PROMOTECH®

smart tools for heavy tasks

FM 37982

MANTIS BATTERY | CORDLESS DUAL TORCH WELDING TRACTOR

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

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

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

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

CAS CORDLESS ALLIANCE SYSTEM

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



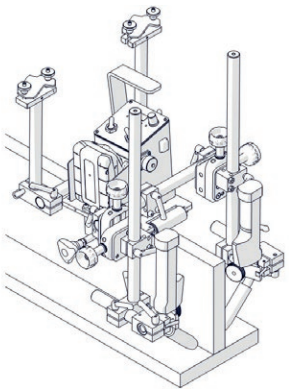
Features and benefits:

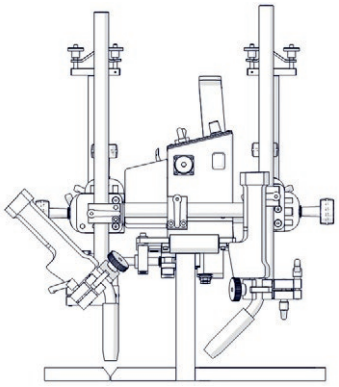
- Battery-powered programmable welding tractor for travelling on steel profiles such as flats, angles, I-beams, T-beams, bulb flats and irregularly shaped work pieces with radius down to 160 mm
- Dual-sided operation with two torches in continuous or intermittent welding mode
- Simple and ergonomic programming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

Continuous welding | Stitch welding | Welding path programming | Dual torch welding | Dual Arc Ignition | Horizontal speed 5–130 cm/min (2-51 in/min)

Wide variety of applications:

- Straight-line welding and cutting
- Fillet welding
- Flange welding
- Beam splitting
- Non-regular shape welding and cutting
- Circle welding and cutting

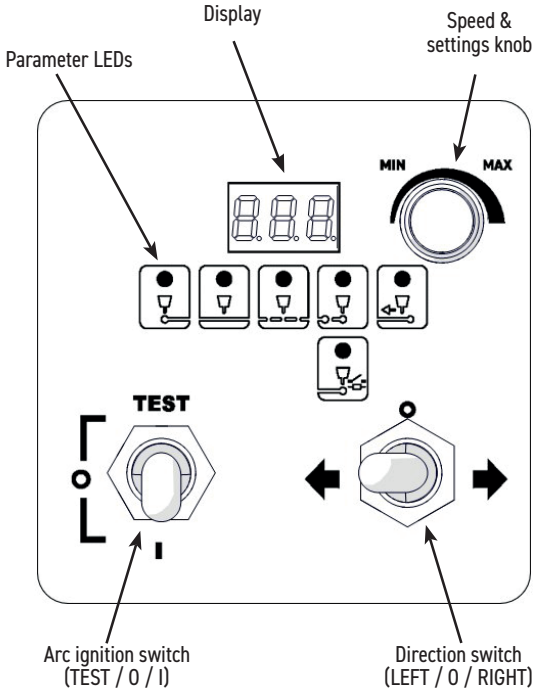




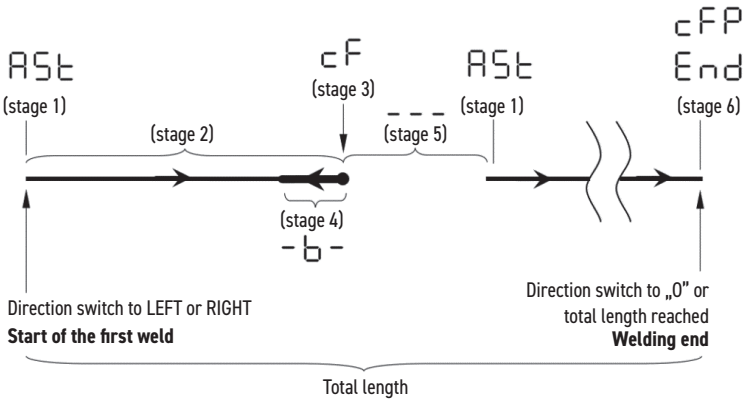
Programmable variables diagram

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



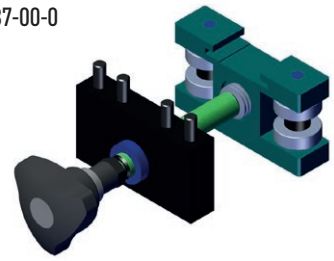
Stage 1	Arc stabilization and crater filling at the beginning of the weld
Stage 2	Tractor moves with the set speed and creates the weld of a defined length
Stage 3	Crater filling at the end of the weld
Stage 4	Back weld (Reverse filling length)
Stage 5	Tractor skips between welds. Next steps 1 ,2, 3,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



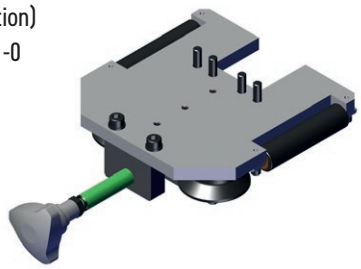
Types and dimensions of steel profiles suitable for the MANTIS Battery:

