

L&T Hydraulics

An aerial photograph of a large industrial complex. The main building is a long, white structure with a grey roof, divided into several sections. In the foreground, there is a paved road with white dashed lines, a green lawn, and several tall palm trees. The background shows a dense forest of palm trees and some residential buildings under a clear sky. The text 'L&T Hydraulics' is overlaid in the top left corner.

Ver: 25-26/Web/01
Apr 2025

L&T Hydraulics – At a Glance



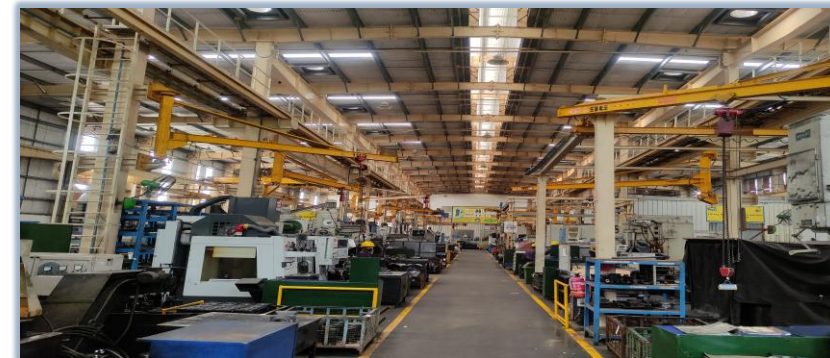
L&T Hydraulics of LTCEL,
A wholly owned
subsidiary of
Larsen & Toubro Limited



Established in 1982 to
manufacture Hydraulic
Motors, Pumps, Swivel
Joints & Cylinders



185+ Employees



ISO 9001 & ISO 14001
Certified



EHS
Compliant

LTCEL Journey

1982

Hydraulic works was established to cater to internal hydraulic requirement viz. Motors, Pumps, SJ & Cyls.



1999

Joint Venture with Komatsu Asia Pacific – L&T Komatsu Limited (LTK)



2013

LTK became LTCEL, a wholly owned subsidiary of Larsen & Toubro Limited



2015

Inauguration of New Hydraulics Works (HW) of LTCEL at Doddaballapur



2016

Started Supply of Hydraulics to leading OEMs of Construction Sectors



Manufacturing Plant

Motor, Pump & Drive Manufacturing



Hangar 2

Cylinder Manufacturing



Hangar 1

Customized Hydraulics Manufacturing



Swivel Joint Manufacturing



Business Segmentation & Products

1 Mobile Hydraulics



- Construction Equipment
- Mining Equipment
- Drilling Equipment
- Road Making Machines

2 Industrial Hydraulics



- Rubber Processing
- Hydraulic Press
- Renewable Energy
- Injection moulding

3 Customised Hydraulics



- Bulk Material Handling
- Civil Construction
- Precision Engineering
- Marine
- Rubber Processing

STANDARD PRODUCTS



Hydraulic Cylinder



Hydraulic Swivel Joint

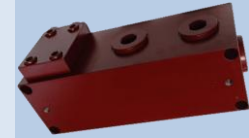


Radial Piston Motors - HTLS

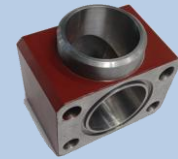


Radial Piston Pumps

Other Products Custom Manufactured



Manifold Blocks



Hydraulic Gear Boxes

CUSTOMISED PRODUCTS



Product Specifications: **Hydraulic Cylinders**



Wide range of Hydraulic Cylinders including telescopic and for special purpose

Bore diameter Up to 350 mm

Stroke Up to 4000 mm

Pressure Up to 450 bar (High Pressure Cylinder) Up to 350 bar (Medium Pressure Cylinder) Up to 250 bar (Low Pressure Cylinder)

End mountings Eye end, Trunnion, Flange and Foot mounting

Typical applications are in Hydraulic excavators, Wheel loaders, Loader Backhoes, Mobile cranes, Dump trucks, Tyre Curing Press , Wind Yaw and Pitch drive & various Industrial & Construction Applications.



