






ANNUAL REPORT 2014-15

L&T Hydrocarbon Engineering

COMPANY INFORMATION

BOARD OF DIRECTORS

Mr. K. Venkataramanan
Managing Director

Mr. U. Dasgupta
Whole-Time Director

Mr. K. Ravindranath
Whole-Time Director

Mr. R. Shankar Raman
Non-Executive Director

Mr. N. Hariharan
Non-Executive Director

Mr. Vikram Singh Mehta
Independent Director

Mr. S. Behuria
Independent Director

Mr. A. K. Balyan
Independent Director

Mrs. Bhagyam Ramani
Independent Director

Mr. P. S. Kapoor
Chief Financial Officer &
Company Secretary

M/s. Sharp & Tannan
Statutory Auditors

Ms. Naina R Desai
Secretarial Auditor

CONTENTS

DIRECTORS' REPORT

The Directors have pleasure in presenting the Sixth Annual Report and Audited Accounts for the year ended March 31, 2015.

FINANCIAL RESULTS

Summary of Financial Results of the Company is as follows:

₹ Crore

Particulars	**2014-15**	*2013-14*
Turnover (gross)	**5,748.47**	*8,737.03*
Profit/(loss) before Depreciation, exceptional and extra ordinary items & Tax	**(896.91)**	*263.88*
Less: Depreciation, amortisation & obsolescence	**105.44**	*100.05*
Add: Transfer from revaluation reserve	**–**	*–*
Profit/(loss) before exceptional & extra ordinary items and tax	**(1,002.35)**	*163.83*
Add: Exceptional Items	**–**	*–*
Profit/(loss) before extraordinary items and tax	**(1,002.35)**	*163.83*
Add: Extraordinary Items	**–**	*–*
Profit/(loss) before Tax	**(1,002.35)**	*163.83*
Less: Provision for Tax (including deferred tax)	**(348.23)**	*58.10*
Profit/(loss) after Tax from continuing operations	**(654.12)**	*105.73*
Profit from discontinued operations (after Tax)	**–**	*–*
Profit for the period carried to Balance Sheet	**(654.12)**	*105.73*
Add: Balance brought forward from previous year	**97.23**	*(0.01)*
Balance available for disposal (which directors appropriate as follows)		
Transfer to General Reserve	**–**	*–*
Proposed Dividend including Dividend Distribution Tax	**–**	*(8.49)*
Additional depreciation charge to retained earnings on revision of useful life	**(3.07)**	*–*
Balance carried to Balance Sheet	**(559.96)**	*97.23*

STATE OF COMPANY AFFAIRS

The gross sales for the financial year under review were ₹ 5,748.47 crore as against ₹ 8,737.03 crore for the previous financial year. The year-on-year de-growth of 34% was primarily due to low domestic opening order book coupled with drop in international revenue as majority of existing international jobs have reached close out stage and the Kuwait project received during the year being a long cycle project, is still in engineering phase and will ramp-up in the subsequent years. The Net Loss before tax was ₹ 1,002.35 crore and the Loss after tax was ₹ 654.12 crore for the financial year under review as against positive ₹ 163.83 crore and ₹ 105.73 crore respectively for the previous financial year. The losses during the year were incurred primarily on certain stressed international projects, primarily in GCC countries. Most of these projects were first of its kind with respect to size & scale, technical complexity, customer expectations and situated in challenging geographic locations. The company is in advanced stage of commissioning & close-outs of these projects.

DIVIDEND

In view of the loss during the year, the Directors do not recommend any dividend on preference or equity shares. (₹ 0.1452 dividend per preference share in previous year).

CAPITAL & FINANCE

During the year under review, the Company raised ₹ 400 Crores against issue of Short Term Commercial Papers.

Long Term Inter Corporate Deposits from holding company outstanding as on March 31, 2015 are ₹ 148.30 Crores.

CAPITAL EXPENDITURE

As at March 31, 2015, the gross fixed and intangible assets, stood at ₹ 1,426.49 crore and the net fixed and intangible assets, at ₹ 889.46 crore. Capital expenditure during the year amounted to ₹ 71.97 crore.

DEPOSITS

The Company has not accepted any deposits from public during the financial year ended March 31, 2015. There are no deposits outstanding as of March 31, 2015.

PARTICULARS OF LOANS GIVEN, INVESTMENTS MADE, GUARANTEES GIVEN OR SECURITY PROVIDED BY THE COMPANY

During the year under review, the Company has not entered into any of the above transactions.

AUDITORS' REPORT

The Auditors' Report to the Shareholders does not contain any qualification.

CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION, FOREIGN EXCHANGE EARNINGS AND OUTGO

Information relating to Conservation of Energy, Technology Absorption, Foreign Exchange Earnings and Outgo is provided in **Annexure 'A'** forming part of this Report.

PARTICULARS OF CONTRACTS OR ARRANGEMENTS WITH RELATED PARTIES

The Audit Committee of the Board of Directors have approved the Related Party Transactions for financial year 2014 -15.

All the related party transactions were in the ordinary course of business and at arm's length.

A disclosure is provided in the **Annexure 'B'** for material transactions, contracts or arrangements which are at arm's length basis as per Sec 134(3)(h) of the Act 2013 read with Companies (Audit and Accounts) Rules, 2014.

MATERIAL CHANGES AND COMMITMENTS AFFECTING THE FINANCIAL POSITION OF THE COMPANY, BETWEEN THE END OF THE FINANCIAL YEAR AND THE DATE OF THE REPORT

There are no material changes and commitments affecting the financial position of the Company, between the end of the financial year and the date of the report.

RISK MANAGEMENT POLICY

The Company has formulated a risk management policy and has in place a mechanism to inform the Board Members about risk assessment and mitigation procedures.

A detailed note on risk management is given under financial review section of the Management Discussion and Analysis of this Annual Report.

CORPORATE SOCIAL RESPONSIBILITY

The Company has constituted a Corporate Social Responsibility committee during the year comprising of Mr. Vikram Singh Mehta, Ms. Bhagyam Ramani, Mr. U. Dasgupta and Mr. K. Ravindranath as the Members. Mr. Vikram Singh Mehta is the Chairman of the Committee.

The details of the various projects and programmes to be undertaken by the Company as a part of its CSR framework is available on its website www.lnthydrocarbon.com.

1. Average net profit of the Company for the last three financial years.

   The average net profit of the Company (excluding profit/(loss) of overseas branches) for the last three financial years is ₹ 336.88 crore.

2. Prescribed CSR expenditure (two percent of the amount as in item 1 above).

   The Company is required to spend an amount of ₹ 6.74 crore as CSR expenditure during the financial year 2014-15.

3. Details of CSR spent during the financial year:

   a. Total amount to be spent for the financial year

      The Company is required to spend ₹ 6.74 crore during the financial year 2014-15.

   b. Amount unspent, if any

      The Company has not spent ₹ 6.08 crore during the financial year 2014-15.

   c. Manner in which the amount was spent In the financial year is detailed below:

      As per table enclosed

₹ Crore

CSR project/activity identified	Sector in which the Project is covered	Projects/Programs 1) Local area or other 2) specify the State and district where projects or Programs were Undertaken	Amount outlay (budget) project / program wise	Amount spent on the project / programs Sub–heads: 1) Direct expenditure on projects or programs 2) Overheads	Cumulative spend upto the reporting period	Amount spent (Direct / implementing agency)
Contribution to Kashmir Flood victims through PM Relief Fund	Welfare	LTHE	0.44	0.44	0.44	Direct
Providing health care & education support to villages around project sites.	Healthcare & Education	Construction Sites	0.08	0.04	0.04	Direct

₹ Crore

CSR project/activity identified	Sector in which the Project is covered	Projects/Programs 1) Local area or other 2) specify the State and district where projects or Programs were Undertaken	Amount outlay (budget) project / program wise	Amount spent on the project / programs Sub–heads: 1) Direct expenditure on projects or programs 2) Overheads	Cumulative spend upto the reporting period	Amount spent (Direct / implementing agency)
To install a Bulk Milk Chiller (BMC) in the local milk collection centre to facilitate scientific way of milk collection & ensure better quality of the collected milk and reduces wastage	Social Business Project	Vadodara	0.07	0.06	0.06	Direct
Providing bore wells for drinking water & infrastructure for rural development.	Eradication of Hunger & Poverty	Upstream	0.30	0.12	0.12	Direct
Up-gradation and renovation of "Primary Health Care" Center, Suvali, Hazira	Healthcare	MFF Hazira	0.79	–	–	Direct
Construction of Toilet facility in 3 Government Girls High School.	Empowering Women	MFF Kattupalli	0.54	–	–	Direct
Promoting education in schools around work locations through employee volunteering	Education	Mumbai/ Baroda/ Hazira/ Chennai	0.25	–	–	Direct
Total			**2.47**	**0.66**	**0.66**	

4. Reasons for not spending the amount during the financial year:

Section 135 of the Companies Act, 2013 requires the Company to spend at least 2% of the average net profits of the preceding 3 years (excluding profit/loss of international branches) on CSR activities. Based on this, the Company was required to spend ₹ 6.74 crore during FY 2014-15. However, the identification of eligible projects took time. Thereafter, there were delays/non receipt of approvals from the relevant local authorities. Hence, the actual spend on CSR activities during the year is ₹ 0.66 crore. The Company is however, committed to the CSR cause and has identified a number of CSR projects, to which it shall contribute going forward.

The Company intends to expand the CSR initiatives in a systematic manner to achieve maximum impact in the most needy locations and will continue to support these ongoing projects.

DIRECTORS

The Board comprises of Mr. K. Venkataramanan, Mr. R. Shankar Raman, Mr. N. Hariharan, Mr. U. Dasgupta, Mr. K. Ravindranath, Mr. Vikram Singh Mehta, Dr. Ashok Kumar Balyan, Mr. Sarthak Behuria and Ms. Bhagyam Ramani.

Ms. Bhagyam Ramani was appointed as Independent Woman Director with effect from March 28, 2015. Resolutions proposing her appointment for period of 5 years, will be placed before the shareholders for their approval.

Mr. Vikram Singh Mehta, Dr. Ashok Kumar Balyan and Mr. Sarthak Behuria were re-designated as Independent Directors with effect from April 1, 2014 for a period of 5 years.

Mr. R. Shankar Raman and Mr. N. Hariharan retire by rotation and being eligible, offer themselves for re-appointment.

The proposal for re-appointment of Mr. R. Shankar Raman and Mr. N. Hariharan will be placed before the shareholders for their approval at the ensuing Annual General Meeting.

DETAILS ABOUT KEY MANAGERIAL PERSONNEL (KMP)

The current KMP of the Company are as follows:

Mr. K. Venkataramanan – Managing Director

Mr. U. Dasgupta – Whole Time Director

Mr. K. Ravindranath – Whole Time Director

Mr. P. S. Kapoor – Company Secretary & Chief Financial Officer

NUMBER OF MEETINGS OF THE BOARD OF DIRECTORS

The Meetings of the Board are held at regular intervals with a time gap of not more than 120 days between two consecutive Meetings. Additional Meetings of the Board of Directors are held when necessary. During the year under review, 6 meetings were held - 29th April 2014, 27th June 2014, 17th July 2014, 20th October 2014, 22nd January 2015 and 28th March 2015.

The Agenda of Meetings are circulated to the Directors in advance. Minutes of the Meetings of the Board of Directors are circulated amongst the Members of the Board for their perusal and comments.

AUDIT COMMITTEE

The Company has re-constituted Audit Committee in terms of the requirements of the Companies Act, 2013. Mr. Sarthak Behuria and Ms. Bhagyam Ramani were inducted in the Audit Committee during the year.

It comprises of four Independent Directors and one Non-Executive Director as under:

1. Dr. Ashok Kumar Balyan - Chairman
2. Mr. Sarthak Behuria
3. Mr. Vikram Singh Mehta
4. Ms. Bhagyam Ramani
5. Mr. R. Shankar Raman

During the year under review, 4 meetings were held - 29th April 2014, 17th July 2014, 20th October 2014 and 22nd January 2015

In accordance with the requirements of the Companies Act, 2013, the Company has established a vigil mechanism framework for directors and employees to report genuine concerns.

COMPANY POLICY ON DIRECTOR APPOINTMENT AND REMUNERATION

The Company has constituted the Nomination & Remuneration Committee in accordance with the requirements of the Companies Act, 2013 read with the rules made thereunder. The Committee comprises of two Independent Directors, one Non-Executive Director and the Managing Director as under:

1. Mr. Sarthak Behuria
2. Dr. Ashok Kumar Balyan
3. Mr. R. Shankar Raman
4. Mr. K. Venkataramanan

The Company has formulated a policy on director's appointment and remuneration including recommendation of remuneration of the key managerial personnel and other employees and the criteria for determining qualifications, positive attributes and independence of a Director.

DECLARATION OF INDEPENDENCE

The Company has received a Declaration of Independence as stipulated under Section 149(7) of the Companies Act, 2013 confirming that he/she is not disqualified from continuing as an Independent Director.

DIRECTORS' RESPONSIBILITY STATEMENT

The Board of Directors of the Company confirms:

i. in the preparation of the annual accounts, the applicable Accounting Standards have been followed along with proper explanation relating to material departures;

ii. the Directors have selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of loss of the Company for that period;

iii. the Directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 2013 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;

iv. the Directors have prepared annual accounts on a going concern basis; and

v. the Directors have devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

PERFORMANCE EVALUATION OF THE BOARD, ITS COMMITTEES AND DIRECTORS

The Board has laid down the manner in which formal annual evaluation of the performance of the Board, committees and individual directors has to be made. It includes circulation of questionnaires to all Directors for evaluation of the Board and its Committees, Board composition and its structure, its culture, Board effectiveness, Board functioning, information availability, etc. These questionnaires also cover specific criteria and the grounds on which all directors in their individual capacity will be evaluated.

The inputs on the evaluation process given by all the directors were discussed in the meeting of the Independent Directors held on March 28, 2015, as per schedule IV of the Companies Act, 2013. The performance evaluation of the Board, Committees and Directors was also reviewed by the Nomination and Remuneration Committee and the Board of Directors.

EXTRACT OF ANNUAL RETURN

As per the provisions of Section 92(3) of the Companies Act, 2013, an extract of the Annual Return is attached as **Annexure 'C'** to this Report.

DETAILS OF SIGNIFICANT AND MATERIAL ORDERS PASSED BY THE REGULATORS OR COURTS OR TRIBUNALS

During the year under review, there were no orders passed by the regulators or courts or tribunals impacting the going concern status and the Company's operations in future.

