The Liburdi Dimetrics G Head is designed for remote automatic welding/overlay of pipe with GTAW (TIG) welding process. O.D. pipes sizes ranging from 4 inches to flat plate (and even ID curved surfaces). The G Head is a remarkably versatile welding tool for any industry where high integrity welds are required, repetitively and quickly.

In its standard form, the G Head provides a full function (with automatic Arc Voltage Control and Oscillation), cold wire configuration, with capability to adapt to both Hot Wire and Narrow Groove applications. Its versatile, high performance specification makes it ideally suited to run with the new and powerful Liburdi Dimetrics Gold Track VI power supply, but can also be adapted to all previous Gold Track models.

With only a 6” to 10” (152 - 254 mm) radial clearance, the G Head indirectly mounts to pipes by means of an aluminium track ring. A smooth and accurate weld head rotation is achieved with the Liburdi Dimetrics patented backlash free friction drive mechanism.

All torch bodies are water-cooled and use commercially available standard torch consumables. The G Head can accommodate the latest range of FireView direct vision systems.

A variety of wire feeder and spool holder configurations are available in including dual wire feed for bi-directional welding, to enhance the G Head’s utility.
**Pipe Welding Head**

**Standard Features**
- Liquid cooled torch.
- AVC (arc voltage control).
- Torch oscillation.
- Electric torch center steering.
- Jog buttons conveniently located on the weld head.
- Can weld in forward and reverse directions.
- Suitable for welding: carbon steel, stainless steel, nickel alloys, copper-nickel, titanium, etc. and aluminum alloys when connected to the appropriate power source.
- Fully compatible with our “FireView” vision system and portable viewing system in conjunction with our optional video front ends.

**Specifications**
- Available in Hot Wire version
- Three torch models available: “A” “C” and “Hot Wire Torch”
- Current rating: 300 amperes @ 100% (Model A and C torches)
- Current rating: 500 amperes @ 100% (Hot Wire torch)
- Maximum travel speed: 20 IPM (50 cm/min)
- Pipe sizes from 2” (51mm O.D.) to infinity
- Flat and curved surface welding with “straight tracks” and “flexible tracks”
- Inside welding with I.D. adapter kit from 16” (400mm) and up
- Wall thickness: 1.125” - 3.0” (29-76.2mm) with appropriate accessories

**Options**
- Narrow groove torch
- Dual wire feeders (2 x 120 or 2 x 400 IPM)
- Dual spool holders (2 x 4” or 2 x 8” spools)
- Dual hot wire kit
- Socket adapter kit
- ID adapter kit (for welding inside a pipe)
- Cable modification kit (for welding inside 16” pipe)
- AVC - oscillator interchange kit
- Extension Cables 50’ (15m) (up to 6 extensions can be used depending on application)
- Video front end for remote viewing
- Narrow gap video front end
- Different length osc. rails for different length strokes

**Physical Characteristics**
For dimensions: see table below
Weight without cable: 20 lbs (9kg) depending on version
Cable length: 35’ (11m)

- **A/C Front End**
  - **A/C Front End**
  - **Hot Wire**

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>DESCRIPTION</th>
<th>A/C Front End</th>
<th>Hot Wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Track-to-Rear</td>
<td>8.5 - 17.5” (216 - 445 mm)</td>
<td>8.5 - 17.5” (216 - 445 mm)</td>
</tr>
<tr>
<td>B</td>
<td>Track-to-Electrode</td>
<td>9 - 18” (229 - 457 mm)</td>
<td>9 - 18” (229 - 457 mm)</td>
</tr>
<tr>
<td>Nominal</td>
<td>Track-to-Joint</td>
<td>9 - 18” (229 - 457 mm)</td>
<td>9 - 18” (229 - 457 mm)</td>
</tr>
<tr>
<td>C</td>
<td>Center Adjust</td>
<td>Electrical Only</td>
<td>Electrical Only</td>
</tr>
<tr>
<td>D</td>
<td>Oscillator Stroke</td>
<td>9” (228 mm)</td>
<td>9” (228 mm)</td>
</tr>
<tr>
<td>E</td>
<td>Electrode-to-Front</td>
<td>4” (100 mm)</td>
<td>4” (100 mm)</td>
</tr>
<tr>
<td>F</td>
<td>Radial Clearance</td>
<td>6 - 10” (152 - 254 mm)</td>
<td>6 - 10” (152 - 254 mm)</td>
</tr>
<tr>
<td>G</td>
<td>Up/Down Adjust</td>
<td>6” (150 mm)</td>
<td>6” (150 mm)</td>
</tr>
<tr>
<td>H</td>
<td>AVC Stroke</td>
<td>4” (100 mm)</td>
<td>4” (100 mm)</td>
</tr>
<tr>
<td>Lead/Lag</td>
<td>Torch Adjust</td>
<td>± 45° / 45°</td>
<td>± 45° / 45°</td>
</tr>
<tr>
<td>Tilt</td>
<td>Torch Adjust</td>
<td>± 45° / 45°</td>
<td>± 45° / 45°</td>
</tr>
<tr>
<td>Wire Feeder</td>
<td>120 IPM (3 m/min)</td>
<td>400 IPM (10.16 m/min)</td>
<td></td>
</tr>
<tr>
<td>Spool Holder</td>
<td>4” (100 mm)</td>
<td>8” (200 mm)</td>
<td></td>
</tr>
</tbody>
</table>