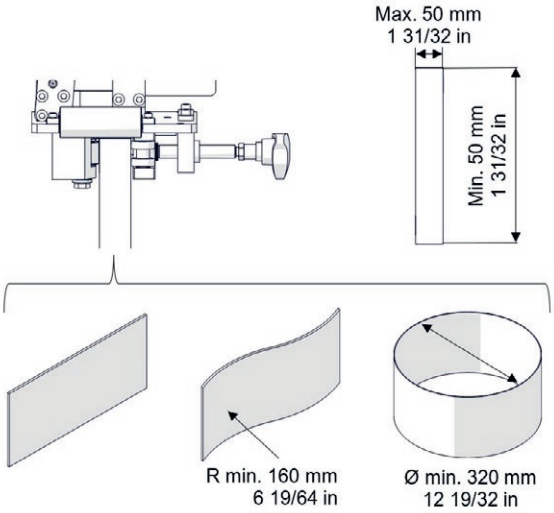
We offer 4 optional clamps to choose from, depending on the type of steel profiles being processed.
Optional clamps must be purchased separately. These are not included in the standard shipping set.

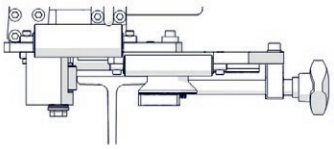
Clamp for flat profiles
(option)
DCS-0824-0037-00-0

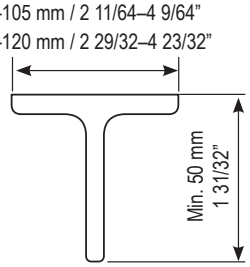


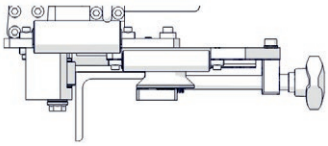
Clamp for T profiles and
angle profiles (option)
DCS-0824-0037-01-0

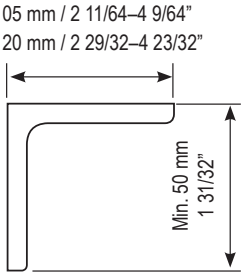




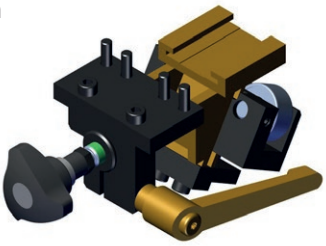






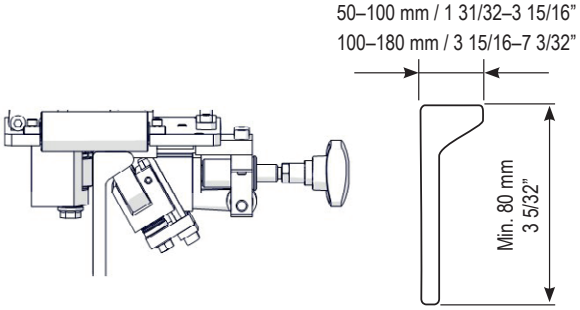


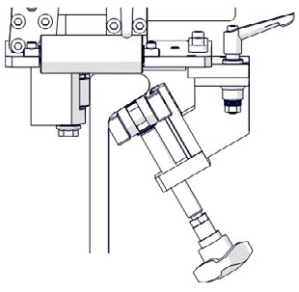
Small clamp for bulb
profiles 50 – 180 mm
(option)
DCS-0824-0037-02-0