AUDITORS

The Auditors, M/s. Sharp & Tannan, Chartered Accountants, hold office until the conclusion of the ensuing Annual General Meeting. As per provisions of The Companies Act, 2013, M/s. Sharp & Tannan are eligible to be appointed for the next four years. Certificate from the Auditors has been received to the effect that they are eligible to act as auditors of the Company under Section 141 of the Companies Act, 2013. The Board recommends the appointment of M/s. Sharp & Tannan, Chartered Accountants, as auditors of the Company from the conclusion of the ensuing Annual General Meeting until the conclusion of the next Annual General Meeting.

COST AUDITORS

The Company's Kattupalli Fabrication Yard, being a SEZ unit, is exempt from provisions of Cost Audit. The Company's Hazira's Fabrication Yard will be covered under Cost audit from April 1, 2015 as per Rule 4(2)(iv) of Companies (Cost Records and Audit) Amendment Rules, 2014. Hence, the Company is not required to appoint cost auditor for FY 2014-15.

The Board of Directors have appointed R. Nanabhoy & Co., Cost Accountants as Cost Auditors of the Company for audit of cost accounting records for the financial year 2015-16.

A proposal for ratification of remuneration of Cost Auditor is placed before shareholders.

SECRETARIAL AUDITORS

The Board had appointed Mrs. Naina Desai, Practicing Company Secretary, as the Secretarial Auditor of the company under Section 204 of The Companies Act, 2013 for the Financial Year ended March 31, 2015.

The Secretarial Audit Report in Form MR-3 is attached as **Annexure 'D'** to this Report. The same does not contain any qualification.

ACKNOWLEDGEMENT

Your Directors take this opportunity to thank the Customers, Supply Chain Partners, Business Associates, Employees, Management of the Holding Company, Banks, Central and State Government authorities, Regulatory authorities, and various other stakeholders for their continued co-operation and support to the Company.

For and on behalf of the Board

K. Venkataramanan
Managing Director
DIN: 0001647

Mumbai, April 28, 2015

ANNEXURE 'A' TO DIRECTORS' REPORT

CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION, FOREIGN EXCHANGE EARNINGS AND OUTGO

A. CONSERVATION OF ENERGY

(a) Energy Conservation measures taken:

1. **Improving Energy Effectiveness/Efficiency of Equipment and Systems**
   - Optimize running of Air Compressors used for Blasting/Painting through optimum loading of Blasting operation & reduction in idle running
   - Conversion and retrofitting of equipment e.g. Installation of on-off timers in high mast towers
   - Usage of invertor based Welding Machines

(b) Additional investments & proposals, if any, being implemented for reduction of consumption of energy:

- Implementation of Energy Management System ISO 50001
- Replacement of metal halide lamps in place of sodium lamps
- Replacement of Existing window/split ACs by energy efficient invertor based AC
- Energy saver unit installation in Lightings and welding machines at yards.
- Installation of Capacitor bank in yard
- Installation of Occupancy sensors at offices and porta cabins at yards

(c) Impact of measures at (a) and (b) above for reduction of energy consumption and consequent impact on the cost of production of goods:

The measures taken have resulted in savings in cost of production, cost of power consumption, energy savings and reduction in maintenance cost, reduction in processing cycle time.

(d) Total Energy Consumption and Energy Consumption per unit of production as per Form A in respect of industries specified in the Schedule:

The Company provides engineering, procurement & construction solutions on turnkey basis in oil & gas, petroleum refining, chemicals & petrochemicals and fertilizer sectors and pipelines. Hence, disclosures in Form A are not applicable to the Company.

B. RESEARCH AND DEVELOPMENT (R&D)

1. Specific areas in which R&D carried out by the Company:

The Company has well-established R&D facilities for carrying out applied research in the areas of Chemical Engineering, Material Science & Corrosion, Thermal Engineering, Machinery & System Engineering, Mechanical Engineering and Water Technologies.

Research work is currently focused on the following:

- **Chemical Engineering**

  Design, analysis and simulation of chemical processes and equipment, with special emphasis on Gas Processing applications (Gas/Liquid Separation, Condensate Fractionation, Gas Dehydration, Gas Sweetening Units and C2/C3/C4 component recovery Systems); Process simulation for Ammonia and Urea Plants; Process Engineering for Gas Compressor Modules; Flow simulation studies for Oil & Gas Projects; Steady State and Dynamic Simulation of Oil & Gas Processing plants; Refractory engineering for Fertilizer and Refinery Plant equipment; Technology evaluation, Coal characterization, Modelling and simulation for Gasification technologies; Modelling of Pressure Swing and Temperature Swing Adsorption beds for product purification; Failure analysis and troubleshooting of various process units such as Steam Generators, Thermo-siphon System, Pressure Swing Adsorption unit, HP/LP Flash Drum and Gas Compressors.

- **Material Science & Corrosion Engineering**

  Material selection, verification and characterization for Gas Processing Plants, LNG Pipelines / Terminals and Offshore facilities; Risk assessment and generation of Corrosion Management Manual / Plan for Gas Processing and Oil & Gas facilities, involving equipment and flow-lines; Troubleshooting and Failure Analysis studies for equipment and components (such as Process Piping, Waste Heat Recovery System, Heat Exchangers, Reformer tubes, Turbine blades, Valves, Fasteners, Fittings, Coatings etc.); Preservation and Restoration techniques for critical systems; Chemical cleaning / surface engineering of metals and non-metals; Characterization of various materials with state-of-art instrumentation; Materials for strategic applications.

- **Thermal Engineering**

  Design verification of Thermo-siphon Re-boilers and Cryogenic Fluid Heaters; Design of Indirect Bath Heaters for well fluid heating; Check-rating and design optimization of Waste Heat Recovery coils and Heat Exchangers; Failure analysis and troubleshooting of Inter-stage Cooler of Gas Compressors; Troubleshooting of Heat Exchanger vibration due to fluid elastic instability and piping system vibration due to cavitation in valves; CFD analysis for design optimization and troubleshooting of Hypersonic Wind Tunnels, Flare and Exhaust Stack on

Offshore Platforms; Safety studies for safe helideck operation at Offshore Platforms; Radiation and Dispersion Analysis for the Fare Gas and DG Exhaust Gases; Hazard analysis for gas leakage from cross-country pipelines; Investigation of fire accidents and failure analysis of flare tip on Offshore Platforms; CFD analysis to finalize the Platform layout from safety aspects and to verify performance of Lube-oil Coolers and Air Coolers; Support for commissioning of Offshore Wellhead Platform and Process Platform; String Testing of Process Gas Compressor modules; Thermal design of equipment in Low-Temperature Thermal Desalination processes; Dynamic Simulation Study of thermal and electrical systems of captive sub-critical power plant operating in island mode; Dynamic Simulation Study of BOP components of supercritical power plant; Design verification of HVAC systems for Offshore Platforms.

- **Machinery & System Engineering**

  Advanced studies in Vibration and Acoustics for machinery and piping; Fatigue Life Assessment of process piping considering Flow-induced and Acoustic-induced vibration; Lateral and Torsional Vibration analysis for Turbines and Compressors; Troubleshooting of vibration problems in Steam Turbines, Centrifugal Compressors; Failure analysis of Lubrication System in Screw Compressor; Failure analysis of Deck Crane Slew Bearing, Expander Bearing; Winch Drum Luff Wire Rope, Utility Water Pumps, PWCS Pumps, HVAC Compressor and Slewing Bearings in Offshore platforms; Noise Assessment studies for Gas Processing Plant and Wellhead Platform; Design improvement / optimization studies for Coal Pulverizes units in Supercritical Boilers; Turning Gear Failure investigations and design improvement of Boiler Feed Pump Turning Gear in Supercritical Power Project; Technical support during Acceptance Test and Commissioning for critical machinery.

- **Mechanical Engineering**

  Composite FE analysis of systems involving combined equipment, piping and structural effects; Lateral and Upheaval Buckling analysis of sub-sea pipelines; Seismic analysis of buried pipelines; Fitness For Service (FFS) assessment of in-service equipment and structures containing damage or flaws; Coupled Thermal-Structural Transient and Fatigue analysis of process equipment; Lifting, transportation and load-out analysis of process equipment and Offshore structures, Strain Gauging for underwater applications and residual stress measurement using non-destructive techniques; Design optimization studies of Model Injection Mechanism for hypersonic wind tunnel application; Design optimization study for piping of Air Independent Propulsion System for strategic application.

- **Water Technologies**

  Total water management solutions including technology evaluation, design and detailing of water / wastewater facilities for Oil & Gas – Upstream & Mid & Downstream sector; Waste minimization / recycling studies; Oil-water Separation processes; Troubleshooting of Condensate Polishing Unit (CPU) in Fertilizer Plant; Design verification of oil-water separation device, such as Corrugated Plate Interceptor; Implementing Zero-liquid Discharge in process plants; Testing for water and wastewater characterization; Lab-scale pilot plant studies for treatability aspects of water and wastewater; Produced Water management for both Onshore and Offshore installations; Review of Reject Water Management systems from RO plants; Technical support towards compliance with Environmental requirements of Oil & Gas Projects during Proposal Engineering and Execution.

R&D Laboratories in the areas of Vibration & Acoustics, Experimental Stress Analysis, Materials Technology, Corrosion Studies and Water Technology have been upgraded by addition of new, state-of-the-art instruments and software tools to carry out the R&D studies effectively.

R&D facilities are augmented with the latest IT infrastructure. A fully E-enabled Technical Library, having a large collection of technical publications, research journals and product/technology databases further supplement the R&D resources. Emphasis is given on creating Intellectual Properties (IP) and managing the Intellectual Property Rights (IPR). The R&D Centre has been involved in active networking with Professional Societies, R&D Laboratories and Academic Institutes.

2. Benefits derived as a result of above R&D:

- Complete process simulation, design solutions and optimization for Hydrocarbon projects in Fertilizer sector, involving Reformers, Ammonia Plant and Urea Plant.
- Establishment of in-house capability in Process Simulation and FEED Verification of on-shore / off-shore Gas Processing Plants and design optimization of associated equipment.
- In-house expertise for complete Refractory solutions (e.g., material selection, engineering, commissioning and troubleshooting) in high-temperature equipment for process plants.
- Capability in multi-phase flow characterization and simulation studies for Oil & Gas Projects.
- Capability for carrying out dynamic simulation of equipment and processes.
- Equipment design capability for waste heat recovery from sources with intermittent operations.
- Design capability for equipment used in low temperature thermal desalination and process optimization.
- Successful testing / commissioning of plants and equipment in various Hydrocarbon projects, through multi-disciplinary technology support.
- Complete support to business units for all Materials related assignments (such as material verification / selection / evaluation / characterization; corrosion rate estimation, selection of alternative materials; failure analysis; preservation and corrosion protection of critical equipment; development of new materials for strategic applications; identification of newer technologies and commercially available proven products and their implementation for preventing material degradation and extending useful life).
- Synthesis and Characterization of novel Nano-enabled bulk materials and coatings for high-temperature applications.

- Establishment of in-house capabilities in analysis of piping system for flow-induced and acoustic-induced vibrations; Conduct of Plant Noise studies utilizing in-house expertise; Development of in-house capabilities in special acoustic studies such as piping insulation design and valve noise / vent noise assessment.
- Development of in-house expertise in advanced FEA and fatigue analysis techniques for specialized systems (process piping and piping supports subjected to vibration induced fatigue; process equipment on Offshore floating platforms subjected to motion induced fatigue).
- Development of in-house expertise in Fitness for Service (FFS) Level 1, Level 2 and Level 3 assessment for in-service equipment and structures.
- Development of in-house expertise in advanced FE studies like coupled thermal / structural, time-transient, non-linear, shock and fatigue analysis of process equipment and piping for special applications.
- Establishment of in-house capability in composite analysis of complex systems involving combined effect of equipment, piping and structures.
- Development of in-house expertise in specialized applications such as lateral and upheaval buckling analysis of sub-sea pipeline and seismic analysis of onshore buried pipeline.
- Technical support to Oil & Gas, Refinery, Fertilizer and Chemical Plant Projects for complete water and wastewater management solutions; Management of Produced Water, Injection Water and Utility Water; Design of Sludge and Effluent Treatment systems; Appropriate solutions for water treatment, filtration and desalination applications; Development of water recycling, reuse and zero-discharge schemes.

3. Future Plan of Action:

The R&D Centre is committed to providing appropriate technology support to all Hydrocarbon Projects, as required by various business units. Future development activities are identified based on the anticipated needs of upcoming Projects as well as requirements for in-house capability development. The following key areas have been identified under R&D Action Plan:

- Process technology for coal gasification, design optimization and system integration for EPC Projects
- In-house design / simulation capability of Ammonia and Urea Processes
- Rate-based model development and simulation for Pre-Reformer, HTER and Auto-thermal Reformer
- Use of Petcoke for Gasification applications
- Modeling and Process Simulation of Fluidized Bed Gasification Reactors for high-ash Indian coals
- Process design capabilities in Petrochemical / Polymer Plants
- Modularization of Process Plants
- Carbon Capture and Sequestration (CCS) techniques for Oil & Gas Projects
- Application of Enhanced Oil Recovery (EOR) processes through chemical flooding techniques
- CO2 Capture from Reformer stack in fertilizer plant and recycling as feed stock for Urea plant.
- Cryogenic Air Separation Processes (technology evaluation, process simulation, heat integration and system engineering)
- Use of CFD techniques for design optimization of coal gasifiers
- Emerging (Non-traditional) energy solutions such as CBM, Shale Gas and Tar Sands
- Development of Nano-based materials for high temperature applications
- Thermal design and optimization of Cryogenic Vaporizers and Cold Boxes for Air Separation plants.
- Application of Low Temperature Thermal Desalination process for commercial use
- Design / engineering of molten salt based thermal energy storage system for electric arc furnace with intermittent operation
- Use of Oxyfuel combustion to enhance capacity of existing Power Plant Boilers
- Design of Combustion Air Pre-heaters for Reformers in Ammonia Plants
- Design analysis of Bulk Flow coolers in Urea Plants
- Power generation solutions for offshore process platforms using wind power
- Development of in-house design / analysis capability involving Recycle, Reuse and Zero-discharge Technologies
- Solar energy based desalination plants for “Clean Energy” initiative
- RO reject water management and salt reclamation using Nano-filtration (NF) and other Membrane / Electrolytic based systems
- Advanced Finite Element Analysis (FEA) techniques for analyzing coupled Fluid Structure Interaction (FSI) problems
- Study of sub-sea equipment design philosophy
- Study of advanced non-destructive techniques for residual stress measurement
- Stress analysis of non-ferrous materials like ceramic refractory and concrete structures
- Capability development in Fracture Mechanics and Advanced Fatigue Analysis
- Advanced Finite Element Analysis (FEA) techniques for process equipment subjected to thermal shock

- Study of design philosophy of offshore wind turbines
- Techniques for Reliability, Availability & Maintainability (RAM) studies as part of specialized engineering support for Process Plants
- Fitness for Service (Level-3) assessment using FEA
- Theoretical and experimental study on degradation mechanisms in material of construction for Ammonia Convertor
- Study on degradation / failure mechanisms for High-Strength Steel; Characterization of different heat treated (Normalized + Tempered and Normalized + Accelerated cooling + Tempered) low-alloy steel for temper embrittlement; Evaluation of hydrogen charged DSS.
- Development of environmentally-friendly (non-toxic and bio-degradable) chemical formulations for chemical cleaning and pickling of steels; Characterization and optimization of selected chemicals based on surface cleaning efficiency and material weight loss.