Product Specifications: **Turning Joint**

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

L&T Hydraulic Works designs & 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

Typical applications are in Hydraulic excavators, Motor grader and Mobile cranes



Product Specifications: **Radial Piston Pumps**

Radial piston multi-flow pumps capable of developing maximum operating pressure up to 350 bar

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 & 85

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

Typical applications are in Hydraulic excavators, Drill rigs, Hydraulic power packs for Material handling systems and Hydraulic Press.



Product Specifications: **High Torque Low Speed Motors**



Compact Motor

HTLS motors which deliver very high torque even at very low speeds.

Operate up to a maximum pressure of 450 bar.

Available in Shaft, Wheel, Compact & Torque mountings.

Options available: Static parking brake, Dual displacement, Keyed/Splined shaft & Free Wheeling

Typical Applications are in Excavator Swing/Track, Blast hole drill rigs, Compactors, Hydraulic Winches, Mining & Material Handling equipment.



Torque Motor



Shaft Motor



Wheel Motor

Type	Displacement cc/rev	Torque @100 bar Nm	Max. power KW	Max Speed (rpm)	
				Higher Displacement	Lower Displacement
H15	1130	1797	52	146	220 *
H20	1979	3147	75	120	180 *
H25	3122	4964	100	100	150 *

Applications

Hydraulic Excavator



Application:
Crawler Excavator

Product:

- Hyd Cylinders
- Swivel Joints

Concrete Boom Pump



Application:
Truck Mounted
Concrete Boom Pump

Product:

- Hyd Cylinders

Mining: Underground Equipment



Application:
Underground Mine truck

Product:

- Hyd Cylinders

Dump Trucks



Application:
Dump Truck

Product:

- Hyd Cylinders

Mining: Special Equipment



Application:
Mining Equipment
Product: Hyd Cylinders

Grabs & Attachments



Application: Grab &
Attachments
Product: Hyd Cylinders

Water Well Rigs



Application:
Water Well Rigs
Product: Hyd Cylinders,
Pumps & Motors

23.5 m Super Long Front Attachment for 65T HEX



Amphibious Undercarriage Excavator



Special Equipment and Customized Hydraulics

High Speed Rail Project



Straddle Carrier



Girder Transporter



Track Slab Laying Car



CAM Car



Rail Feeder Car



Asphalt Storage Tank



Trencher

Bulk Material Handling

Wagon Tippler



Side Arm Charger



Paddle Feeder



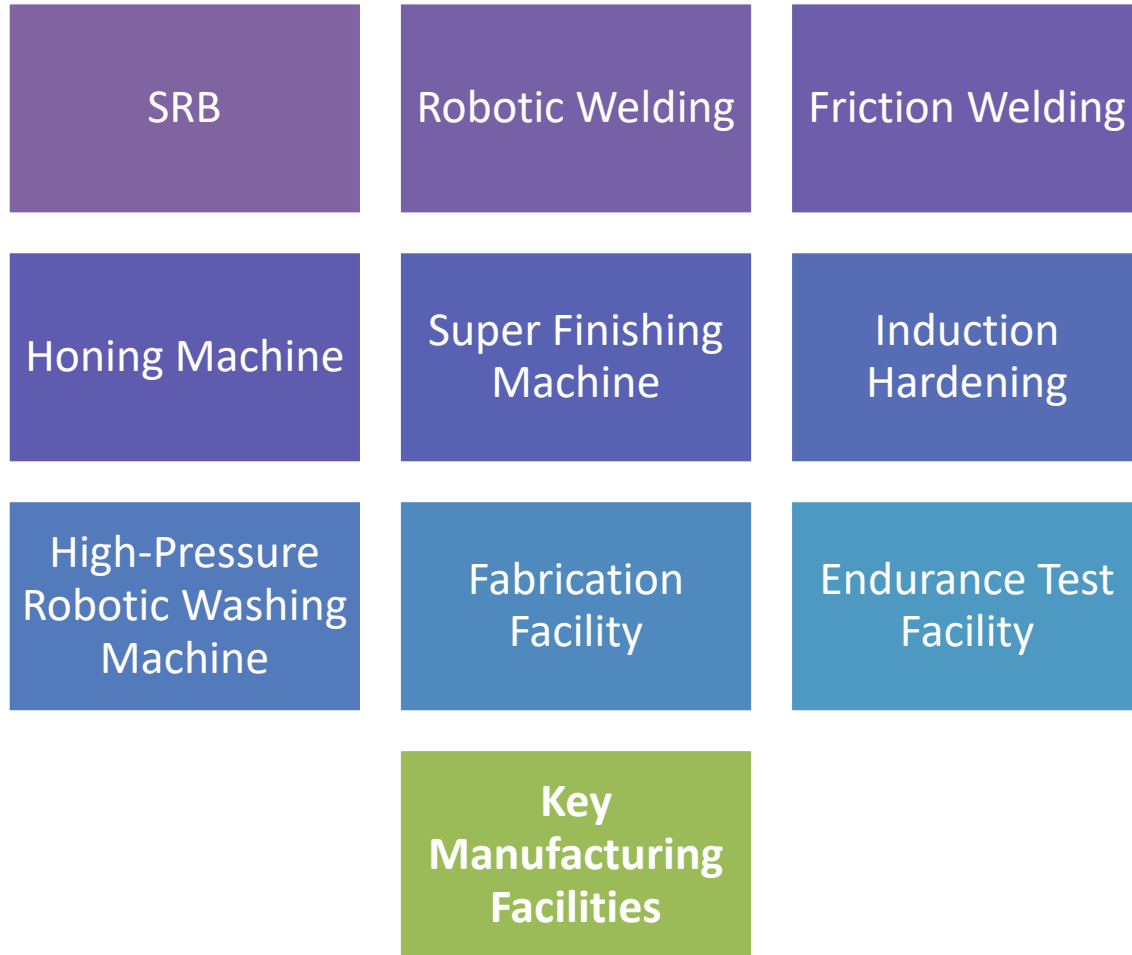
Developed Hydraulic Systems

– Power Packs, Cylinders & Drive Systems



Installed > 500+ units in last 15 years

Key Manufacturing Facilities & Capabilities



At our manufacturing facility in Bangalore, we have capabilities that equip us to engineer hydraulic systems for customer specific applications, from design to manufacturing, installation and commissioning.

Equipped with in-house Heat Treatment and Metrology facilities, Design & R&D center, the facility meets the needs of our customers world-wide.

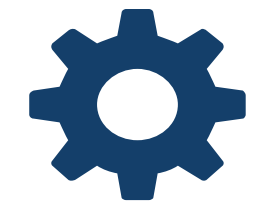
Design & Engineering Capabilities



**40+
Engineers**

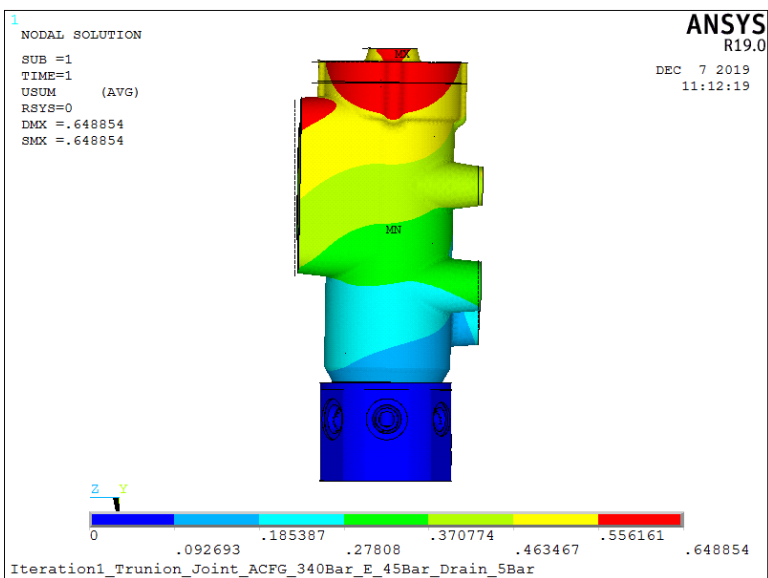


**1000+
Designs**

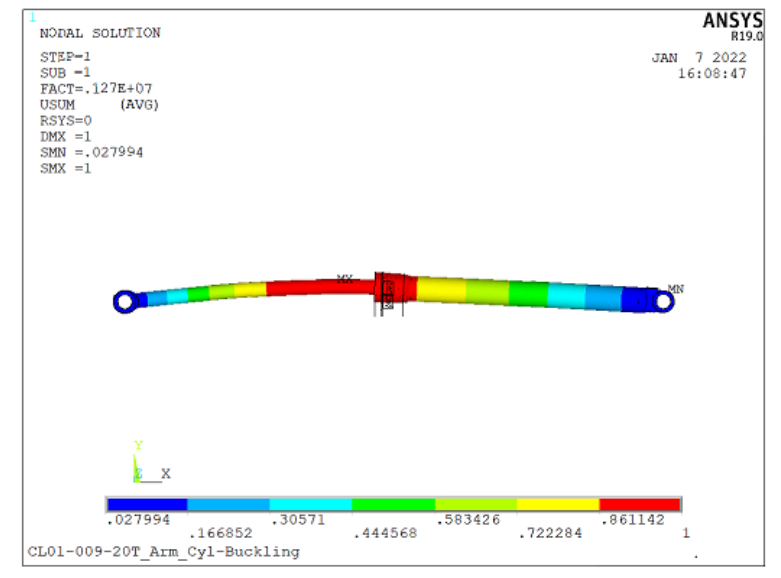


**Diverse
Application
Experience**

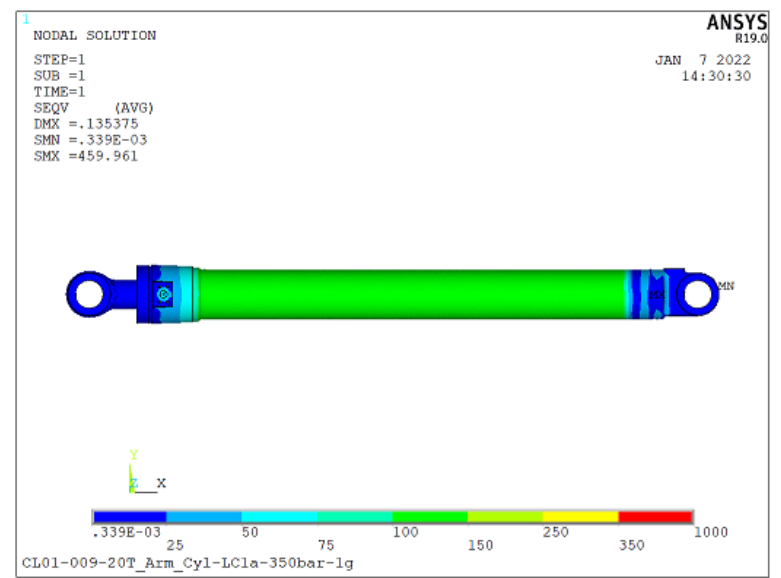
Swivel Joint Stress Analysis



Hydraulic Cylinder Buckling Analysis



Hydraulic Cylinder Stress Analysis



1 Domain Expertise at **Product Development Center**

Design, proto and testing

DSIR recognised In-house R&D Centre

15 Patents filed, 4 granted & 14 publications

Inhouse FEA, Electricals and Hyd. modules

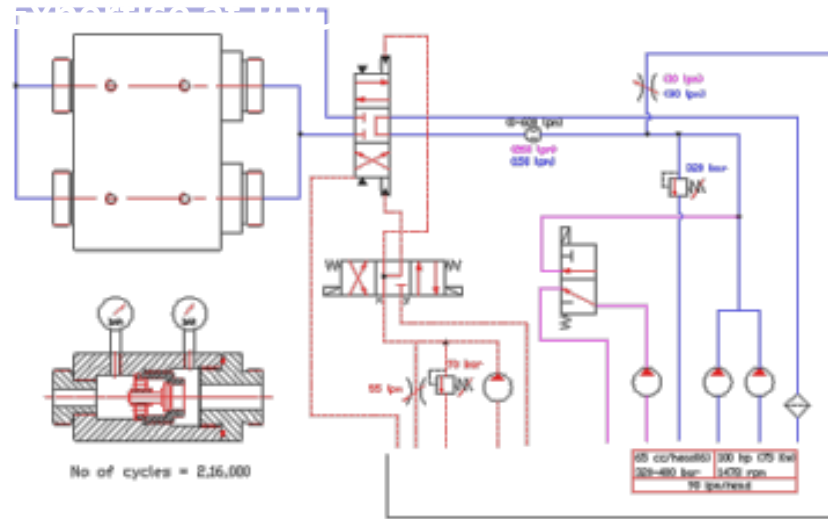
Selection of Drive Train Elements

- Engine
- Transmission – Hydrodynamic & Hydrostatic
- Axle, Steering & Brake Systems



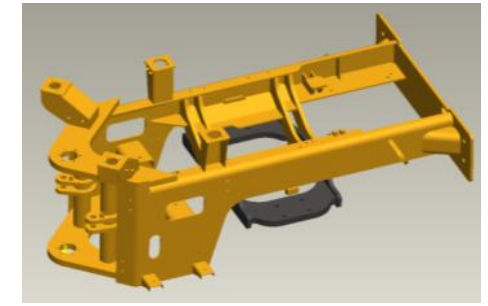
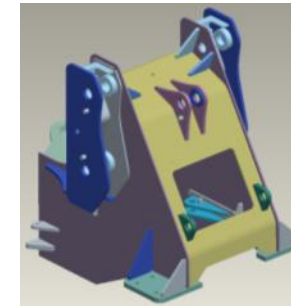
Mobile Hydraulics

- High Pressure rating up to 420 bars
- Selection of Pumps, Linear and Rotary Actuators