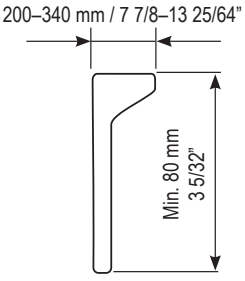


Large clamp for bulb
profiles 200 – 340 mm
(option)
DCS-0824-0037-03-0







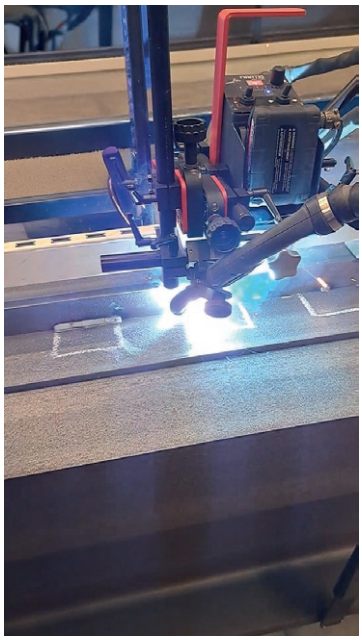


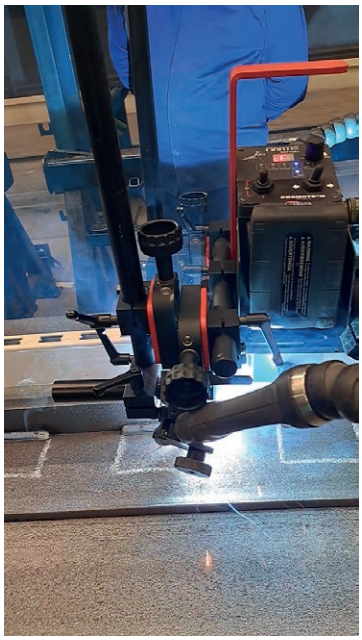
Welding modes

I. Intermittent welding

In intermittent welding, the programming of weld and pause lengths is performed as a function of the distance. The carriage operator can make the required welding speed adjustments during welding without concern about changing the programmed section lengths.
These adjustments remain unchanged, as the carriage control system recalculates their lengths in real time, taking into account the entered adjustments.







II. Continuous welding





Standard accessories



Battery 4.0 Ah
AKM-0738-10-00-01-0



Cross slide assembly „Left"
UKL-0824-1051-01-0



Cross slide assembly „Right"
UKL-0824-0974-01-0



Short rod torch holder
with clamp 16–22 mm
UCW-0754-07-00-00-0
(2 pcs included)



Cable anchor
UCW-0466-55-03-00-0
(2 pcs included)



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



Rod 300 mm
WSP-0523-16-00-00-0
(2 pcs included)



450 mm long rod
WLK-0824-0973-00-0
(2 pcs included)



Double clamping block with levers
KST-0525-11-00-00-0
(4 pcs included)

Optional accessories for variety of applications



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



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



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



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



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



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



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



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



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



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



Fall arrester device
URZ-000001



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



Precise torch holder incl. clamp 28-35 mm
with angle and height adjustment
UCW-0753-08-00-00-0



Standard torch holder incl. clamp 28-35 mm
and angle adjustment
UCW-0475-28-00-00-0



540 mm long rod
with 449 mm geared rack
RAM-0753-07-00-00-0



1000 mm long rod
with 940 mm geared rack
RAM-0753-13-00-00-0



Counterweight 1.3 kg (2.9 lbs)
with screw
PWG-0833-05-00-00-0

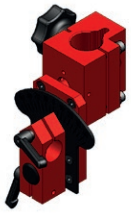


Large Counterweight 2,6 kg (5,7 lbs)
with screw
PWG-0833-06-00-00-0



Machine torch holder
30 mm (1-3/16")
UCW-0475-61-00-00-0

Machine torch holder
35 mm (1-3/8")
UCW-0475-29-00-00-1

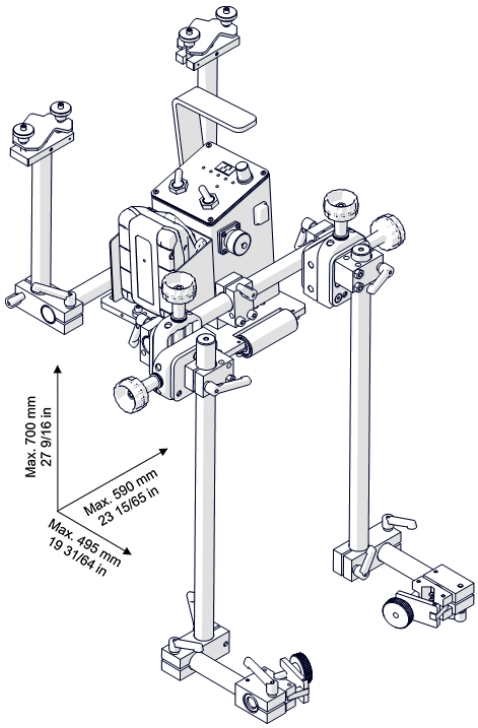


Precise machine torch holder
30 mm (1-3/16") with angle adjustment
UCW-0753-22-00-00-0

Precise machine torch holder
35 mm (1-3/8") with angle adjustment
UCW-0753-24-00-00-0

TECHNICAL SPECIFICATIONS MANTIS BATTERY		
Voltage		18 V DC, 4.0 Ah
Power		18 W
Welding position (according to EN ISO 6947 and AWS/ASME)	Horizontal	PA / 1F / 1G PB / 2F
Torch type		MIG / MAG
Torch diameter		16–22 mm (5/8"–55/64") up to 35 mm (1.38") option
Horizontal pulling force		150 N
Cross slide adjustment range		0–35 mm (0–1.38") up-down, left-right
Horizontal speed		5–130 cm/min
Weight (without battery)		7 kg
Product Code		WOZ-0824-10-18-00-0

Dimensions:



Standard shipping set:

- MANTIS Battery tractor without any clamps
- Accessories to mount two welding torches
- Battery 4.0 Ah
- Dual arc ignition cable of 6.5 m (21 ft)
- Set of hex wrenches
- Plastic Box
- Operator's manual

More information at www.promotech.eu

All information is subject to change without notice. 26.06

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Your local dealer: