# PROMOTECH





# LIZARD | PROGRAMMABLE WELDING CARRIAGE

LIZARD is a portable, programmable welding carriage 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.



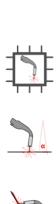
#### Applications:

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



A very important optional feature of LIZARD is oscillation attachment to produce weave welds. The unit can identify its connection automatically configure and suitable operating modes.

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



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)



Weight 14 kg (31 lbs)

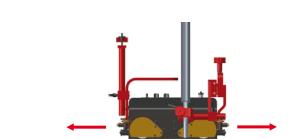


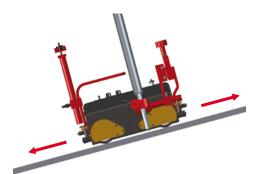
Stitch welding



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

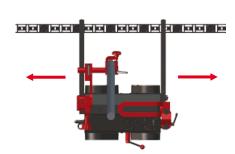
Versatility of applications including out-of-position use

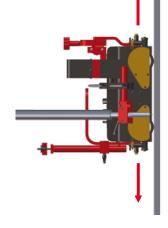




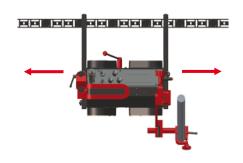


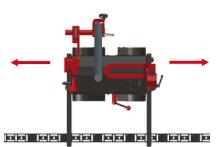










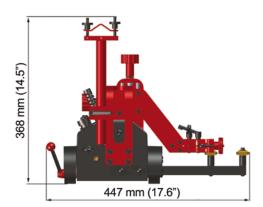


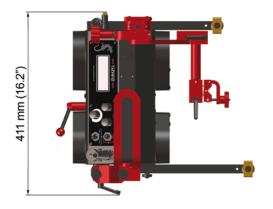


#### Primary features and benefits:

- 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

#### Dimensions:



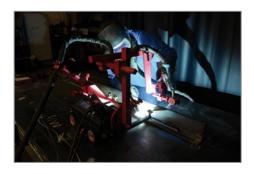






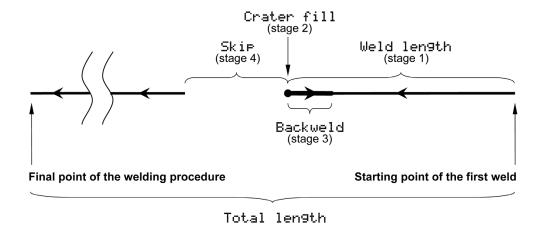








TECHNICAL SPECIFICATIONS LIZARD	
Voltage	1~ 115–230 V, 50–60 Hz
Power	25 W
Welding position (according to EN ISO 6947 and AWS/ASME)	PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G PF / 3F / 3G with optional oscillator) PG / 3F / 3G (with optional oscillator)
Programmable variables	carriage speed, weld length, 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)

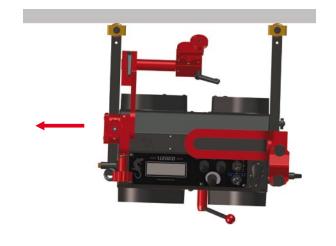


- 1. Operator's panel with control knobs and switches
- 2. Magnetic adhesion release lever
- 3. Power supply coupling
- 4. Weld contact / Arc ignition socket
- 5. Main Power Switch (0/I)
- 6. Cable anchor
- 7. Cross slide assembly
- 8. Quick clamp torch holder
- 9. Adjustable guide arm
- 10. Limit switch



#### 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 carriage into a direction of its movement
- maintain a permanent contact with the workpiece
- allow either interval or continuous guide arms adjustment



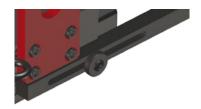


Each new guide arm has got a number of indented grooves only on one side.

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 accessories



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





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



Power cord 3m (9,7 ft)



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



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

## **Optional accessories**



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



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



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



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

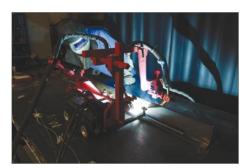


ZSP-0466-46-00-00-1 Extended Cross-Slide 0-76 mm (0-3") up-down, 0-35 mm (0-1.38") left-right



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







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



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



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







PRW-0476-21-00-00-0 Edge Following Guide Arms (set of 2 pcs)



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





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



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



BLO-0466-50-01-10-0 Magnet block 1pc



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

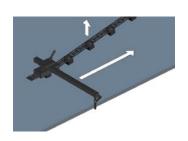




PRW-0476-52-00-00-1 Magnet guide arms (set of 2 pcs)





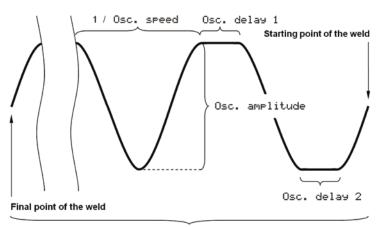






UCW-0476-06-00-00-0 Torch Holder Lower Rod Clamp Assembly

#### Oscillator settings diagram



Weld len9th

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)



Butt joint welding with oscillator



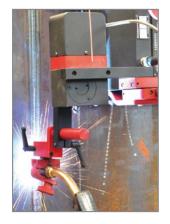
Fillet Welding with oscillator











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

More information at www.promotech.eu

