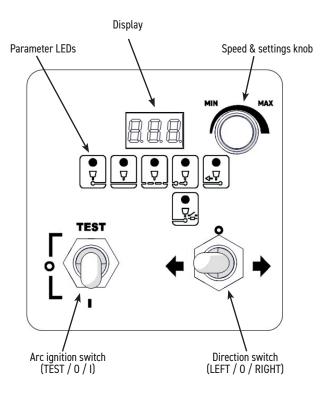
1250 mm (49 7/32")

1000 mm (39 3/8")

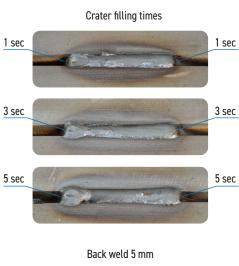
# Programmable variables diagram

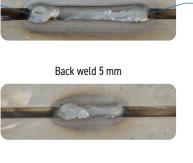
Simple and ergonomic programming of welding patterns and stitch welding by specifying parameters such as weld length, skip length and crater filling at the beginning and the end of the welds.











	Crater fill time Arc stabilization time		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]
<b>O</b>	Skip length		0.5-99.9 cm [step: 0.1] 0.5-40" [step: 0.1]
	Crater fill	۶۶ ۲۹ <u>-</u>	0-5.0 sec [step: 0.1] Crater filling time at the end of the weld
	Off (default)	∍FF	Current curve set on Welding Source
	On (	חכ	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



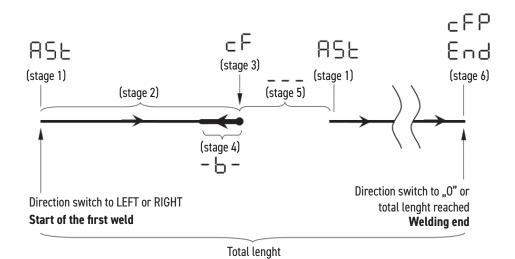












Stage 1	Arc stabilization and crater filling at the beginning of the weld		
Stage 2	Tractor moves with the set speed and creates the weld of a defined length		
Stage 3	Crater filling at the end of the weld		
Stage 4	Back weld (Reverse filling length)		
Stage 5	Tractor skips between welds.  Next steps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

#### 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



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

# Optional accessories for variety of applications



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



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



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



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



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





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



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









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

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





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



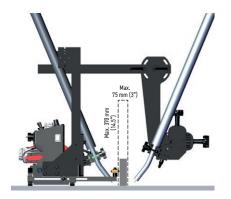
Stainless steel driving wheel KOL-0466-72-00-00-0



Cable anchor PDT-0776-04-00-00-0



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

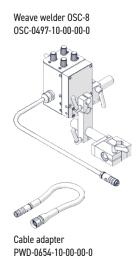




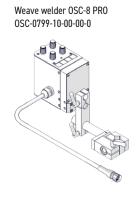
# Pendulum oscillation (option)

SCORPIO BATTERY is ready for use with the OSC-8 and OSC-8 PRO external pendulum oscillators and has built-in socket to power these oscillators. This eliminates the need for a separate oscillator power supply.

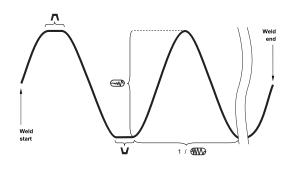


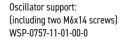






- The following oscillation parameters can be set and adjusted with both pendulum weave welders:
  - oscillation width
  - oscillation speed
  - dwell time on both ends





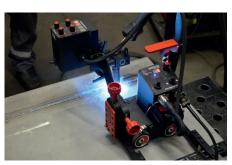






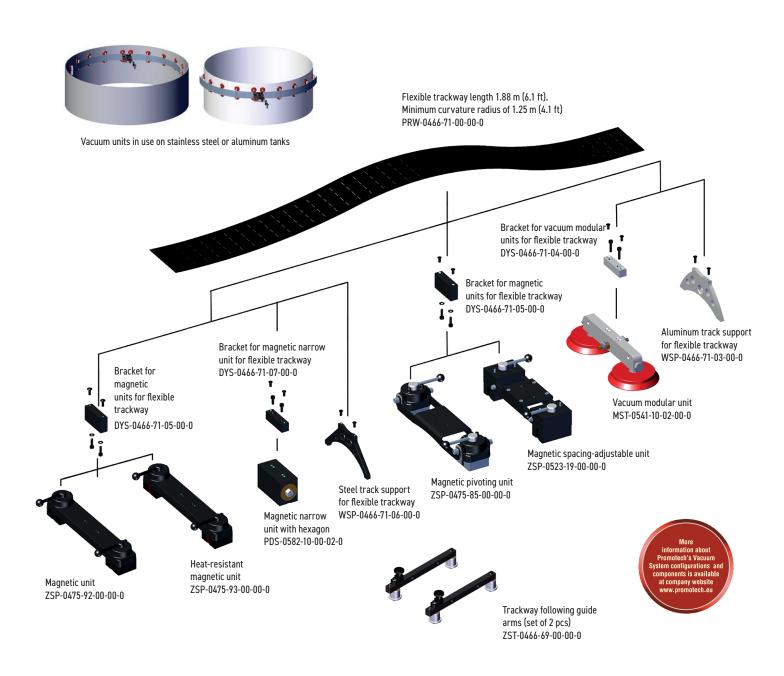






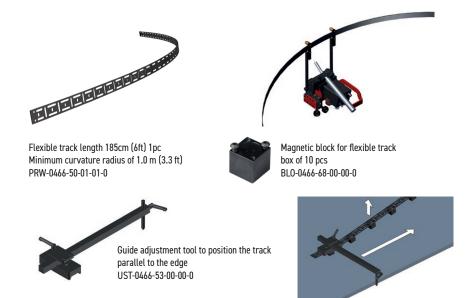


TECHNICAL SPECIFICATION	OSC-8	OSC-8 PRO
Voltage	14-24 V DC	18-24V DC
Power	50 W	50 W
Torch type	MIG/MAG	MIG/MAG
Torch diameter	16-22 mm (5/8"-7/8")	16-22 mm (5/8"-7/8")
Oscillation type	Pendulum	Pendulum
Oscillation width at r=150 mm (6")	1-30 mm; 3/64" -1 3/16" (1-100%)	1-30 mm; 3/64" -1 3/16" (3-99%)
Oscillation speed at oscillation width of 10 mm (3/8") and zero dwell time on ends	12-115 cycles/min (1-100%)	12-300 cycles/min
Oscillation dwell time on ends	0-3 s	0-5 s
Maximum torque	8 N·m (5.7 lb·ft)	8 N·m (5.7 lb·ft)
Required ambient temperature	0-50°C (32-122°F)	0-50°C (32-122°F)
Weight	2 kg (4.4 lbs)	2.1 kg (4.6 lbs)
Product code:	OSC-0497-10-00-00-0	OSC-0799-10-00-00-0

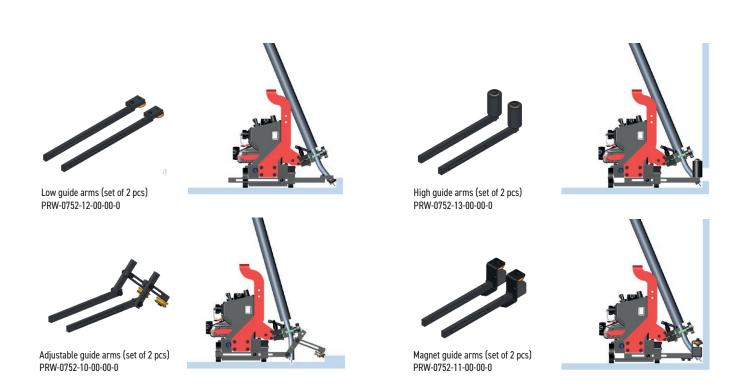








Depending on sort of fixing units in use with flexible trackway, Scorpio Battery welding tractor is suitable for applications with carbon steel, stainless steel and aluminum.





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

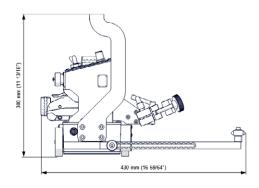


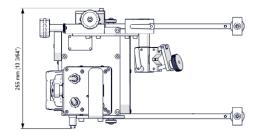


SCORPIO BATTERY - TECHNICAL SPECIFICATION						
Voltage		18 V DC, 4 Ah				
Power		18 W				
Welding position (according to EN ISO 6947 and AW	S/ASME)	PA/1F/1G PB/2F PC/2G				
Minimum path curve	Outer	1000 mm (39 3/8")				
radius	Inner	1250 mm (49 7/32")				
Torch type		MIG/MAG				
Torch diameter		16-22 mm (5/8"-55/64") up to 35 mm (1.38") option				
Minimum workpiece thickno	ess	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		W0Z-0757-10-00-00-0				

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

#### Dimensions:





# 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





## 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





Min. path convex radius 1000 mm



Min. path concave radius 1250 mm





More information on www.promotech.eu