4. Expenditure on R&D:

₹ Crore

Particulars	**2014-15**	*2013-14*
Capital	**0.54**	*0.14*
Recurring	**11.48**	*11.48*
TOTAL	**12.02**	*11.62*
Total R&D expenditure as percentage to total turnover	**0.21%**	*0.13%*

TECHNOLOGY ABSORPTION, ADAPTATION AND INNOVATION:

1. Efforts made in brief towards technology absorption, adaptation and innovation:

- Interaction with external agencies / technology partners for exposure to the latest products / designs, manufacturing technologies, processes, analytical techniques and engineering protocols
- Active involvement with International / National Professional Societies (such as IChemE, AIChE / CCPS, IIChE, ICC, ASME, NACE, ASM, ASTM, AISC, ACS, TERI, HTFS, HTRI, STLE, TSI, NAFEMS, etc.)
- Active participation in National / International Innovation forums and Innovation contests
- Institutionalization of in-house schemes (such as ICONs and KnowNet) for identifying, nurturing and implementing innovative ideas and technology solutions
- Networking and knowledge sharing through national / international conferences, seminars and exhibitions
- Valuation, adaptation and/or modification of imported designs / technologies to suit indigenous requirements, alternative materials / components
- Parametric studies involving theoretical models duly validated by experimental studies at in-house laboratories and pilot plants, as well as feedback and operating data during commissioning of various plants and machinery
- Review of Patents in relevant technology areas
- Nomination of R&D engineers to external training programs, expert groups and technical committees
- Collaborative efforts with educational / research institutions for research projects
- Use of state-of-the-art equipment, instrument and software as well as the latest Codes and Standards
- Analyzing feedback from Customers / internal users to continually improve processes and services.

2. Benefits derived as a result of above efforts:

- Capability development and professional enrichment of R&D Engineers through networking with domain experts and researchers in India and abroad
- Enhancement of professional skills of R&D Engineers through additional academic qualifications, certification and acquisition of Chartered Engineer status
- Successful performance simulation / optimization of process design and engineering for various Hydrocarbon projects (Refinery, Oil & Gas, Fertilizer and Chemical plants)
- Complete in-house support to business units in providing Refractory solutions (selection, design, engineering, commissioning) for high-temperature applications
- Energy conservation through optimal design, analysis and engineering of heat exchange equipment and waste heat recovery systems for Process Plants
- Optimum material selection, verification and characterization of materials for critical applications; Implementation of suitable preservation / corrosion protection techniques to achieve successful longer life and adequate performance
- Development of optimized design for Coal Pulverizers through appropriate sizing, material selection, heat treatment and indigenization of manufacturing and machining processes
- Establishment of in-house capability for specialized engineering analyses, such as Modeling & Process Simulation, Computational Fluid

Dynamics, Transient Thermal Analysis, Risk Based Inspection (RBI) Studies, Fitness for Service (FFS) Studies, advanced Stress Analysis, Vibration & Acoustics, Rotor Dynamics, Tribology etc., in order to achieve self-sufficiency and minimize dependence on external agencies

- Multi-disciplinary technology support to Projects towards troubleshooting, failure analysis and plant commissioning, in order to achieve successful Project completion with respect to cost, time, quality and HSE targets
- Acquisition of in-house expertise in areas such as material characterization, advanced corrosion control methods, coating and wear protection techniques to assess and mitigate material-related failures and associated risks in Projects
- Contribution towards new materials development (composites / nano-materials) and indigenous solutions to control corrosion for effective support to Projects of strategic importance
- Establishment / upgradation of state-of-the art laboratory facilities for materials characterization, chemical analysis, corrosion control, coating evaluation, vibration and acoustics studies, experimental stress analysis etc., in order to provide comprehensive technology support to business units. This has reduced the dependence on external agencies and enabled effective execution of projects.

3. Information regarding technology imported during the last 5 years:

No technology was imported during the last 5 years.

C. FOREIGN EXCHANGE EARNINGS AND OUTGO

Activities relating to exports, initiatives taken to increase exports; development of new export markets for products and services; and export plans:

The Company has been prequalified for major international EPC projects from reputed customers in Middle East, South East Asia and CIS countries. During the year, the Company has received its largest ever international project, for EPC of a Gas Gathering Center in Kuwait. The Company is constantly evaluating opportunities to strengthen its footprint in the Middle East markets. During the year, Company has initiated the process of registering itself with a large National Oil Company in Saudi Arabia as a qualified bidder under their “Long Term Unit Rate Contract” program under which the Company could get Long Tenure Export Contracts. The Company is also executing several large size complex projects in GCC region.

The Company has been taking various initiatives to strengthen its international operations viz filling up key positions in international organization with experienced personnel, recruiting senior expats for “on the ground” decisions and improving client proximity, optimal blend of sub-contracting & in-house construction for profitable execution.

Total foreign exchange used and earned: ₹ Crore

Particulars	**2014-15**
Foreign Exchange earned	**3,465.06**
Foreign Exchange used	**4,086.97**

ANNEXURE 'B' TO DIRECTORS' REPORT

DISCLOSURE OF PARTICULARS OF CONTRACTS/ARRANGEMENTS ENTERED INTO BY THE COMPANY WITH RELATED PARTIES REFERRED TO IN SUB-SECTION (1) OF SECTION 188 OF THE COMPANIES ACT, 2013 INCLUDING CERTAIN ARMS LENGTH TRANSACTIONS UNDER THIRD PROVISO THERETO

FORM NO. AOC-2

(Pursuant to clause (h) of sub-section (3) of section 134 of the Act and Rule 8(2) of the Companies (Accounts) Rules, 2014)

S. No	Name of Related Party	Relationship	Contract / Arrangement / Transactions					
			Nature	Duration	Value ₹ Crore	Terms	Date(s) of Board approval, if any	Amt paid as advance
1	L&T Electromech LLC	Fellow Subsidiary	Construction Works for PDO-Lekhweir project ($21.19 Mn)	Completion : Mar 2015	131	Payment based on milestone & progress (back-to-back based on approved billing schedule). Payment approved within 30 days of invoice.	NA	NIL
2	Larsen & Toubro Limited	Holding Company	Interest expense on Inter - Corporate Deposits (ICDs) taken	2014-15	76	Interest rate comparable with bank rate; Option to pre-pay ICDs at any time.	NA	NA

For and on behalf of the Board

K. VENKATARAMANAN
Managing Director
DIN: 0001647

Place : Mumbai
Date : April 28, 2015

ANNEXURE 'C' TO DIRECTORS' REPORT

FORM NO. MGT-9

EXTRACT OF ANNUAL RETURN
as on the financial year ended on 31 March 2015

[Pursuant to section 92(3) of the Companies Act, 2013 and rule 12(1) of the Companies (Management and Administration) Rules, 2014]

I. REGISTRATION AND OTHER DETAILS:

i)	CIN	U11200MH2009PLC191426
ii)	Registration Date	April 02, 2009
iii)	Name of the Company	L&T Hydrocarbon Engineering Limited
iv)	Category / Sub-Category of the Company	Public Limited Company
v)	Address of the Registered office and contact details	L&T House, Ballard Estate, Mumbai 400 001 Tel: +91 22 6705 5656
vi)	Whether listed company	No
vii)	Name, Address and Contact details of Registrar and Transfer Agent, if any	N.A.

II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

All the business activities contributing 10 % or more of the total turnover of the company shall be stated:-

Sl. No.	Name and Description of main products / services	NIC Code of the Product/ service	% to total turnover of the company
1	General construction services of other industrial plants	99542699	100%

III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES –

S. No	Name And Address of the Company	CIN/GLN	Holding/ Subsidiary /Associate	% of Shares held	Applicable Section
1	Larsen & Toubro Limited, L&T House, Ballard Estate, Mumbai 400 001	L99999MH1946PLC004768	Holding Company	100%	2 (46)

IV. SHARE HOLDING PATTERN (EQUITY SHARE CAPITAL BREAKUP AS PERCENTAGE OF TOTAL EQUITY) – 66.67%

i) Category-wise Share Holding – Equity Shares **No. of shares in crores**

Category of Shareholders	No. of Shares held at the beginning of the year				No. of Shares held at the end of the year				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
A. Promoters									
1) Indian									
a) Individual/ HUF									
b) Central Govt									
c) State Govt (s)									
d) Bodies Corp.		100.005	100.005	100		100.005	100.005	100	–
e) Banks / FI									
f) Any Other….									
Sub-total (1):-		100.005	100.005	100		100.005	100.005	100	
2) Foreign									
a) NRIs - Individuals									
b) Other – Individuals									
c) Bodies Corp.									
d) Banks / FI									
e) Any Other….									
Sub-total (2):-									
Total shareholding of Promoter (A) = (A)(1)+(A)(2)		100.005	100.005	100		100.005	100.005	100	

Category of Shareholders	No. of Shares held at the beginning of the year				No. of Shares held at the end of the year				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
B. Public Shareholding									
1) Institutions									
a) Mutual Funds									
b) Banks / FI									
c) Central Govt									
d) State Govt(s)									
e) Venture Capital Funds									
f) Insurance Companies									
g) FIIs									
h) Foreign Venture Capital Funds									
i) Others (specify)									
Sub-total (B)(1):-									
2) Non-Institutions									
a) Bodies Corp.									
i) Indian									
ii) Overseas									
b) Individuals									
i) Individual shareholders holding nominal share capital upto Rs. 1 lakh									
ii) Individual shareholders holding nominal share capital inexcess of Rs 1 lakh									
c) Others (specify)									
Sub-total (B)(2):-									
Total Public Shareholding (B)=(B)(1)+(B)(2)									
C. Shares held by Custodian for GDRs & ADRs									
Grand Total (A+B+C)		**100.005**	**100.005**	**100**		**100.005**	**100.005**	**100**	

Category-wise Share Holding – Preference Shares **No. of shares in crores**

Category of Shareholders	No. of Shares held at the beginning of the year				No. of Shares held at the end of the year				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
A. Promoters									
1) Indian									
a) Individual/HUF									
b) Central Govt									
c) State Govt (s)									
d) Bodies Corp.		50	50	100		50	50	100	–
e) Banks / FI									
f) Any Other….									
Sub-total (1):-		50	50	100		50	50	100	
2) Foreign									
a) NRIs - Individuals									
b) Other - Individuals									
c) Bodies Corp.									
d) Banks / FI									
e) Any Other….									
Sub-total (2):-									
Total shareholding of Promoter (A) = (A)(1)+(A)(2)		**50**	**50**	**100**		**50**	**50**	**100**	

Category of Shareholders	No. of Shares held at the beginning of the year				No. of Shares held at the end of the year				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
B. Public Shareholding									
1) Institutions									
a) Mutual Funds									
b) Banks / FI									
c) Central Govt									
d) State Govt(s)									
e) Venture Capital Funds									
f) Insurance Companies									
g) FIIs									
h) Foreign Venture Capital Funds									
i) Others (specify)									
Sub-total (B)(1):-									
2) Non-Institutions									
a) Bodies Corp.									
i) Indian									
ii) Overseas									
b) Individuals									
i) Individual shareholders holding nominal share capital upto Rs. 1 lakh									
ii) Individual shareholders holding nominal share capital in excess of Rs 1 lakh									
c) Others (specify)									
Sub-total (B)(2):-									
Total Public Shareholding (B)=(B)(1)+(B)(2)									
C. Shares held by Custodian for GDRs & ADRs									
Grand Total (A+B+C)		50	50	100		50	50	100	

(ii) Shareholding of Promoters – Equity Shares **No. of shares in crores**

Sl No	Shareholders Name	Shareholding at the beginning of the year			Shareholding at the end of the year			% change in Shareholding during the year
		No. of Shares	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	No. of Share	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	
1	Larsen & Toubro Limited	100.005	100	–	100.005	100	–	–
	Total	**100.005**	**100**	**–**	**100.005**	**100**	**–**	**–**

Shareholding of Promoters – Preference Shares **No. of shares in crores**

Sl No	Shareholders Name	Shareholding at the beginning of the year			Shareholding at the end of the year			% change in Shareholding during the year
		No. of Shares	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	No. of Share	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	
1	Larsen & Toubro Limited	50	100	–	50	100	–	–
	Total	**50**	**100**	**–**	**50**	**100**	**–**	**–**

(iii) Change in Promoters' Shareholding (please specify, if there is no change) – Equity shares: No Change

No. of shares in crores

Sl. No.		Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
1	At the beginning of the year	100.005	100	100.005	100
2	Date wise Increase / Decrease in Promoters Share holding during the year specifying the reasons for increase/decrease (e.g. allotment / transfer / bonus/sweat equity etc):	NIL	NIL	NIL	NIL
3	At the End of the year	100.005	100	100.005	100

Change in Promoters' Shareholding (please specify, if there is no change) – Preference shares: No Change

No. of shares in crores

Sl. No.		Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
1	At the beginning of the year	50	100%	50	100%
2	Date wise Increase/Decrease in Promoters Share holding during the year specifying the reasons for increase/decrease (e.g. allotment/transfer/bonus/ sweat equity etc):	NIL	NIL	NIL	NIL
3	At the End of the year	50	100	50	100

(iv) Shareholding Pattern of top ten Shareholders (other than Directors, Promoters and Holders of GDRs and ADRs): None

Sl. No.	For Each of the Top 10 Shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of Shares	% of total shares of the company
1	At the beginning of the year	NIL	NIL	NIL	NIL
2	Date wise Increase/Decrease in Share holding during the year specifying the reasons for increase/decrease (e.g. allotment/transfer/bonus/ sweat equity etc):	NIL	NIL	NIL	NIL
3	At the End of the year (or on the date of separation, if separated during the year)	NIL	NIL	NIL	NIL

(v) Shareholding of Directors and Key Managerial Personnel: None

Sl. No.	For Each of the Directors and KMP	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of Shares	% of total shares of the company
1	At the beginning of the year	NIL	NIL	NIL	NIL
2	Date wise Increase / Decrease in Share holding during the year specifying the reasons for increase / decrease (e.g. allotment / transfer / bonus/ sweat equity etc):	NIL	NIL	NIL	NIL
3	At the End of the year	NIL	NIL	NIL	NIL

V. INDEBTEDNESS

Indebtedness of the Company including interest outstanding/accrued but not due for payment

₹ Crore

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount	274.86	771.95	–	1,046.81
ii) Interest due but not paid	0.02	–	–	0.02
iii) Interest accrued but not due	0.11	3.40	–	3.51
Total (i+ii+iii)	**274.99**	**775.35**	**–**	**1,050.34**

₹ Crore

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Change in Indebtedness during the financial year				
Addition	–	73.47	–	73.47
Reduction	(114.02)	–	–	(114.02)
Net Change	**(114.02)**	**73.47**	**–**	**(40.55)**
Indebtedness at the end of the financial year				
i) Principal Amount	160.63	846.82	–	1,007.45
ii) Interest due but not paid	–	0.39	–	0.39
iii) Interest accrued but not due	0.34	1.61	–	1.95
Total (i+ii+iii)	**160.97**	**848.82**	**–**	**1,009.79**

VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

A. Remuneration to Managing Director, Whole-time Directors and/or Manager:

₹ Crore

Sl. no.	Particulars of Remuneration	Name of MD/WTD/ Manager			Total Amount
		Mr. K. Venkataramanan	Mr. U. Dasgupta	Mr. K. Ravindranath	
1.	Gross salary				
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	–	1.43	0.98	2.41
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	–	0.07	0.05	0.12
	(c) Profits in lieu of salary under section 17(3) Income tax Act, 1961	–	–	–	–
2.	Stock Option	–	–	–	–
3.	Sweat Equity	–	–	–	–
4.	Commission	–	–	–	–
	- as % of profit				
	- others, specify…				
5.	Others –Remuneration paid to Director by holding company (since he is also Director of holding company) partially debited to the Company	0.75	–	–	0.75
	Total (A)	**0.75**	**1.50**	**1.03**	**3.28**
	Ceiling as per the Act	**0.75**	**1.50**	**1.50**	**3.75**

B. Remuneration to other directors:

₹ Crore

Sl. no.	Particulars of Remuneration	Name of Directors						Total Amount
		Mr. Vikram Singh Mehta	Dr. A. K. Balyan	Mr. S. Behuria	Ms. Bhagyam Ramani	Mr. R. Shnakar Raman	Mr. N. Hariharan	
1.	Independent Directors							
	• Fee for attending board /committee meetings	0.02	0.07	0.07	–			0.16
	• Commission							
	• Others, please specify							
	Total (1)	**0.02**	**0.07**	**0.07**	**-**			**0.16**

₹ Crore

Sl. no.	Particulars of Remuneration	Name of Directors						Total Amount
		Mr. Vikram Singh Mehta	Dr. A. K. Balyan	Mr. S. Behuria	Ms. Bhagyam Ramani	Mr. R. Shnakar Raman	Mr. N. Hariharan	
2.	Other Non-Executive Directors							
	• Fee for attending board /committee meetings							
	• Commission							
	• Others, please specify							
	Total (2)					–	–	–
	Total (B)=(1+2)	**0.02**	**0.07**	**0.07**	–	–	–	**0.16**
	Total Managerial Remuneration	**0.02**	**0.07**	**0.07**	–	–	–	**0.16**
	Overall Ceiling as per the Act							

C. Remuneration to Key Managerial Personnel Other than MD/Manager/WTD

₹ Crore

Sl. no.	Particulars of Remuneration	Key Managerial Personnel		
		CEO	Company Secretary & CFO Mr. P. S. Kapoor	Total
1.	Gross salary			
	(a) Salary as per Provisions contained in section 17(1) of the Income-tax Act, 1961		0.53	0.53
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961		0.13	0.13
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961		–	–
2.	Stock Option		–	–
3.	Sweat Equity		–	–
4.	Commission - as % of profit - others, specify		–	–
5.	Others, please specify		–	–
	Total		**0.66**	**0.66**

VII. PENALTIES / PUNISHMENT/ COMPOUNDING OF OFFENCES: None

Type	Section of the Companies Act	Brief Description	Details of Penalty / Punishment/ Compounding fees imposed	Authority [RD / NCLT / COURT]	Appeal made, if any (give Details)
A. COMPANY					
Penalty	NIL	NIL	NIL	NIL	NIL
Punishment	NIL	NIL	NIL	NIL	NIL
Compounding	NIL	NIL	NIL	NIL	NIL
B. DIRECTORS					
Penalty	NIL	NIL	NIL	NIL	NIL
Punishment	NIL	NIL	NIL	NIL	NIL
Compounding	NIL	NIL	NIL	NIL	NIL
C. OTHER OFFICERS IN DEFAULT					
Penalty	NIL	NIL	NIL	NIL	NIL
Punishment	NIL	NIL	NIL	NIL	NIL
Compounding	NIL	NIL	NIL	NIL	NIL

ANNEXURE D TO DIRECTORS' REPORT

FORM NO. MR-3

SECRETARIAL AUDIT REPORT
FOR THE FINANCIAL YEAR ENDED MARCH 31, 2015

[Pursuant to Section 204(1) of the Companies Act, 2013 and rule No.9 of the Companies (Appointment and Remuneration Personnel) Rules, 2014]

To,

The Members,

L&T HYDROCARBON ENGINEERING LIMITED

I have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **L&T HYDROCARBON ENGINEERING LIMITED** (hereinafter called the Company). Secretarial Audit was conducted in a manner that provided me a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing my opinion thereon.

Based on my verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, I hereby report that in my opinion, the Company has, during the audit period covering the financial year ended on March 31, 2015, complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter.

I have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on March 31, 2015 according to the provisions of:

(i) The Companies Act, 2013 (the Act) and the rules made thereunder;

(ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the rules made thereunder;

(iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;

(iv) Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings;

(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ('SEBI Act'), **as applicable:-**

  a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;

  b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 1992;

  c) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009;

  d) The Securities and Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999;

  e) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008;

  f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;

  g) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009; and

  h) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998;

(vi) No other specific business/industry related laws applicable to the Company.

I have also examined compliance with the applicable clauses of the following:

i. Secretarial Standards issued by The Institute of Company Secretaries of India.

ii. The Listing Agreements have been entered into by the Company with Stock Exchange(s), if applicable. **This is not applicable.**

During the period under review the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. mentioned above.

I further report that the Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. The changes in the composition of the Board of Directors or Committees thereof that took place during the period under review were carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors to schedule the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting. Majority decision is carried through while the dissenting members' views are captured and recorded as part of the minutes.

I further report that, I was informed there are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

I further report that during the audit period the Company has **no** instances of any events / actions having a major bearing on the Company's affairs in pursuance of the above referred laws, rules, regulations, guidelines, standards, etc. viz.:-

(i) Public/Right/Preferential issue of shares/debentures/sweat equity, etc.

(ii) Redemption / buy-back of securities.

(iii) Major decisions taken by the members in pursuance to Section 180 of the Companies Act, 2013.

(iv) Merger / amalgamation / reconstruction, etc.

(v) Foreign technical collaborations.

NAINA R DESAI
Practising Company Secretary
FCS No. 1351
Certificate of Practice No.13365

Place : Mumbai
Date : April 24, 2015

This report is to be read with our letter of even date which is annexed as Annexure A and forms an integral part of this report.

'ANNEXURE A'

To,

The Members

L&T HYDROCARBON ENGINEERING LIMITED

Our report of even date is to be read along with this letter.

1) Maintenance of secretarial record is the responsibility of the management of the Company. Our responsibility is to express an opinion on these secretarial records based on our audit.

2) We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the Secretarial records. The verification was done on test basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices, we followed provide a reasonable basis for our opinion.

3) We have not verified the correctness and appropriateness of financial records and Books of Account of the Company.

4) Where ever required, we have obtained the Management representation about the compliance of laws, rules and regulations and happening of events etc.

5) The compliance of the provisions of Corporate and other applicable laws, rules, regulations, standards is the responsibility of management. Our examination was limited to the verification of procedures on test basis.

6) The Secretarial Audit report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

NAINA R DESAI
Practising Company Secretary
FCS No. 1351
Certificate of Practice No.13365

Place : Mumbai
Date : April 24, 2015

MANAGEMENT DISCUSSION & ANALYSIS

Global Economic Conditions:

Global Economy continued to show mixed signs in FY 2014-15, with a strong growth in US economy being offset by weakness in Euro zone, China & Japan. A series of healthy numbers on US growth & employment data, has resulted in an increasing clamour by the US Federal Reserve for increasing the interest rates. Meanwhile, the European Central Bank has tried to boost sentiment in Euro zone during the year through various measures including negative interest rates, a massive QE program, etc., but still faces a high risk of deflation. Political environment in the region has also turned volatile with uncertainties re-surfacing on exit of Greece from Euro zone and consequent global domino effect. The fall in commodity prices during the year has also resulted in significant slowdown in China's growth.

Oil demand growth during the year was slowest in more than two years, on account of sluggish economic growth in Europe, Japan & weak growth in China. Crude Oil prices fell sharply by over 50% in the second half of the year and are now at around USD 60 per barrel. The refusal by OPEC members to cut output to support price levels, sends a strong signal that chances of oil price rebounding in the short term are slim. There has been a spate of capex cuts & project deferral announcements by global oil majors, in the wake of this dramatic price fall. However, in the long run, the demand for crude oil is expected to grow gradually.

Overview of Indian Economy:

Indian economy witnessed a historic mandate being given to the new government in the form of an absolute majority, unseen in last 30 years. The global fall in crude oil price assisted the government to keep the fiscal deficit & trade deficit in check, and had a positive knock on effect in reducing inflation numbers. The Reserve Bank of India also contributed towards the recovery process by initiating the long awaited interest rate-cut cycle.

The government during the year announced a number of positive policy initiatives for the hydrocarbon sector including complete de-regulation of fuel prices, exemption to upstream public sector oil companies from sharing under-recoveries on kerosene & LPG, amendments to the New Urea Investment Policy to catalyse capex expansion in the fertiliser sector, etc. The government's thrust on 'Make in India' initiative is expected to give a favourable thrust to the company's prospects in the domestic market.

India is expected to remain a bright spot in the global economy with expectations that next year's growth could surpass that of China, making it the fastest growing economy in the world.

Scheme of Arrangement & Transfer of Hydrocarbon business:

As reported in the previous year, a Scheme of Arrangement ("the Scheme") was entered into between Larsen & Toubro Limited (L&T) and the Company for transfer of the Hydrocarbon undertaking of L&T along with related assets, liabilities, specific identified reserves, employees, and other items specifically listed therein. The aforementioned Scheme effective from April 1, 2013 ("Appointed Date") was sanctioned by the Honourable Bombay High Court vide its order dated December 20, 2013 which came into effect on January 16, 2014 ("Effective Date").

Hydrocarbon undertaking's all work experience, qualifications, capabilities, legacies & track record, financials, contracts with clients & vendors and licenses & permissions were also transferred to the Company. The Company has during the year taken steps for giving effect to the transition including novation of contracts. However, the Company continues to draw on the parent company's organizational & financial strengths and experience.

The Board has also given an in-principle approval for transfer of investments in Subsidiary & Associate Companies in Hydrocarbon sector from L&T to the Company.

Business Overview:

The Company provides "design to build" engineering, procurement and construction solutions on turnkey basis in oil & gas, petroleum refining, chemicals & petrochemicals, fertiliser sectors and cross country pipelines. It has capabilities to deliver complete end to end solutions including front end design through engineering, procurement, fabrication, project management, construction and installation up to commissioning services.

The Company has time & again delivered, both in India & overseas, a number of large, critical & complex projects due to its experienced and highly skilled project execution team, world-class HSE practices and culture of excellence. The Company has a fully integrated capability chain including in-house engineering, R&D centre, global sourcing hubs, world class modular fabrication facilities, offshore installation capabilities and a safety ingrained work culture. The keystones of Company's business philosophy are excellence in corporate governance, best in class safety standards, state-of-the-art IT security practices, on-time delivery and cost competitiveness.

The Company's geographic reach spans across Asia, beyond India covering Middle-East and South-East Asia. In India, it has set up major work centers at Mumbai, Vadodara, Chennai, Faridabad, Hazira and Kattupalli. The Company's project execution capabilities in Middle East are located in UAE (Sharjah and Abu Dhabi), Saudi Arabia (Al-Khobar), Kuwait, Oman (Muscat) & Qatar (Doha). In addition to the Company's Modular Fabrication Facilities at Hazira and Kattupalli in India, the company has a major Modular Fabrication Facility at Sohar in Oman held through a fellow subsidiary. The Company has registered its presence in South East Asia through its offices in Malaysia (Kuala Lumpur) and Indonesia (Jakarta).

The Company has operations across the Hydrocarbon value-chain in India & overseas:

- Hydrocarbon Upstream
- Hydrocarbon Mid & Downstream - Domestic
- Hydrocarbon Construction & Pipelines - Domestic
- Hydrocarbon Mid & Downstream including Pipelines - International

Hydrocarbon Upstream:

The Company offers turnkey solutions to the Global Offshore Oil & Gas industry encompassing well-head platforms, process platforms & modules, subsea pipelines, brown field developments, Jack-up rig refurbishment, floating production storage & off-loading (FPSO) topsides and subsea projects. The Company has successfully executed large offshore platforms and pipeline projects in east and west coast of India, Middle East, South East Asia and Africa over two decades; for global companies such as ONGC, GSPC, ADMA OPCO, Bunduq, Qatar Petroleum, Maersk Oil Qatar, PTTEP, Petronas and Songas.

(Manifold Tower (MFT) incl Bridge to Wellhead Tower 1 (WHT-1) build and installed as a part of Nasr & Umm Lulu Development project of ADMA-OPCO, Abu Dhabi)

The Company has two state-of-the-art fabrication facilities in India at strategically important locations for offering round the year delivery of process platforms, wellhead platforms, modular structures, heavy jackets and oil rigs. The Company's Hazira Fabrication Facility, near Surat in Gujarat, caters to business opportunities in the West Coast of India (Mumbai High) & Kattupalli Fabrication Facility near Chennai in Tamil Nadu caters to opportunities from East Coast (KG Basin) and South East Asia. L&T Modular Fabrication Yard LLC's yard at Sohar, Oman is strategically located to cater to opportunities in UAE, Qatar, Saudi Arabia & North Sea. These yards have a total fabrication capacity of about 150,000 MT per year.

The Company has business development offices in Middle East & South East Asia to provide a thrust to its international growth plans. The Company is selectively exploring upcoming opportunities in these regions.

The Company's fellow subsidiaries, L&T Sapura Shipping Private Limited own and operate a Heavy Lift Pipe Lay Vessel, alongwith L&T Sapura Offshore Private Limited provide offshore installation services. Dedicated Engineering fellow subsidiary, L&T-Valdel Engineering Limited, provides engineering support to the Company through multi-locational centres at Bengaluru and Chennai.

During the year, the Company has won orders against international competitive bidding, for Engineering, Procurement, Construction & Installation of five wellhead platforms at Mumbai High; two wellhead platforms, subsea pipelines and modification of existing facilities at Heera-Panna-Bassein Block. The Company also bagged an order for Re-routing of 42" Subsea Pipeline near Umbrahat beach. The fabrication facility at Hazira has successfully diversified for supply of piping spools for Reliance Industries and Kuwait National Petroleum Company.

(Yetagun North (Phase-V Development) for PETRONAS Carigali after completion. Platform was fabricated at Modular Fabrication Facility, Kattupalli, near Chennai)

In international waters, Company achieved 'First Oil' for its ongoing project in Abu Dhabi with Abu Dhabi Marine Operating Company (ADMA OPCO) and successfully completed PETRONAS Project in Myanmar. In domestic, the Company successfully handed over 2 wellhead platform projects to ONGC. In recognition of the Company's project management excellence, the Company's East Coast Process Platform Project won Project Management Institute's (PMI) Mega Project of the Year 2014 Award.

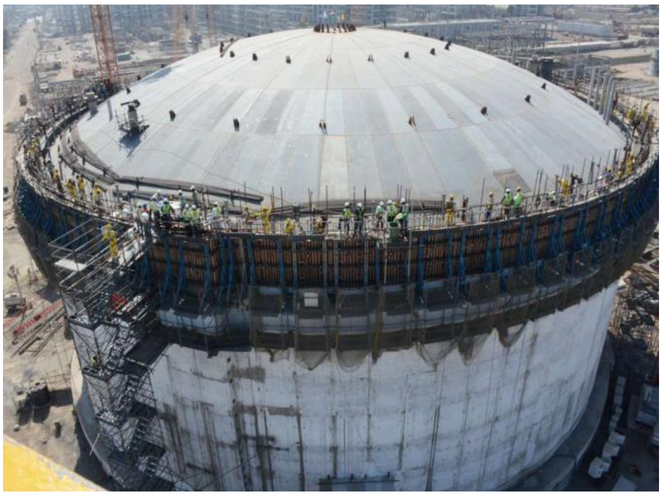
<u>Hydrocarbon Mid & Downstream – Domestic :</u>

The Company provides EPC solutions for a wide range of applications in hydrocarbon projects covering Refining, Petrochemical, Fertilizer (ammonia & urea complexes), On-shore Oil & Gas Processing plants, and Modular Process Plants.

The Company has successful track record of simultaneous execution of multiple large value projects on a turnkey basis supported by in-house Engineering Resource Centers located at Mumbai, Faridabad and Vadodara, which cater to the complete spectrum of FEED, process and detailed engineering. The Company also draws engineering support from L&T-Chiyoda Limited.

The Company has rich experience of project execution with technologies from process licensors like UOP, Axens, Haldor Topsoe, CB&I Lummus, Black & Veatch, Ortloff, ExxonMobil, BOC Parsons, Invista & Davy Process Technologies. The Company has executed Lump-Sum Turnkey (LSTK) projects in on-shore Oil & Gas Processing, Refinery & Petrochemical applications for various Indian oil majors like IOCL, MRPL, ONGC, OMPL, BPCL, HPCL, Reliance Industries etc., as well as fertiliser companies like NFL, GNFC, RCF and others.

The Company has recently made an entry into the niche area of large scale Cryogenic Terminal projects featuring Full Containment Cryogenic Storage Tanks. During the year, the Company successfully completed its first ever dome air raising activity for a Cryogenic Ethylene Tank Project. The Company has also received an order for EPC of a Cryogenic Ethane cum LNG Storage Tank Project. These projects provide a good leverage for bidding for the forthcoming LNG Terminal projects incorporating LNG tanks and Regasification plants. The Company has also entered into a number of strategic project specific alliances with international EPC companies like Saipem, Italy & Technip, France as well as Indian companies like Engineers India Ltd, as part of its initiative in areas of LNG, Fertilisers & Petrochemicals.



Cryogenic Ethylene Tank – Dome Air Raising

During the year, the Company has successfully commissioned the largest single train Paraxylene complex in India, consisting of 9 process units. In recognition of the exemplary project management performance in an extremely difficult terrain and weather conditions, this project was conferred Project of the Year award in large project category. Additionally, the Company also received Final Acceptance Certificate (FAC) on successful completion of Performance Guarantee tests for Additional Gas Processing Project, two Ammonia Feedstock Conversion Projects and Ammonia Syn Gas Generation Project.

Hydrocarbon Construction & Pipelines – Domestic:

The Company undertakes EPC projects of cross-country pipelines for Oil & Gas involving laying, horizontal directional drilling (HDD), testing, pre-commissioning & commissioning. It also renders turnkey construction services for refineries, petrochemicals, chemical plants, fertilizers, gas gathering stations, crude oil & gas terminals and underground cavern storage systems for LPG.

Refinery Off Gas Cracker Furnace

The Company has built up major capabilities including heavy lift competency, advanced welding technologies and Quality systems. The Company has also invested in strategic construction equipment, range of Pipeline spread equipment, automatic welding machines and other plant & machinery for Electro-mechanical Construction Works.

The Company's fellow subsidiary, L&T-Gulf Private Limited, provides world class engineering capabilities for cross-country pipeline construction.

The Company has executed projects for major private sector customers like Cairn Energy, Reliance Industries, HPCL Mittal Energy as well as major oil PSUs like BPCL, IOCL, ONGC and others.

The company is currently executing India's first Coal Bed Methane field development project, including installation of Field Pipelines, Power Distribution Network, Construction of Well Site facilities, Group Gathering Stations and associated facilities. It is also executing civil, mechanical, electrical & instrumentation works for India's largest paraxylene plant requiring more than 30,000 workmen at peak execution.

Lowering of 28" Pipe Line for Salaya Mathura Pipeline Project – IOCL, Rajasthan

Hydrocarbon Mid & Downstream International:

The Company's international business operations are predominantly in Middle-East, spread across United Arab Emirates, Sultanate of Oman, Qatar, Kingdom of Saudi Arabia and Kuwait. In South East Asia & North Africa geographies, the Company is targeting prospects in Indonesia & Algeria, respectively. The Company's network of international offices and facilities are geared to respond to the needs of its client-base in multiple geographies including Middle East, North Africa and South East Asia.

The Company has built up a strong team, integrating in-house talent with internationally experienced resources headquartered in Sharjah and supported by regional hubs in Al-Khobar and Kuwait. The Company is developing an engineering center in Sharjah to co-ordinate and consolidate engineering efforts being carried out at various locations. A centralised proposal & estimated team is being constituted for better control and accuracy in estimates. The Company is also pursuing complex mega projects through alliances with the leading global EPC companies. Efforts have also been made during the year to strengthen risk management including interface management and Project Portfolio monitoring.

The Company is prequalified by major international Oil & Gas producers such as Saudi Aramco, Kuwait Oil Company (KOC) & Kuwait National Petroleum Company (KNPC), Abu Dhabi Gas Industries Ltd (GASCO), Abu Dhabi Gas Liquefaction Company Ltd (ADGAS), Abu Dhabi Company for Onshore Oil Operations (ADCO), SOCAR, PETRONAS, CNPC and Dragon Oil in Turkmenistan, Lukoil in Uzbekistan and Sonatrach in Algeria.

During the year, the Company has received its largest international order from Kuwait Oil Company to execute Engineering, Procurement & Construction contract for Gathering Center in North Kuwait which will process crude oil from Raudhatain fields in a multi stage process.

During the year, the Company successfully commissioned its gas pipeline project in UAE for Abu Dhabi Gas Industries Ltd. It also achieved substantial completion for Petroleum Development Oman's Lekhwair Gas Field Development Project in Oman. In Qatar, the two projects being executed for Dolphin Energy have achieved 'Ready-For-Start-Up' (RFSU) stage.

The Company is screening local construction partners in Algeria for tendering & execution of upcoming opportunities. The Company is also eligible to participate in Refinery and Fertilizer projects in Indonesia through its Construction Service Provider Representative Office (CSPRO).

Business Environment:

The Company achieved a major breakthrough in the Middle East during the year by securing its largest ever contract of around USD 846 million. In India, many large value projects were deferred during the year on account of uncertain economic environment & volatility in crude oil prices. Despite this, the Company received domestic orders of around Rs 4,000 crores.

The entire global hydrocarbon industry is passing through a difficult phase with E&C industry leaders reporting cost over-runs. The Company also faced over-runs in some of the international projects bagged during 2010 to 2011 period which were first of its kind with respect to customers, size & scale, technical complexity and affected by unforeseen cost increases and VISA delays due to the changed local environment.

All of these projects are at advanced stage of commissioning and final settlement with customers. The Management has restructured its international operations and steps are being taken to build strong customer relationships, a culture of operational excellence and greater accountability. Contracts management, safety & quality departments are being strengthened with experienced recruits. A process of bid/no-bid clearance for international prospects has been instituted to weed out unfeasible proposals at early stages. The Management is confident that the Company will turnaround in FY 15-16.

Financial Overview:

During the year, the Company secured new orders of around Rs 9,300 Cr, of which around Rs 5,500 Cr were international orders.

Net Revenue from Operations for the year was around Rs 5,700 Cr registering a year-on-year de-growth of 34%, due to low opening order book. International revenue dropped by 54% year-on-year, as majority of existing jobs have reached close out stage and the Kuwait project received during the year is a long cycle project, still in engineering phase and will ramp-up in the subsequent years. Consequently, share of international revenue dropped to 38% of total revenue from 54% in the previous year.

Manufacturing, Construction & Operating Expenses for the year increased to 100% of Net Revenue compared to 84.3% in the previous year, due to cost over-runs in certain stressed international projects. Staff Costs at Rs 605 Cr registered an absolute decline of around 8% year-on-year, due to progressive demobilisation of site manpower on achieving close-out of international projects. Sales, Administration & Other Expenses were lower at 3.3% of Net Revenue compared to 4.7% in previous year, due to savings in overheads and no major foreign exchange variation impact in current year compared to foreign exchange variation loss in previous year. Finance Costs have increased during the year as borrowings peaked in the first half of the year due to delayed collections in domestic operations.

The Net Loss before tax is Rs 1,002 Cr compared to Profit of Rs 164 Cr in the previous year. After considering deferred tax credit, the Net Loss after tax in the current year is Rs 654 Cr compared to Net Profit of Rs 106 Cr in the previous year. Consequently, Company's Earnings per Share is negative for the year.

The Company's Capital Employed as on 31 March 2015 improved to Rs 1,895 Cr compared to Rs 2,528 Cr in the previous year. Net Working Capital (including Cash & Bank) dropped to Rs 657 Cr representing 11.4% of Gross Sales, compared to Rs 1,379 Cr in the previous year. The drop in Working Capital was contributed by reduction in unbilled revenue and trade receivables, due to close-out of old projects.

The Company's Net Debt as on 31 March 2015 stood at Rs 811 Cr. The Company's Networth reduced to Rs 888 Cr on account of losses during the year. Consequently, net debt to equity ratio increased to 0.91:1 from 0.58:1 in the previous year. Cash generated from operating activities during the year was Rs 229 Cr due to liquidation of old outstanding and retentions. Cash outflow on capex during the year was restricted to Rs 52 Cr.

With substantial close-out of low margin legacy projects, the profitability of the company is expected to improve going forward.

Risk Management & Internal Controls:

The Company has institutionalized risk management processes by implementing Risk Management policy and guidelines, incorporating global best practices and procedures along with quantitative tools and techniques. The Risk Management process is aimed at identification, assessment, monitoring and mitigation of risks from pre-bid to execution / close out of the project. Risk Management Committee periodically reviews the risks and advises on the mitigation measures.

The major challenges like tight work schedule, technical complexities, growing competition, newer geographies, forex variation, claims management and staffing of key project personnel are mitigated through specific actions like operational excellence initiatives, alliances, cost optimisation, improved customer intimacy, compliance with stringent HSE standards, proactive forex hedging, strong contract & claims management and identification of key personnel & talent at pre-bid stage.

All projects undergo a well-structured pre-bid risk review process by risk management committee at business and at corporate level as per well-defined authorisation limits. The process involves a detailed assessment of risks and deliberation on mitigation measures by the Risk Management Committee and risk reviews of on-going projects at regular intervals. Project Managers/Project team members also undergo certified Risk Induction Programme conducted by ECRI (Engineering & Construction Risk Institute) on a continuous basis to get acquainted with Global Best Practices in Engineering & Construction Risk Management.

The Company believes that a strong internal control mechanism is an important pillar of Corporate Governance. It has established internal control mechanism commensurate with the size and complexity of its business. Internal Control Manual provides structured framework for identification, rectification, monitoring and reporting of internal control weaknesses in the Company. The Company also follows well documented Standard Operating Procedures (SOPs) for critical business processes. The operating effectiveness of various Controls is periodically tested by external parties and deficiencies, if any are promptly rectified.

Human Resource Development:

The Company has a unique mix of experienced professionals and young dynamic passionate individuals working in various disciplines. HR efforts are targeted to ensure that the right talent is sourced, selected, trained and deployed across the organisation. A number of in-house modules for processes like recruitment (E-Rec) and competency management (E-Profile) have been implemented to automate & digitise the core processes. Special efforts are being put to identify high potential leaders and groom them through seven stages of leadership development to take on higher responsibilities in the future. The Company nominates its employees for L&T's Corporate training programmes like Leadership programme, Core Development Program, EMBA programmes and special E-learning programmes (DDI, Harvard and other certification programme) on a regular basis. The Company continues to foster a high performance culture by recognising good performers and providing them with career enhancing opportunities. Various activities and initiatives are undertaken to increase employee motivation through initiatives like Long Service Awards, Team Building Workshops, Town Halls, non-monetary recognition events, etc.

As a part of its drive towards building international project management capabilities, several senior professionals have been recruited from leading international EPC companies.

Health Safety Environment (HSE) & Sustainability:

Health, Safety & Environment is the cornerstone of the Company's business philosophy. The Company strives for continuous improvement for the protection and development of health, safety, and environmental assets of its employees and stakeholders. During the year, five crucial projects were safely commissioned without any significant incidents. The Company has developed a Corporate HSE Plan and refreshed various policies in line with best practices. The Company participated in Global Summit on Process Safety.

During the year, several cross functional HSE audits were initiated for Offshore Operations and Hazira Fabrication Facility. For Onshore Operations, the Company developed & implemented competency assurance & assessment system for one of its overseas clients. A behaviour based safety program was implemented for developing & sustaining a positive HSE culture. Online HSE Action Tracking System was made functional alongwith online monthly HSE Reports and unsafe act / incident reporting system. Senior Management participated in Site Safety Surveys and Employees were made part of Safety perception survey.

To spread safety awareness, various campaigns were observed during the year. Lessons learnt during project execution were shared throughout the organisation by way of HSE Alerts. Various HSE training programs were held, and motivational schemes were instituted.

As a responsible Corporate Citizen, the Company believes in adopting Sustainable practices. The Company has released Sustainability Report – "In Tune, Attune" in January 2015 which covers various initiatives taken across the Company and also highlights need to enhance performance across all sustainability parameters – safety, energy, water conservation and productivity.

As one of India's most respected Engineering and Construction Companies, the Company is aware of its responsibility towards social upliftment which is an integral part of the corporate culture. The Company has developed a CSR Framework for demonstrating its responsibility as a corporate citizen which lays down the principles and mechanisms for undertaking various programs in accordance with section 135 of the Companies Act 2013 for the community at large. The Company is committed to developing projects that will contribute to the quality of life, including schools, hospitals, skill training institutes, water supply & distribution and sanitation facilities.

During the year, the Company won several national & international accolades from clients, some of which are as follows: Modular Fabrication Facility (MFF), Hazira received RoSPA Gold Award for Occupational Health & Safety, "Visionary Project" award by IMEA, Frost & Sullivan Safety Cultural Transformation. MFF, Kattupalli received 3 Star Rating in CII (South India) EHS Awards 2014,. Both, Hazira & Kattupalli, also received International Safety Award with 'Merit' by British Safety Council. Internationally, the Company received "HSE Award– 2014" by PETRONAS for exceptional HSE performance on Yetagun Project, , ASSE Gold Award 2014 for Dolphin Project, Qatar and Gold Award from American Society of Safety Engineers for SADARA Project, Saudi.

Outlook:

The new government regime in India, has laid the policy framework for realising strong growth in the coming years by focusing on key pillars of Infrastructure creation, sustainable 7-8% GDP growth p.a., 'Make in India' initiative, etc. With China slowing down, already certain global agencies have forecast that India could become the fastest growing economy in FY 15-16. The gradual pick-up in on-ground implementation of the above measures is expected to result in increased opportunities for the Company in FY 15-16.

In Upstream sector, ONGC is expected to continue with new project awards, notwithstanding the recent fall in crude oil prices. Also, E&P companies in select geographies like Saudi Arabia, Myanmar and Thailand are expected to continue with their planned capex investments. The Company is actively pursuing opportunities with Saudi Aramco for their "Maintain Potential Facilities - Long Term Agreement (LTA)" program which will provide visibility of continuous projects awards in medium to long term. The Company is also building up competencies in Brownfield Projects to move up the value chain. As part of de-risking strategy, the Company is actively developing relationships with private sector customers.

In the Mid & Downstream sector, with fall in crude prices and consequent reduction in under-recoveries, Indian Refiners have planned expansion and clean fuel projects. The Company is witnessing a number of exciting opportunities in LNG Terminals, petrochemical plants & refinery up-gradations. Fertiliser sector is also witnessing a revival with planned investment of over Rs 40,000 Crores in next four years.

In International markets, the current oil price scenario has resulted in oil related projects being kept on hold. However, significant EPC awards are expected in the Gas sector in the coming year. United Arab Emirates has planned several Gas development projects driven by investments by state-owned companies – ADCO and ADGAS. Oman has continued its investments and offers good opportunities in downstream projects. Saudi Arabia has embarked upon a program to develop its unconventional gas reserves which will provide a number of opportunities for the Company. Kuwait is emerging as a stable, business- friendly destination with a fast moving economy. With lower break even costs, Kuwait has capacity to invest further even in this downturn and has ambitious plans to increase oil production from 3 million barrels per day (bpd) to 4 million bpd by 2020 which will provide the Company with a number of opportunities in Gathering Centers, Booster Stations, Central Gas Utilization Project with associated infrastructure.

To conclude, FY 16 is expected to be a turnaround year. The Company's mega project in Kuwait is expected to ramp-up in FY 16 which will contribute to top line growth. In India, the government's thrust on "Make in India" initiative will enable the Company to bag a few domestic orders in FY 16 which will support the Company's topline & bottomline growth from FY17 onwards.

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF L&T HYDROCARBON ENGINEERING LIMITED

Report on the standalone financial statements

We have audited the accompanying standalone financial statements of **L&T HYDROCARBON ENGINEERING LIMITED** ('the Company'), which comprise the Balance Sheet as at 31 March 2015, the Statement of Profit and Loss and the Cash Flow Statement for the year then ended, and a summary of the significant accounting policies and other explanatory information.

Management's responsibility for the standalone financial statements

The Company's board of directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ('the Act') with respect to the preparation of these standalone financial statements that give a true and fair view of the financial position, financial performance and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act, read with rule 7 of the Companies (Accounts) Rules, 2014. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these standalone financial statements based on our audit.

We have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the rules made thereunder.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the Company has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the standalone financial statements.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at 31 March 2015, and its loss and its cash flows for the year ended on that date.

Report on other legal and regulatory requirements

1 As required by the Companies (Auditor's Report) Order, 2015 ('the Order'), issued by the central government of India in terms of sub-Section (11) of Section 143 of the Companies Act, 2013, we give in the Annexure a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.

2 As required by Section 143 (3) of the Act, we report that:

   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.

   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.

   (c) The Balance Sheet, the Statement of Profit and Loss and the Cash Flow Statement dealt with by this report are in agreement with the books of account.

   (d) In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with rule 7 of the Companies (Accounts) Rules, 2014.

   (e) On the basis of the written representations received from the directors as on 31 March 2015 taken on record by the Board of Directors, none of the directors is disqualified as on 31 March 2015 from being appointed as a director in terms of Section 164 (2) of the Act.

   (f) With respect to the other matters to be included in the Auditor's Report in accordance with rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

      i. The Company has disclosed the impact of pending litigations on its financial position in its financial statements;

ii. The Company has made provision, as required under the applicable law or accounting standards, for material foreseeable losses on long term contracts including derivative contracts; and

iii. There were no amounts which were required to be transferred to the investor education and protection fund by the Company.

For **SHARP & TANNAN**
Chartered Accountants
Firm's registration No. 109982W

FIRDOSH D. BUCHIA
Partner
Membership No. 38332

Place : Mumbai
Date : April 28, 2015

ANNEXURE TO THE AUDITORS' REPORT

(Referred to in paragraph 1 under 'Report on other legal and regulatory requirements' of our report of even date)

1 (a) The Company is maintaining proper records to show full particulars including quantitative details and situation of all fixed assets.

(b) We are informed that the Company has formulated a program of physical verification of all the fixed assets over a period of three years which, in our opinion, is reasonable having regard to the size of the Company and nature of its assets. Accordingly, the physical verification of the fixed assets has been carried out by management during the year and no material discrepancies were noticed on such verification.

2 (a) As explained to us, inventory has been physically verified by management at reasonable intervals during the year.

(b) In our opinion, and according to the information and explanations given to us, the procedures of physical verification of inventory followed by management are reasonable and adequate in relation to the size of the Company and the nature of its business.

(c) The Company is maintaining proper records of inventory. The discrepancies noticed on verification between the physical stocks and the book records were not material.

3 According to the information and explanations given to us, the Company has not granted any loans, secured or unsecured, to companies, firms or other parties covered in the register maintained under Section 189 of the Companies Act, 2013.

4 In our opinion and according to the information and explanations given to us, there is an adequate internal control system commensurate with the size of the Company and the nature of its business for the purchase of inventory and fixed assets and for the sale of goods and services. Further, on the basis of our examination of the books and records of the Company and according to the information and explanations given to us, we have neither come across nor have we been informed of any continuing failure to correct major weaknesses in the aforesaid internal control system.

5 We have broadly reviewed the books of account and records maintained by the Company pursuant to the rules prescribed by the central government for the maintenance of cost records under Section 148(1) of the Companies Act, 2013 in respect of EPC projects undertaken by the Company and are of the opinion that prima facie the prescribed accounts and records have been made and maintained. The contents of these accounts and records have not been examined by us.

6 (a) According to the information and explanations given to us and as per the records of the Company examined by us, in our opinion, the Company is regular in depositing undisputed statutory dues including provident fund, employees state insurance, income-tax, sales-tax, wealth tax, service tax, duty of customs, duty of excise, value added tax, cess and other material statutory dues with the appropriate authorities. According to the information and explanations given to us, there were no undisputed amounts payable in respect of provident fund, employees state insurance, income-tax, sales-tax, wealth tax, service tax, duty of customs, duty of excise, value added tax, cess and other material statutory dues outstanding as at 31 March 2015 for a period of more than six months from the date they became payable.

(b) According to the information and explanations given to us and according to the records of the Company, there are no dues of income-tax or sales-tax or wealth tax or service tax or duty of customs or duty of excise or value added tax or cess have not been deposited with the appropriate authorities on account of any dispute except as given below:

Name of the Statute	Nature of the disputed dues.	Amount (₹ in Crore)	Period to which the amount relates	Forum where dispute is pending
Central Sales Tax Act, Local Sales Tax Act, Works Contract Tax Act.	Disallowance of deemed inter state sales and non submission of forms	0.08	1999-00	Assistant Commissioner (Appeals)
	Disallowance of sales in transit, deemed inter state sales, non submission of forms and other matters	93.84	1989-90, 1997-98, 1998-99, 2001-02, 2003-04 to 2011-12	Deputy Commissioner (Appeals)
	Classification disputes, disallowance of forms and other matters	94.64	1996-97, 2000-01, 2001-02, 2003-04 to 2005-06, 2010-11	Joint Commissioner (Appeals)
	Non submission of forms	3.58	2005-06, 2010-11, 2011-12	Additional Commissioner (Appeals)
	Disallowance of deemed sales in course of imports, classification disputes, non submission of forms	2.55	1987-88 to 1991-92, 1999-00, 2000-01, 2002-03	Sales Tax Tribunal
	Disallowance of deemed sales in course of imports, taxability of sub-contractor's turnover and other matters	78.39	1999-00, 2000-01	High Court
	Classification disputes, disallowance of input tax credit and other matters	104.59	2006-07 to 2010-11	Supreme Court
The Central Excise Act, 1944, Service Tax under Finance Act, 1994	Demand for excise duty on fabrication of tanks, platforms and ladders	0.32	1989-90 to 2011-12	Additional Commissioner (Central Excise)
	Demand for excise duty on fabrication of tanks, platforms and ladders	0.06	1989-90	CESTAT
	Demand for service tax on manpower recruitment and supply agency service and dispute on adjustment of excess service tax paid	1.82	09-10 & 10-11	CESTAT

Name of the Statute	Nature of the disputed dues.	Amount (₹ in Crore)	Period to which the amount relates	Forum where dispute is pending
	Demand for service tax on manpower recruitment	4.64	2005-06 to 2010-11	Commissioner of Service Tax
	Demand for service tax including penalty and interest on lumpsum turnkey jobs	72.12	2002-03 to 2006-07	CESTAT
Income Tax Act, 1961	Dispute regarding tax not deducted on bank guarantee charges and internet charges	0.01	2010-11	Income Tax Appellate Tribunal (ITAT)
	Dispute regarding tax not deducted on bank guarantee charges and internet charges	1.11	2011-12	Chief Commissioner of Income-tax (A)
	Difference in rate of tax deducted at source	2.57	2007-08, 2008-09	Director of Income-tax (International Taxation)
Customs Act, 1962	Dispute on software procurement	0.01	2006-07	Commissioner of Customs
	Dispute on classification	0.93	2013-14	CESTAT

(c) The Company is not required to transfer any amounts to the investor education and protection fund in accordance with the relevant provisions of the Companies Act 1956 (1 of 1956) and rules made thereunder.

7 The accumulated losses of the Company as at the end of the financial year do not exceed fifty percent of its net worth. The Company has incurred cash losses in the current financial year but not in the immediately preceding financial year.

8 According to the records of the Company examined by us and the information and explanations given to us, the Company has not defaulted in repayment of dues to any financial institution or bank or debenture holder as at the Balance Sheet date.

9 During the course of our examination of the books and records of the Company, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, we have neither come across any instances of fraud on or by the Company, noticed or reported during the year, nor have we been informed of such case by management.

10 Clauses 3(v), 3(x) and 3(xi) of the Order are not applicable to the Company.

For **SHARP & TANNAN**
Chartered Accountants
Firm's registration No. 109982W

FIRDOSH D. BUCHIA
Partner
Membership No. 38332

Place : Mumbai
Date : April 28, 2015

BALANCE SHEET AS AT MARCH 31, 2015

	Note	As at 31.03.2015 (₹ Crore)	(₹ Crore)	As at 31.03.2014 (₹ Crore)	(₹ Crore)
EQUITY AND LIABILITIES:					
Shareholders' funds					
Share capital	B	1,500.05		1,500.05	
Reserves and surplus	C	(612.23)		(19.41)	
			887.82		1,480.64
Non- current liabilities					
Long-term borrowings	D(I)	148.60		260.00	
Other long term liabilities	D(II)	49.03		35.93	
Long-term provisions	D(III)	12.01		10.93	
			209.64		306.86
Current liabilities					
Short-term borrowings	E(I)	858.85		786.81	
Trade payables	E(II)	2,179.74		2,708.89	
Other current liabilities	E(III)	1,195.57		906.73	
Short-term provisions	E(IV)	78.46		83.97	
			4,312.62		4,486.40
TOTAL			5,410.08		6,273.90
ASSETS:					
Non- current assets					
Fixed assets					
Tangible assets	F(I)	873.87		917.60	
Intangible assets	F(II)	3.15		1.98	
Capital-work-in-progress	F(I)	12.44		25.13	
			889.46		944.71
Deferred tax assets (net)	Q(10)		348.94		16.97
Long-term loans and advances	G		109.20		108.10
Current assets					
Inventories	H(I)	41.49		21.03	
Trade receivables	H(II)	1,732.35		2,174.66	
Cash and bank balances	H(III)	197.06		187.11	
Short term loans and advances	H(IV)	848.29		726.91	
Other current assets	H(V)	1,243.29		2,094.41	
			4,062.48		5,204.12
TOTAL			5,410.08		6,273.90
SIGNIFICANT ACCOUNTING POLICIES	A				
CONTINGENT LIABILITIES	I				
COMMITMENTS (CAPITAL AND OTHERS)	J				
OTHER NOTES FORMING PART OF THE ACCOUNTS	Q				

As per our report attached

For and on behalf of the Board

SHARP & TANNAN
Chartered Accountants
Firm's Registration No.109982W
by the hand of

FIRDOSH D. BUCHIA
Partner
Membership No.38332

P. S. KAPOOR
Company Secretary & Chief Financial Officer

K. VENKATARAMANAN
Managing Director
DIN: 001647

U. DASGUPTA
Director
DIN: 00129114

Place : Mumbai
Date : April 28, 2015

Place : Mumbai
Date : April 28, 2015

STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDED MARCH 31, 2015

	Note	2014-15 (₹ Crore)	2014-15 (₹ Crore)	*2013-14 (₹ Crore)*	*2013-14 (₹ Crore)*
REVENUE:					
Revenue from operations (gross)	K	5,748.47		*8,737.03*	
Less: Excise duty		25.12		*21.13*	
Revenue from operations (net)			5,723.35		*8,715.90*
Other income	L		17.35		*0.89*
TOTAL REVENUE			5,740.70		*8,716.79*
EXPENSES:					
Manufacturing ,construction and operating expenses:	M				
Cost of raw material ,components consumed		1,671.01		2,731.82	
Construction materials consumed		546.66		329.23	
Stores,spares and tools consumed		63.72		120.94	
Sub-contracting charges		2,457.53		3,202.91	
Changes in inventories of work-in-progress and stock-in-trade		(2.81)		26.75	
Other manufacturing ,construction and operating expenses		991.85		936.08	
			5,727.96		*7,347.73*
Employee benefits expense	N		605.36		*655.08*
Sales, administration and other expenses	O		186.72		*408.14*
Finance costs	P		117.57		*41.96*
Depreciation, amortisation and obsolescence			105.44		*100.05*
TOTAL EXPENSES			6,743.05		*8,552.96*
Profit / (loss) before tax			(1,002.35)		*163.83*
Tax expenses:					
Current tax		–		44.00	
Deferred tax	Q(10)	(348.23)		14.10	
			(348.23)		*58.10*
Profit / (loss) after tax carried to Balance Sheet			(654.12)		*105.73*
Basic earnings per equity share (₹)	Q(9)		(6.54)		*0.97*
Diluted earnings per equity share (₹)	Q(9)		(6.54)		*0.97*
Face value per equity share (₹)			10		*10*
SIGNIFICANT ACCOUNTING POLICIES	A				
OTHER NOTES FORMING PART OF ACCOUNTS	Q				

As per our report attached

SHARP & TANNAN
Chartered Accountants
Firm's Registration No.109982W
by the hand of

FIRDOSH D. BUCHIA
Partner
Membership No.38332

Place : Mumbai
Date : April 28, 2015

For and on behalf of the Board

P. S. KAPOOR
Company Secretary & Chief Financial Officer

K. VENKATARAMANAN
Managing Director
DIN: 001647

U. DASGUPTA
Director
DIN: 00129114

Place : Mumbai
Date : April 28, 2015

CASH FLOW STATEMENT FOR THE YEAR ENDED MARCH 31, 2015

		2014–2015 (₹ Crore)	2013–2014 (₹ Crore)
A.	**Cash flow from operating activities:**		
	Profit / (loss) before tax	**(1,002.35)**	*163.83*
	Adjustments for:		
	Depreciation, amortisation and obsolescence	**105.44**	*100.05*
	Interest expense	**117.57**	*41.96*
	Interest income	**(0.17)**	*(0.10)*
	Profit on sale of fixed assets (net)	**(2.33)**	*(0.39)*
	Operating profit before working capital changes	**(781.84)**	*305.35*
	Adjustments for:		
	(Increase)/decrease in trade and other receivables	**1,318.39**	*509.02*
	(Increase)/decrease in inventories	**(20.45)**	*(15.27)*
	Increase/(decrease) in trade payables and customer advances	**(236.48)**	*(868.11)*
	Cash (used in)/generated from operations	**279.62**	*(69.01)*
	Direct taxes refund/(paid) - net	**(50.68)**	*(52.17)*
	Net cash (used in)/from operating activities	**228.94**	*(121.18)*
B.	**Cash flow from investing activities:**		
	Purchase of fixed assets	**(59.28)**	*(147.03)*
	Sale of fixed assets (including advance received)	**6.73**	*26.06*
	Consideration towards transfer of Hydrocarbon Undertaking	**–**	*(1,760.00)*
	Interest received	**0.17**	*0.10*
	Net cash (used in)/ from investing activities	**(52.38)**	*(1,880.87)*
C.	**Cash flow from financing activities:**		
	Proceeds from fresh issue of share capital	**–**	*1,500.00*
	Proceeds from long term borrowings from Holding Company	**240.00**	*260.00*
	Repayment of long term borrowings	**(351.40)**	*–*
	(Repayments)/proceeds from other borrowings (net)	**411.74**	*90.78*
	Inter-corporate borrowing from Holding Company (net of repayments)	**(339.70)**	*339.70*
	Dividends paid	**(7.26)**	*–*
	Additional tax on dividend	**(1.23)**	*–*
	Interest paid	**(118.76)**	*(38.44)*
	Net cash (used in)/ from financing activities	**(166.61)**	*2,152.04*
	Net (decrease) / increase in cash and cash equivalents (A + B + C)	**9.95**	*149.99*
	Add: Cash & Cash equivalents of transferred undertaking received as part of Scheme	**–**	*37.07*
	Cash and cash equivalents at beginning of the period	**187.11**	*0.05*
	Cash and cash equivalents at end of the period	**197.06**	*187.11*

Notes:

1. Cash flow statement has been prepared under the indirect method as set out in the Accounting Standard (AS) 3: “Cash Flow Statements” as specified under Section 133 of the Act, read with rule 7 of the Companies (Accounts) Rules, 2014.
2. Purchase of fixed assets includes movement of capital work-in-progress during the year
3. Cash and cash equivalents at the end of the year represent cash and bank balances and include unrealised gain of ₹ 0.40 crore (previous year : ₹ 0.57 crore) on account of translation of foreign currency bank balances.
4. Cash and cash equivalents are reflected in the Balance Sheet as follows:

	2014–2015	2013–2014
(a) Cash and cash equivalents disclosed under current assets [Note H (III)]	**197.06**	*187.11*

5. Previous year’s figures have been regrouped/reclassified wherever applicable

As per our report attached

SHARP & TANNAN
Chartered Accountants
Firm’s Registration No.109982W
by the hand of

FIRDOSH D. BUCHIA
Partner
Membership No.38332

Place : Mumbai
Date : April 28, 2015

For and on behalf of the Board

P. S. KAPOOR
Company Secretary & Chief Financial Officer

K. VENKATARAMANAN
Managing Director
DIN: 001647

U. DASGUPTA
Director
DIN: 00129114

Place : Mumbai
Date : April 28, 2015

NOTES FORMING PART OF THE ACCOUNTS

NOTE A : SIGNIFICANT ACCOUNTING POLICIES

1. **Basis of accounting**

   The Company maintains its accounts on accrual basis following the historical cost convention, in accordance with generally accepted accounting principles ["GAAP"] in compliance with the provisions of the Companies Act, 2013 (to the extent notified), the Companies Act, 1956 (to the extent applicable) and the Accounting Standards specified under Section 133 of the Act, read with rule 7 of the Companies (Accounts) Rules, 2014. Further, the guidance notes/announcements issued by the Institute of Chartered Accountants of India (ICAI) are also considered, wherever applicable.

   The preparation of financial statements in conformity with GAAP requires that management of the Company makes estimates and assumptions that affect the reported amounts of income and expenses of the period, the reported balances of assets and liabilities and the disclosures relating to contingent liabilities as on the date of the financial statements. Examples of such estimates include the useful lives of tangible and intangible fixed assets, deferred tax assets, allowance for doubtful debts/advances, future obligations in respect of retirement benefit plans, etc. Difference, if any, between the actual results and estimates is recognised in the period in which the results are known.

2. **Presentation of financial statements**

   The Balance Sheet and the Statement of Profit and Loss are prepared and presented in the format prescribed in the Schedule III to the Companies Act, 2013 ("the Act"). The Cash Flow Statement has been prepared and presented as per the requirements of Accounting Standard (AS) 3 "Cash Flow Statements". The disclosure requirements with respect to items in the Balance Sheet and Statement of Profit and Loss, as prescribed in the schedule III to the Act, are presented by way of notes forming part of accounts along with the other notes required to be disclosed under the notified Accounting Standards.

   Amounts in the financial statements are presented in Indian Rupees in crore [1 crore = 10 million] rounded off to two decimal places in line with the requirements of schedule III. Per share data are presented in Indian Rupees to two decimals places.

3. **Revenue recognition**

   Revenue is recognised based on nature of activity when consideration can be reasonably measured and there exists reasonable certainty of its recovery.

   A. Revenue from operations

      a. Sales and service

         i. Sales and service include excise duty and adjustments made towards liquidated damages and price variation, wherever applicable. Escalation and other claims, which are not ascertainable / acknowledged by customers, are not taken into account.

         ii. Revenue from sale of manufactured and traded goods is recognised when the substantial risks and rewards of ownership are transferred to the buyer under the terms of the contract.

         iii. Revenue from construction/project related activity and contracts for supply/commissioning of complex plant and equipment is recognised as follows:

            a. Cost plus contracts: Contract revenue is determined by adding the aggregate cost plus proportionate margin as agreed with the customer.

            b. Fixed price contracts: Contract revenue is recognized only to the extent of cost incurred till such time the outcome of the job cannot be ascertained reliably. When the outcome of the contract is ascertained reliably, contract revenue is recognized at cost of work performed on the contract plus proportionate margin, using the percentage of completion method. Percentage of completion is the proportion of cost of work performed to-date, to the total estimated contract costs.

               Expected loss, if any, on the construction/project related activity is recognized as an expense in the period in which it is foreseen, irrespective of the stage of completion of the contract. While determining the amount of foreseeable loss, all elements of costs and related incidental income not included in contract revenue is taken into consideration.

         iv. Revenue from contracts for the rendering of services which are directly related to the construction of an asset is recognised on similar basis as stated in iii above.

         v. Revenue from construction/project related activity and contracts executed in joint ventures under work-sharing arrangement [being jointly controlled operations, in terms of Accounting Standard (AS) 27 "Financial Reporting of Interests in Joint Ventures"], are recognised on the same basis as similar contracts independently executed by the Company.

         vi. Revenue from service related activities is recognised using the proportionate completion method.

         vii. Revenue from engineering and service fees is recognised as per the terms of the contract.

      b. Other operational revenue

         Other operational revenue represents income earned from the activities incidental to the business and is recognised when the right to receive the income is established as per the terms of the contract.

   B. Other income

      i. Interest income is accrued at applicable interest rate.

      ii. Dividend income is accounted in the period in which the right to receive the same is established.

      iii. Other items of income are accounted as and when the right to receive arises.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

4. Extraordinary and exceptional Items

Income or expenses that arise from events or transactions that are clearly distinct from the ordinary activities of the Company are classified as extraordinary items. Specific disclosure of such events/transactions is made in the financial statements. Similarly, any external event beyond the control of the Company, significantly impacting income or expense, is also treated as extraordinary item and disclosed as such.

On certain occasions, the size, type or incidence of an item of income or expense, pertaining to the ordinary activities of the Company, is such that its disclosure improves an understanding of the performance of the Company. Such income or expense is classified as an exceptional item and accordingly disclosed in the notes to accounts.

5. Research and development

Revenue expenditure on research and development is expensed under respective heads of account in the period in which it is incurred.

6. Employee benefits

a. Short term employee benefits:

All employee benefits falling due wholly within twelve months of rendering the service are classified as short term employee benefits. The benefits like salaries, wages, short term compensated absences etc. and the expected cost of bonus, ex-gratia are recognised in the period in which the employee renders the related service.

b. Post-employment benefits:

i. Defined contribution plans: The Company’s superannuation scheme, state governed provident fund scheme, employee state insurance scheme and employee pension scheme are defined contribution plans. The contribution paid/payable under the schemes is recognised during the period in which the employee renders the related service.

ii. Defined benefit plans: The employees’ gratuity fund schemes, post-retirement medical care scheme, pension scheme and provident fund scheme managed by trust are the Company’s defined benefit plans. The present value of the obligation under such defined benefit plans is determined based on actuarial valuation using the Projected Unit Credit Method.

The obligation is measured at the present value of the estimated future cash flows. The discount rate used for determining the present value of the obligation under defined benefit plans, is based on the market yield on government securities of a maturity period equivalent to the weighted average maturity profile of the related obligations at the Balance Sheet date.

Actuarial gains and losses are recognised immediately in the Statement of Profit and Loss.

The interest element in the actuarial valuation of defined benefit plans, which comprises the implicit interest cost and the impact of changes in discount rate, is classified under finance costs. The balance charge is recognised as employee benefit expenses in the Statement of Profit and Loss.

In case of funded plans, the fair value of the plan assets is reduced from the gross obligation under the defined benefit plans to recognise the obligation on a net basis.

Gains or losses on the curtailment or settlement of any defined benefit plan are recognised when the curtailment or settlement occurs. Past service cost is recognised as expense on a straight-line basis over the average period until the benefits become vested.

c. Long term employee benefits: The obligation for long term employee benefits such as long term compensated absences, long service award etc. is recognised in the similar manner as in the case of defined benefit plans as mentioned in (b)(ii) above.

d. Termination benefits: Termination benefits such as compensation under voluntary retirement cum pension scheme are recognised as expense in the period in which they are incurred.

7. Tangible fixed assets

Tangible fixed assets are stated at original cost net of tax/duty credits availed, if any, less accumulated depreciation and cumulative impairment. Assets acquired on hire purchase basis are stated at their cash values. Specific know-how fees paid, if any, relating to plant and equipment is treated as part of cost thereof.

Administrative and other general overhead expenses that are specifically attributable to construction or acquisition of fixed assets or bringing the fixed assets to working condition are allocated and capitalised as a part of the cost of the fixed assets.

Own manufactured assets are capitalised at cost including an appropriate share of overheads.

Tangible assets not ready for the intended use on the date of the Balance Sheet are disclosed as “capital work-in-progress”. (Also refer to policy on leases, borrowing costs, impairment of assets and foreign currency transactions infra.)

8. Leases

The determination of whether an agreement is, or contains, a lease is based on the substance of the agreement at the date of inception.

a. Finance leases:

i. Assets acquired under lease where the Company has substantially all the risks and rewards of ownership are classified as finance lease. Such assets are capitalised at the inception of the lease at the lower of the fair value or the present value of minimum lease payments and a liability is created for an equivalent amount. Each lease rental paid is allocated between the liability and the interest cost, so as to obtain a constant periodic rate of interest on the outstanding liability for each period.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

ii. Assets given under lease where the Company has transferred substantially all the risks and rewards of ownership to lessee, are classified as finance leases. Assets given under a finance lease are recognised as a receivable at an amount equal to the net investment in the lease. Lease income is recognised over the period of the lease so as to yield a constant rate of return on the net investment in the lease.

iii. Initial direct costs relating to assets given on finance leases are charged to Statement of Profit and Loss.

Operating leases:

i) Assets acquired on lease where a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Lease rentals are charged to the Statement of Profit and Loss on accrual basis.

ii) Assets leased out under operating lease are capitalised. Rental income is recognised on accrual basis over the lease term. (Also refer to policy on depreciation infra).

9. Depreciation

a. Owned assets

i. Assets carried at historical cost:

Depreciation on assets has been provided using straight line method based on useful life prescribed under part C of schedule II to the Companies Act, 2013.

However, in respect of the following categories of assets, depreciation is provided based on useful life which is different than as prescribed in schedule II to the Companies Act, 2013.