- Circuit Design with Pilot control, Load sensing



Implements, Linkages & Structures

- Mechanism Design & Kinematic Analysis through Design View, Math Cad, Pro-Mechanism
- Design of Fabricated, Cast or Forged components for Critical load application.
- Validation by experimental strain gauging



Endurance Testing Facilities



Impulse testing for Cylinders As per IS 10585

Validation tests of Cylinders and Rotary Joints as per customer specifications such as side load tests and Back-to-Back cylinder tests

For Special Applications



Test rig for plotting Flow Vs Pressure across Dampers



Proof pressure test rig for 1000 Bar

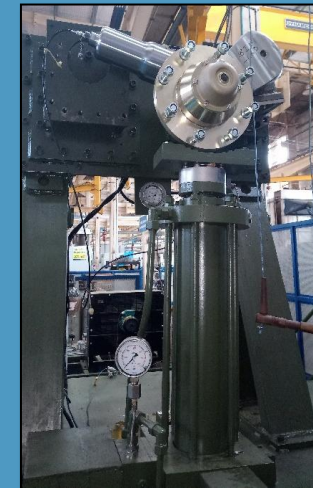


Back-to-Back loading test rig for Cylinders

For Hydraulic Aggregates



PLC integrated test setup to carry out 500,000 cycles of endurance test



PLC and SCADA integrated production line test rigs for plotting Nitrogen Gas Vs Displacement

