L&T Hydraulics manufactures and supports a wide range of high pressure hydraulic products, hydrostatic transmissions and customized hydraulic systems at its state-of-the-art facility in Bengaluru, India.
L&T Hydraulics designs and manufactures a wide range of Hydraulic Cylinders

**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bore diameter</strong></td>
<td>Up to 350 mm</td>
</tr>
<tr>
<td><strong>Stroke</strong></td>
<td>Up to 4000 mm</td>
</tr>
<tr>
<td><strong>Pressure</strong></td>
<td>Up to 450 bar (High Pressure Cylinder)</td>
</tr>
<tr>
<td></td>
<td>Up to 350 bar (Medium Pressure Cylinder)</td>
</tr>
<tr>
<td></td>
<td>Up to 50 bar (Low Pressure Cylinder)</td>
</tr>
<tr>
<td><strong>End mountings</strong></td>
<td>Eye end, Trunnion, Flange, foot or any other type, depending on requirement</td>
</tr>
</tbody>
</table>

Two stage Telescopic Cylinder - 12.5 meters OCL (Open center length) & 5 meter CCL (Closed center length); Both ends with internal cushioning

Our Hydraulic cylinders are used in Excavators, Wheel loaders, Dump trucks and various other industrial & construction applications.
Turning Joint / Swivel Joint

L&T Hydraulics designs & manufactures Turning Joints / Swivel Joints to suit customer requirements.

Turning joints are used to continuously transfer fluid between two rotating sub-assemblies of an equipment.

Requirements beyond the above range are available on request.

Typical applications are in Hydraulic excavators and Mobile cranes.

Specifications

<table>
<thead>
<tr>
<th>No. of ports</th>
<th>5 to 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>Up to 350 bar</td>
</tr>
<tr>
<td>Flow handled</td>
<td>Up to 700 lpm</td>
</tr>
<tr>
<td>Medium</td>
<td>Hydraulic Oil</td>
</tr>
</tbody>
</table>
L&T Hydraulics manufactures HTLS motors which deliver a very high torque at low speeds. They can operate up to a maximum pressure of 450 bar.

The motors are available in Shaft, Wheel, Compact & Torque versions.

**Specifications**

<table>
<thead>
<tr>
<th>Type</th>
<th>Displacement cc/vvh</th>
<th>Torque @ 100 bar Nm</th>
<th>Max. Power KW</th>
<th>Max. Speed (rpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Displacement</td>
</tr>
<tr>
<td>G3 - H15</td>
<td>1130</td>
<td>1797</td>
<td>52</td>
<td>146</td>
</tr>
<tr>
<td>G3 - H20</td>
<td>1979</td>
<td>3147</td>
<td>76</td>
<td>120</td>
</tr>
<tr>
<td>G3 - H25</td>
<td>3122</td>
<td>4964</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>G3 - H30</td>
<td>4914</td>
<td>7813</td>
<td>135</td>
<td>85</td>
</tr>
</tbody>
</table>

*Available only for Compact, Torque & Wheel Motors

Other options include: Static parking brake, Dual displacement, Splined & Key shafts and Free-wheeling.

Typical applications are in Excavators, Blast hole drill rigs, Compactors, Hydraulic Winches, Mining and Material handling equipments.
L&T Hydraulics manufactures a wide range of radial piston multi-flow pumps capable of developing a maximum operating pressure of 350 bars.

**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of flows available</td>
<td>1, 2, 3, 4 &amp; 6</td>
</tr>
<tr>
<td>Direction of rotation</td>
<td>(cw/ccw)</td>
</tr>
<tr>
<td>Displacement (cc/rev.)</td>
<td>5, 10, 20, 25, 28.5</td>
</tr>
<tr>
<td></td>
<td>40, 58, 65, 74 &amp; 85</td>
</tr>
</tbody>
</table>

Requirements of specific displacement within this range is also available on request.

