



L&T Hydraulics



L&T Hydraulics designs and manufactures a wide range of high pressure hydraulic products, hydrostatic transmissions and customized hydraulic systems at its facility in Bengaluru

Milestones

- 1975 L&T Bengaluru Works established in collaboration with Poclain SA, France for excavator manufacturing

- 1982 Hydraulics Works established to manufacture Hydraulic Cylinders, Motors, Pumps, Swivel Joints, Track Drives, Swing Machinery and Customized Hydraulic Systems

- 1998 Joint venture with Komatsu Asia Pacific to form L&T – Komatsu Limited (LTK)

- 2013 LTK becomes L&T Construction Equipment Limited a 100% subsidiary of L&T

- 2015 New manufacturing plant set up at Doddaballapur

- 2016 Supply of Hydraulics to OEM'S Started from Doddaballapur plant

- 2017 Commenced Supply of Hydraulic Aggregates to Defence

- 2018 Awarded NAMC Silver medal for Excellence in Mfg.

- 2019 Awarded NAMC Gold medal for Excellence in Mfg.

- 2022 Developed Hydraulics for Girder Transporter & Straddle Carrier

- 2023 Developed Light Weight Hydraulic Suspension Units for Special Projects



Overview

- ☀ More than 40 years of manufacturing and application engineering expertise in High pressure Hydraulic Equipment
- ☀ Hydraulic Products for Construction, Earthmoving & Industrial segments and Customized Hydraulics Systems for Bulk material handling
- ☀ Highly skilled, qualified and experienced workforce
- ☀ Excellent track record of export including components, parts and aggregates to various OEMs worldwide
- ☀ We can engineer hydraulic systems for customer specific applications including design, fabrication, installation and commissioning

Cylinders



High Pressure Cylinder

L&T Hydraulics designs and manufactures a wide range of Hydraulic Cylinders

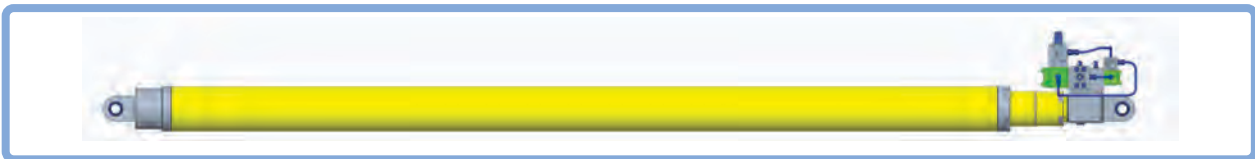
Specifications

Bore diameter	Up to 360 mm
Stroke	Up to 4000 mm
Pressure	Up to 450 bar (High Pressure Cylinder) Up to 350 bar (Medium Pressure Cylinder) Up to 50 bar (Low Pressure Cylinder)

End mountings Eye end, Trunnion, Flange, foot or any other type depending on requirement



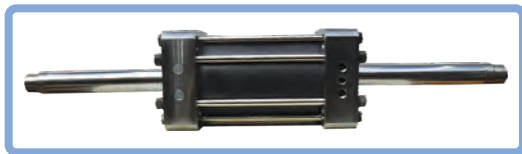
Telescopic Cylinder



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



Medium & Low Pressure Cylinder



Industrial Cylinder



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



Turning Joint / Swivel Joint

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

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

Specifications

No. of ports	5 to 16
Pressure	Up to 350 bar
Flow handled	Up to 700 lpm
Medium	Hydraulic Oil

Requirements beyond the above range are available on request.

Typical applications are in Hydraulic excavators and Mobile cranes.



High Torque Low Speed Motors



Bearing Motor



Torque Motor



Compact Motor

L&T Hydraulics manufactures HTLS motors which deliver a very high torque at low speeds.

They can operate up to a peak pressure of 450 bar.

