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 and configure suitable operating modes. Torch oscillator increases significantly functionality of Lizard welding carriage by allowing it to operate in most out-of-position welding jobs.
Dual torch welding

Horizontal speed
0–120 cm/min (0–47.2 in/min)

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

Min. path convex radius
1500 mm (5 ft)

Min. path concave radius
1500 mm (5 ft)

Weight 14 kg (31 lbs)

Continuous welding

Angular oscillation

Stitch welding

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:
<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Voltage</strong></td>
<td>1– 115–230 V, 50–60 Hz</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>25 W</td>
</tr>
<tr>
<td><strong>Welding position</strong></td>
<td>PA / 1F / 1G</td>
</tr>
<tr>
<td></td>
<td>PB / 2F</td>
</tr>
<tr>
<td></td>
<td>PC / 2G</td>
</tr>
<tr>
<td></td>
<td>PD / 4F</td>
</tr>
<tr>
<td></td>
<td>PE / 4G</td>
</tr>
<tr>
<td></td>
<td>PF / 3F / 3G with optional oscillator</td>
</tr>
<tr>
<td></td>
<td>PG / 3F / 3G (with optional oscillator)</td>
</tr>
<tr>
<td><strong>Programmable variables</strong></td>
<td>carriage speed, weld length, skip, crater fill, backweld, total length</td>
</tr>
<tr>
<td><strong>Welding settings storage</strong></td>
<td>up to 40</td>
</tr>
<tr>
<td><strong>Menu language</strong></td>
<td>English, French, German, Polish, Portuguese, Russian, Spanish, Turkish</td>
</tr>
<tr>
<td><strong>Torch diameter</strong></td>
<td>16–22 mm (0.63–0.87”); up to 35mm (1.38”) option</td>
</tr>
<tr>
<td><strong>Minimum radius of curved workpiece surface</strong></td>
<td>1500 mm (5 ft)</td>
</tr>
<tr>
<td><strong>Minimum workpiece thickness</strong></td>
<td>5 mm (0.2”)</td>
</tr>
<tr>
<td><strong>Ground clearance</strong></td>
<td>5 mm (0.2”)</td>
</tr>
<tr>
<td><strong>Horizontal pulling force</strong></td>
<td>220 N</td>
</tr>
<tr>
<td><strong>Vertical pulling force</strong></td>
<td>150 N</td>
</tr>
<tr>
<td><strong>Cross slide adjustment range</strong></td>
<td>0–35 mm (0–1.38”) up-down, left-right</td>
</tr>
<tr>
<td><strong>Horizontal speed</strong></td>
<td>0–120 cm/min (0–47.2 in/min)</td>
</tr>
<tr>
<td><strong>Vertical speed</strong></td>
<td>0–110 cm/min (0–43.3 in/min)</td>
</tr>
<tr>
<td><strong>Limit switch</strong></td>
<td>at both sides</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>14 kg (31 lbs)</td>
</tr>
</tbody>
</table>

![Programmable variables diagram](image)
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)
Optional Pendulum Oscillator

The oscillator features precise control of weave width, weave speed and dwell times.

Oscillator settings diagram

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillation type</td>
<td>pendulum (0°–11°)</td>
</tr>
<tr>
<td>Oscillation (weaving) pattern</td>
<td>trapezoid, triangle, c-type straight line</td>
</tr>
<tr>
<td>Oscillation width</td>
<td>1–30mm (1–100%) at r=150 mm (5.9&quot;)</td>
</tr>
<tr>
<td>Oscillation speed</td>
<td>100–2200 mm/min (1–100%) at r=150 mm (5.9&quot;)</td>
</tr>
<tr>
<td>Oscillation delay time</td>
<td>0–5 s (at external points)</td>
</tr>
<tr>
<td>Power</td>
<td>12 W</td>
</tr>
<tr>
<td>Weight</td>
<td>2 kg (4 lbs)</td>
</tr>
</tbody>
</table>

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

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

Butt joint welding with oscillator

Fillet Welding with oscillator

More information at www.promotech.eu

American Welding Society
Supporting Company Member

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