Typical applications are in Hydraulic excavators, Drill rigs, Material handling systems and Hydraulic Presses.
Customised Hydraulic Systems

- Hydraulic System for Mould Titting Table
- Power Pack
- Side Arm Charger
- Power Pack for Side Arm Charger Travel Drive
- Wagon Tippler
- Power Pack for Wagon Clamp & Tippler Drive
- Paddle Feeder
- Power Pack and Drive
- Railway Crane
- Hydraulic Winch, Slow and Travel drives for Crane
Variable Work Table - Wheel Dolly

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Dimension:</td>
<td>1950Wx3900Lx1125H mm</td>
</tr>
<tr>
<td>Table size:</td>
<td>1750Wx2350Lx40H mm</td>
</tr>
<tr>
<td>Max working load:</td>
<td>12000 Kgs</td>
</tr>
<tr>
<td>Electric motor power:</td>
<td>7.5 KW</td>
</tr>
<tr>
<td>Tare weight:</td>
<td>3.6 Tons</td>
</tr>
<tr>
<td>Ground clearance:</td>
<td>100 mm</td>
</tr>
<tr>
<td>Lift</td>
<td>Max 150 mm</td>
</tr>
<tr>
<td>Tilt (Front/Back)</td>
<td>8.1° from Horizontal Plane</td>
</tr>
<tr>
<td>Tilt (Left/Right)</td>
<td>6.9° from Horizontal Plane</td>
</tr>
</tbody>
</table>

- Designed for safe and precise positioning of components viz wheel motors armatures etc, during assembly/disassembly
- Environment friendly - Powered by electric motor
- Easy to operate - Conveniently positioned & user friendly controls
- Additional control valve for powering auxiliary tools/attachments
- Smooth operations - Hydraulic System for all functions viz:
  - Lift & Tilt
  - Slew & Slide Shift
  - Propulsion & Steering
- Safety features:
  - Cylinders designed for high pressure with load holding valves
  - Propel motors with inbuilt failsafe parking brake
  - Self winding trailing cable drum
  - Sturdy table with 40mm thick plate for jig mounting

Operation

Removal and Fitment of Dump Truck Wheel Motor using Variable Work Table
Milestones

1975  L&T Bengaluru Works established in collaboration with Poclain SA, France for excavator manufacture
1982  Hydraulics Works established to manufacture Hydraulic Motors & Hydraulic Pumps
1995  Business Process Re-engineering launched
1996  Hydraulics Works Certified under ISO 9001
1997  Golden Peacock & Rajiv Gandhi National Award
1998  Joint venture with Komatsu Asia Pacific L&T Komatsu Ltd. (LTK)
2000  CII-EXIM Business Excellence - Commendation for Commitment to Total Quality
2003  OHSAS 18001 Certification for Health and Safety System
2007  Launch of SCRIPT 6500-Strategic Supply chain initiative
2010  CII BE - Awarded - SIGNIFICANT ACHIEVEMENT
2011  Hydraulics Works re-certified for ISO 9001-2008
2011  Awarded the Platinum award for Quality systems by FICCI
2013  LTK becomes L&T Construction Equipment Ltd., a 100% subsidiary of L&T

Overview

- More than 30 years of manufacturing experience in High Pressure / High Precision.
- Hydraulic Products for Construction, Earthmoving & Customized Hydraulic Equipment for material handling.
- Technology Absorption
  - Poclain Hydraulics, France - Radial Piston Motors, Pumps, Cylinders & Turning Joints
  - Sauer Sundstrand - Axial Motors & Pumps
  - Komatsu - Cylinders, Drives & Swivel Joints.
- Highly skilled (Qualified from Technical schools) & experienced workforce.
- Excellent track record of export including components & parts to Poclain Hydraulics, France & Komatsu, Japan.
- Ability to engineer hydraulic systems for customer specific applications including design, fabrication, installation and commissioning.
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Fax : +91 80 2363 6065
E-mail : ajit.k@larsentoubro.com

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E-mail : avik.halder@larsentoubro.com

L&T Construction Equipment Limited is a wholly owned subsidiary of Larsen & Toubro Limited
CIN : U29119MH1997PLC109700

L&T Hydraulics
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