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

Specifications

Type	Displacement cc/rev.	Torque @ 400 bar m.daN	Max. Power KW	Max. Speed (rpm)	
				Full Displacement	Half Displacement
H15	1130	720	52	150	220*
H20	1979	1260	75	120	180*
H25	3122	1980	100	100	150*

* Available only for Compact, Torque & Wheel Motors

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

Typical applications are in Hydraulic Excavators, Blast hole drill rigs, Vibratory Compactors, Hydraulic Winches, Mining and Material handling equipment.



Radial Piston Pumps

L&T Hydraulics manufactures a wide range of radial piston multi-flow pumps capable of developing a maximum operating pressure of 350 bar.



Specifications

No. of flows available	1,2,3,4 & 6
Direction of rotation	(cw/ccw)
Displacement (cc/rev.)	5,10,20,25,28.5 40,58,65,74 & 84.5

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



Stacker Reclaimer



Side Arm Charger



Hydraulic System for Bucket Wheel and Slew Drive.



Hydraulic System for Side Arm Charger Travel Drive



Wagon Tippler



Hydraulic System for Wagon Clamp & Tippler Drive



Paddle Feeder



Hydraulic System For Paddle Feeder



Railway Crane



Hydraulic Winch, Slew and Travel drives for Crane

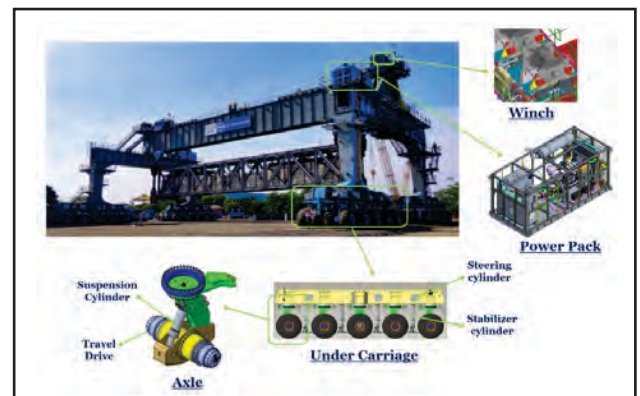
Customised Hydraulic Systems for Special Equipment

- L&T Hydraulics manufactures customized hydraulic systems for Special Equipment.
- A team of trained service personnel are available on call to handle service requirements at customer's site.
- Applications: High Speed Rail - Girder Transporter, Straddle Carrier, Rail Feeder Car, Slab Laying Car etc.

STRADDLE CARRIER

Features & Specifications:

Straddle Carrier is designed and developed to lift and transport the full span 40m Girder weighing 1100T in casting yard. The Girder is lifted with four winches, placed on either side of Straddle Carrier main beam, which is supported by four under carriages placed on either side of the machine.



Two hydraulic power packs of Straddle Carrier are used to perform Travel, Suspension, Steering, Winch, Stabiliser, Hydraulic oil cooling and Sheave block movement operations.

GIRDER TRANSPORTER

Features & Specifications:

Girder transporter is a special purpose equipment, developed for transporting concrete girders weighing up to 1100T and a span length up to 40m. Single girder is loaded on Girder Transporter using Gantry Cranes or Straddle carrier.

The hydraulic power pack of Girder Transporter is used to perform Travel, Suspension, Steering & Stabilizer operations.



Key Manufacturing Facilities



Overview of Machine Shop



Swivel Joint Manufacturing Line



Customized Hydraulic System Assembly



CNC Rod Induction Hardening



Robotic Welding



Ultrasonic Testing



Skiving & Roller Burnishing



Friction Welding



Robotic Washing Machine



Cylinder Assembly



Automated Cylinder Testing



Automated Painting System
(Seamless Integration with Assembly & Testing)



Form tester for Roundness
Cylindricity, Straightness of
super finished parts



Surface Table 00 Grade
for calibration



Carl Zeiss Co-ordinate
Measuring m/c

Manufacturing Facility & Marketing Office:

L&T Construction Equipment Limited

Marketing - Hydraulic Products

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

CIN : U29119MH1997PLC109700



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