Metrology



Form tester
for Roundness, Cylindricity of
super finished parts



Surface Table 00 Grade
for calibration



Carl Zeiss
Co-ordinate Measuring m/c



Millipore Lab

Solar power



Wind Power



Around 78% thru Renewable Sources

- Energy Savings from 2018 till date:
- CO2 emission avoidance **21,518 Tons**
 - Equivalent to planting **2,68,685 Trees**

Rainwater Harvesting



Water Lagoons 3L lit Capacity



Digitalization of Borewell water Extraction Measurement



Overhead tank installed for feeding water under Gravity to HW office blok. Reduction in Water consumption 1500 KL / annum



Solar Water Heaters for Canteen



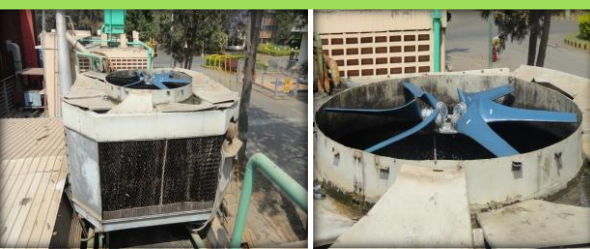
Water conservation

- Used water is treated inside the premises at STP & ETP plant with ultra filtration system
- Zero discharge plant with recycled water is used for gardening
- RO Rejected water is reused for paint booth

Programmable timer introduced for optimum switching of pumps Energy Savings of 9,000 units per/annum



FRP blades introduced in place of Aluminium for Cooling Tower fans Energy Savings of 12,670 units per/annum



Safety Recognition

LTCEL has been awarded **Best Safety Award** from Komatsu India



	2020-21	2021-22	2022-23	2022-23	2023-24	2023-24
Award	UTTHAMA SURAKSHA PURASKARA Award	Best Worker State Level Safety Award (Mr. Praveen Anchan)	Certification of Appreciation	Certification of Appreciation	Consolation Prize In Regional Level Quiz Competition for Safety (Mr. Suresh & Mr. Gopalkrishna)	First Prize State Level Safety Competition (Mr. Erachari)
Awarded By	National Safety Council Karnataka Chapter	Directorate of Factories Govt. of Karnataka	National Safety Council	National Safety Council	Directorate of Factories Govt. of Karnataka	Directorate of Factories, K.S.S.I & Govt. of Karnataka
						
		 				 



**ISO
9001**



**ISO
14001**



**EHS
Certified**

Bureau Veritas Certification

**L&T CONSTRUCTION EQUIPMENT LIMITED
HYDRAULICS WORKS**

SY. NO. 28, THAMMASHETTI HALLI, RAGHUNATHAPURA, DODDABALLAPURA TALUK,
BANGALORE - 561 203, KARNATAKA, INDIA.

Bureau Veritas Certification Holding SAS - UK Branch certifies that the Management System
of the above Organisation has been audited and found to be in accordance with the
requirements of the Management System Standard detailed below.

Standard

ISO 9001:2015

Scope of certification

**DESIGN, DEVELOPMENT, MANUFACTURE AND SERVICING OF HYDRAULIC
MOTORS, PUMPS, TURNING JOINTS, CYLINDERS, GEAR BOXES, HOSE
ASSEMBLIES, VALVE BLOCKS, HYDRAULIC SYSTEMS AND POWER DRIVES**

Original cycle start date: **19 January 1996**
 Recertification cycle start date: **03 May 2023**
 Subject to the continued satisfactory operation of the Organisation's Management System,
 this certificate is valid until: **04 May 2026**
 Certificate No. **IND.23.5565/QM/U** Version: **1** Issue date: **03 May 2023**

For certificate authenticity, click here
<https://certcheck.ukas.com/>

Signed on behalf of BVCH SAS UK Branch
Jagdish N. MANIAN
 Director - CERTIFICATION, South Asia
 Commodities, Industry & Facilities Division

Certification body address: 5th Floor, 66 Prescott Street, London, E1 6HG, United Kingdom.
 Local office: Bureau Veritas (India) Private Limited (Certification Business)
 72 Business Park, Marol Industrial Area, MIDC Cross Road 'C',
 Andheri (East), Mumbai - 400 051, India.

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements
 may be obtained by consulting the organisation.
 To check this certificate validity please call +91 22 6274 2000.

Bureau Veritas Certification

L&T CONSTRUCTION EQUIPMENT LIMITED

L&T Construction Equipment

SY. NO.27/28, THAMMASHETTI HALLI, KASABA HOBLI, DODDABALLAPURA TALUK,
BANGALURU RURAL DISTRICT - 561 203, KARNATAKA, INDIA.

Bureau Veritas Certification Holding SAS - UK Branch certifies that the Management System
of the above organisation has been audited and found to be in accordance with the
requirements of the Management System Standards detailed below.

Standards

ISO 14001:2015 & ISO 45001:2018

Scope of certification

**DESIGN, MANUFACTURE & TESTING OF CONSTRUCTION EQUIPMENT,
HYDRAULIC COMPONENTS & SYSTEMS**

Original cycle start date for ISO 14001: **17 April 2017**
 Original cycle start date for ISO 45001: **27 March 2020**
 Recertification cycle start date: **23 March 2023**
 Subject to the continued satisfactory operation of the organisation's Management System,
 this certificate is valid until: **26 March 2026**
 Certificate No. **IND.23.7090/IM/U** Version: **1** Issue date: **23 March 2023**

For certificate authenticity, click here
<https://certcheck.ukas.com/>

Signed on behalf of BVCH SAS UK Branch
Jagdish N. MANIAN
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L&T Construction Equipment

Environment, Health & Safety (EHS) Policy

We remain committed to safeguarding the health and safety of our employees and other stakeholders and preserving the environment.

To fulfil the above commitment, we will ensure the following:

- Incorporate applicable EHS requirements across all processes to align with the business objectives
- Meet or exceed all applicable legal and other compliance obligations, irrespective of the stipulations of the enforcement authorities
- Pay serious attention to workmen welfare to improve morale and thereby productivity
- Impart structured training and augment resources for effective EHS performance
- Prevent adverse environmental impact and occupational health and safety risks
- Conserve natural resources, minimize waste generation, environmental emissions and reduce carbon footprint
- Encourage communication, consultation and collaboration with all stakeholders
- Establish SMART EHS objectives to permanently reduce EHS risks by eliminating hazards or substituting with less harmful equipment, material, methods and review implementation to achieve continual improvement

This policy to be communicated to all our stake holders and reviewed periodically to ensure that it remains relevant to our business and effective to improve performance.

7th October 2022

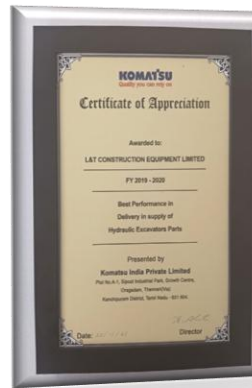
H S HANDE
Chief Executive

**L&T Construction Equipment Limited
Doddaballapura**

Awards & Accolades



Komatsu Plant Manager's Special Award 2016-17



Best Delivery Performance Award by KIPL 2019-20 and 2021-22



National Award for Excellence in Employee Relations by Employers Federation of India



Gold Award by Quality Circle Forum of India, Bangalore Chapter For 2015 , 2016 & 2018



Gold Medal for Mfg. Competitiveness 2018-19



CIA World Annual Awards 2022 & 2023 for Best Company in CE Sector including Special Products and Sub Systems



Strong Commitment to Business Excellence 2024. L&T Business Excellence Model Assessment

Contact Information



Marketing Office & Manufacturing Facility

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Raghunathapura, Doddaballapur Taluk,
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