Sr. No	Category of assets	Sub-category of assets	Useful life as per schedule II (in years)	Useful life adopted (in years)
1.	Non-factory buildings (RCC frame structure)		60	20-60
2.	Non-factory buildings (other than RCC frame structure)		30	10-30
4.	Ownership flats	(a) Building portion - RCC frame structure	60	50
		(b) Building portion - other than RCC frame structure	30	30
5.	Office equipment	Multifunctional devices (fax machine/scanner/ printers), desktop, inkjet/laserjet printers, switches (audio/video) and projectors	5	4
6.	Plant and equipment	Boring/Rolling/Drilling/Milling	15	10-15
		EOT Crane	15-20	10-20
7.	Plant and equipment (general)	Minor plant and equipment of construction activity	12	5
		DG sets above 30 kva	15	5-12
		Erection winches above 2 tons	15	5-12
		Specialised machine tools, dies, jigs, fixtures, gauges	15	5
		Tunnel Boring machine	10	2
8.	Air conditioning and refrigeration equipment		15	12
9.	Laboratory and canteen equipment		10	8
10.	Motor cars		10	7

For these classes of assets, based on internal technical assessment the management believes that the useful lives as given above best represent the period over which management expects to use these assets. Hence the useful lives for these assets are different from the useful lives as prescribed under Part C of schedule II of the Companies Act, 2013.

iii. Depreciation for additions to/deductions from, owned assets is calculated pro rata from/to the month of additions/ deductions. Extra shift depreciation is provided on a location basis.

iv. Depreciation charge for impaired assets is adjusted in future periods in such a manner that the revised carrying amount of the asset is allocated over its remaining useful life.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

b. Leased assets:

Assets acquired under finance leases are depreciated on a straight line method over the lease term. Where there is reasonable certainty that the Company shall obtain ownership of the assets at the end of the lease term, such assets are depreciated at the rates prescribed under schedule II to the Companies Act, 2013 or at the higher rates adopted by the Company for similar assets.

Leasehold land: Land acquired under long term lease is classified under tangible assets and is depreciated over the period of lease.

10. Intangible assets and amortization

Intangible assets are stated at original cost net of tax/duty credits availed, if any, less accumulated amortisation and cumulative impairment. Intangible assets are recognised when it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise and the cost of the asset can be measured reliably. Intangible assets are amortised as follows:

a. Specialised software: over a period of six years.

b. Technical know-how: over a period of six years in case of foreign technology and three years in the case of indigenous technology.

Administrative and other general overhead expenses that are specifically attributable to acquisition of intangible assets are allocated and capitalised as a part of the cost of the intangible assets.

Intangible assets not ready for the intended use on the date of the Balance Sheet are disclosed as “Intangible assets under development”.

Amortisation on impaired assets is provided by adjusting the amortisation charges in the remaining periods so as to allocate the asset’s revised carrying amount over its remaining useful life.

11. Impairment of assets

As at each Balance Sheet date, the carrying amount of assets is tested for impairment so as to determine:

a. the provision for impairment loss, if any; and

b. the reversal of impairment loss recognised in previous periods, if any.

Impairment loss is recognised when the carrying amount of an asset exceeds its recoverable amount. Recoverable amount is determined:

a. in the case of an individual asset, at the higher of the net selling price and the value in use;

b. in the case of a cash generating unit (a group of assets that generates identified, independent cash flows), at the higher of the cash generating unit’s net selling price and the value in use.

(Value in use is determined as the present value of estimated future cash flows from the continuing use of an asset and from its disposal at the end of its useful life).

12. Investment:

Trade investments comprise investments in subsidiary companies, joint ventures, associate companies and in the entities in which the Company has strategic business interest.

Investments, which are readily realisable and are intended to be held for not more than one year from the date of acquisition, are classified as current investments. All other investments are classified as long term investments.

Long term investments including trade investments are carried at cost, after providing for any diminution in value, if such diminution is other than temporary in nature. Investments in integrated joint ventures are carried at cost net of adjustments for Company’s share in profits or losses as recognised.

Current investments are carried at lower of cost and fair value. The determination of carrying amount of such investments is done on the basis of weighted average cost of each individual investment.

Purchase and sale of investments are recognised based on the trade date accounting.

13. Inventories

Inventories are valued after providing for obsolescence, as under:

a. Raw materials, components, construction materials, stores, spares and loose tools at lower of weighted average cost or net realisable value.

b. Manufacturing work-in-progress at lower of cost including related overheads or net realisable value. In the case of qualifying assets, cost also includes applicable borrowing costs vide policy relating to borrowing costs.

c. Finished goods and stock in trade (in respect of goods acquired for trading) at lower of weighted average cost or net realisable value. Cost includes related overheads and excise duty paid/payable on such goods.

14. Cash and bank balances

Cash and bank balances also include fixed deposits, margin money deposits, earmarked balances with banks and other bank balances which have restrictions on repatriation. Short term and liquid investments being not free from more than insignificant risk of change in value, are not included as part of cash and cash equivalents.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

15. Securities premium account

a. Securities premium includes:

The difference between the market value and the consideration received in respect of shares issued pursuant to Stock Appreciation Rights Scheme.

The discount allowed, if any, in respect of shares allotted pursuant to Stock Options Scheme.

b. The following expenses are written off against securities premium account:

Expenses incurred on issue of shares

Expenses (net of tax) incurred on issue of debentures/bonds

Premium (net of tax) on redemption of debentures/bonds.

16. Borrowing costs:

Borrowing costs include interest, commitment charges, amortisation of ancillary costs, amortisation of discounts/premium related to borrowings, finance charges in respect of assets acquired on finance lease and exchange differences arising from foreign currency borrowings, to the extent they are regarded as an adjustment to interest costs.

Borrowing costs that are attributable to the acquisition, construction or production of a qualifying asset are capitalised/inventorised as part of cost of such asset till such time the asset is ready for its intended use or sale. A qualifying asset is an asset that necessarily requires a substantial period of time to get ready for its intended use or sale. All other borrowing costs are recognised as an expense in the period in which they are incurred.

17. Employee stock ownership schemes

The Employees Stock Option Scheme (the Scheme) provides for grant of equity shares of Larsen & Toubro Limited (the holding Company) to employees of the Company. The Scheme provides that employees are granted an option to subscribe to equity share of the holding Company that vest in a graded manner. The options may be exercised within specified period. The holding Company follows the intrinsic value method to account for its stock based employee compensation plans. The expense or credit recognized in the Statement of Profit and Loss for a period represents the movement in cumulative expense recognized as at the beginning and end of that period.

18. Foreign currency transactions, foreign operations, forward contracts and derivatives

a. The reporting currency of the Company is the Indian rupee.

b. Foreign currency transactions are recorded on initial recognition in the reporting currency, using the exchange rate at the date of the transaction. At each Balance Sheet date, foreign currency monetary items are reported using the closing rate.

Non-monetary items, carried at historical cost denominated in a foreign currency, are reported using the exchange rate at the date of the transaction.

Exchange differences that arise on settlement of monetary items or on reporting of monetary items at each Balance Sheet date at the closing rate are recognised as income or expense in the period in which they arise

c. Financial statements of foreign operations comprising jobs contracted are treated as integral operations and translated as in the same manner as foreign currency transactions, as described above. Exchange differences arising on such translation are recognized as income or expense of the period in which they arise.

d. Forward contracts, other than those entered into to hedge foreign currency risk on unexecuted firm commitments or highly probable forecast transactions, are treated as foreign currency transactions and accounted accordingly as per Accounting Standard (AS) 11 “The Effects of Changes in Foreign Exchange Rates”. Exchange differences arising on such contracts are recognised in the period in which they arise.

Gains and losses arising on account of roll over/cancellation of forward contracts are recognised as income/expense of the period in which such roll over/cancellation takes place.

e. All the other derivative contracts, including forward contracts entered into to hedge foreign currency risks on unexecuted firm commitments and highly probable forecast transactions, are recognised in the financial statements at fair value as on the Balance Sheet date, in pursuance of the announcement of the ICAI dated March 29, 2008 on accounting of derivatives. In addition, the derivative arrangements embedded in the contracts entered in the course of business are accounted separately if the economic characteristics and risks of the embedded derivatives are not closely related to economic characteristics and risks of the host contract.

The Company has adopted Accounting Standard (AS) 30 “Financial Instruments: Recognition and Measurement” for accounting of such derivative contracts, not covered under Accounting Standard (AS) 11 “The Effects of Changes in Foreign Exchange Rates”, as mandated by the ICAI in the aforesaid announcement.

Accordingly, the resultant gains or losses on fair valuation/settlement of the derivative contracts (including embedded derivatives) covered under Accounting Standard (AS) 30 “Financial Instruments: Recognition and Measurement” are recognised in the Statement of Profit and Loss or Balance Sheet as the case may be after applying the test of hedge effectiveness. Where the hedge in respect of off-Balance Sheet items is effective, the gains or losses are recognised in the “hedging reserve” which forms part of “reserves and surplus” in the Balance Sheet. The amount recognised in the “hedging reserve” is transferred to the Statement of Profit and Loss in the period in which the underlying hedged item affects the Statement of Profit and Loss. Gains or losses in respect of ineffective hedges are recognised in the Statement of Profit and Loss in the period in which such gains or losses are incurred.

f. The premium paid/received on a foreign currency forward contract is accounted as expense/income over the life of the contract.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

19. **Segment accounting**

a. **Segment accounting policies**

Segment accounting policies are in line with the accounting policies of the Company. In addition, the following specific accounting policies have been followed for segment reporting:

i. Segment revenue includes sales and other income directly identifiable with/allocable to the segment including inter segment revenue.

ii. Expenses that are directly identifiable with/allocable to segments are considered for determining the segment result. Expenses which relate to the Company as a whole and not allocable to segments are included under “unallocable corporate expenditure”.

iii. Income which relates to the Company as a whole and not allocable to segments is included in “unallocable corporate income”.

iv. Segment result includes margins on inter-segment capital jobs, which are reduced in arriving at the profit before tax of the Company.

v. Segment assets and liabilities include those directly identifiable with the respective segments. Unallocable corporate assets and liabilities represent the assets and liabilities that relate to the Company as a whole and not allocable to any segment.

b. **Inter-segment transfer pricing**

Segment revenue resulting from transactions with other business segments is accounted on the basis of transfer price agreed between the segments. Such transfer prices are either determined to yield a desired margin or agreed on a negotiated basis.

20. **Taxes on income**

Tax on income for the current period is determined on the basis of taxable income and tax credits computed in accordance with the provisions of the Income tax Act, 1961 and based on the expected outcome of assessments/appeals.

Deferred tax is recognised on timing differences between the income accounted in financial statements and the taxable income for the year, and quantified using the tax rates and laws enacted or substantively enacted as on the Balance Sheet date.

Deferred tax assets relating to unabsorbed depreciation/business losses/losses under the head “capital gains” are recognised and carried forward to the extent there is virtual certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised.

Other deferred tax assets are recognised and carried forward to the extent that there is a reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised.

21. **Interests in joint ventures are accounted as follows:**

Type of joint venture	**Accounting treatment**
Jointly controlled operations	Company's share of revenues, common expenses, assets and liabilities are included in revenues, expenses, assets and liabilities respectively.
Jointly controlled entities	(a) integrated joint ventures: (i) Company’s share in profits or losses of integrated joint ventures is accounted on determination of the profits or losses by the joint ventures. (ii) Investments in integrated joint ventures are carried at cost net of Company’s share in recognised profits or losses. (b) Incorporated jointly controlled entities: (i) Income on investments in incorporated jointly controlled entities is recognised when the right to receive the same is established. (ii) Investment in such joint ventures is carried at cost after providing for any diminution in value which is other than temporary in nature.

22. **Provisions, contingent liabilities and contingent assets**

Provisions are recognised for liabilities that can be measured only by using a substantial degree of estimation, if

a. the Company has a present obligation as a result of a past event

b. a probable outflow of resources is expected to settle the obligation and

c. the amount of the obligation can be reliably estimated.

Reimbursement expected in respect of expenditure required to settle a provision is recognised only when it is virtually certain that the reimbursement will be received.

Contingent liability is disclosed in case of

a. a present obligation arising from past events, when it is not probable that an outflow of resources will be required to settle the obligation

b. a present obligation arising from past events, when no reliable estimate is possible

c. a possible obligation arising from past events where the probability of outflow of resources is not remote.

Contingent assets are neither recognised, nor disclosed.

Provisions, contingent liabilities and contingent assets are reviewed at each Balance Sheet date.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

23. Commitments

Commitments are future liabilities for contractual expenditure.

Commitments are classified and disclosed as follows:

a. Estimated amount of contracts remaining to be executed on capital account and not provided for

b. Uncalled liability on shares and other investments partly paid

c. Funding related commitment to subsidiary, associate and joint venture companies and

d. Other non-cancellable commitments, if any, to the extent they are considered material and relevant in the opinion of management.

Other commitments related to sales/procurements made in the normal course of business are not disclosed to avoid excessive details.

24. Operating cycle for current and non-current classification

Operating cycle for the business activities of the Company covers the duration of the specific project/contract/product line/service including the defect liability period, wherever applicable and extends up to the realisation of receivables (including retention monies) within the agreed credit period normally applicable to the respective lines of business.

25. Cash flow statement

Cash flow statement is prepared segregating the cash flows from operating, investing and financing activities. Cash flow from operating activities is reported using indirect method. Under the indirect method, the net profit is adjusted for the effects of:

I. transactions of a non-cash nature

II. any deferrals or accruals of past or future operating cash receipts or payments and

III. items of income or expense associated with investing or financing cash flows

Cash and cash equivalents (including bank balances) are reflected as such in the Cash Flow Statement. Those cash and cash equivalents which are not available for general use as on the date of Balance Sheet are also included under this category with a specific disclosure.

NOTE B : SHARE CAPITAL

Particulars	As at 31.03.2015		*As at 31.03.2014*	
	Number of shares	**(₹ Crore)**	*Number of shares*	*(₹ Crore)*
B(I) Authorised, issued, subscribed and paid up:				
Authorised:				
Equity shares of ₹ 10 each	**2,00,00,00,000**	**2,000.00**	*2,00,00,00,000*	*2,000.00*
Preference shares of ₹ 10 each	**1,000,000,000**	**1,000.00**	*1,000,000,000*	*1,000.00*
Issued:				
Equity shares of ₹ 10 each	**1,00,00,50,000**	**1,000.05**	*1,00,00,50,000*	*1,000.05*
Preference shares of ₹ 10 each	**500,000,000**	**500.00**	*500,000,000*	*500.00*
Subscribed and paid up:				
Equity shares of ₹ 10 each	**1,00,00,50,000**	**1,000.05**	*1,00,00,50,000*	*1,000.05*
Preference shares of ₹ 10 each	**500,000,000**	**500.00**	*500,000,000*	*500.00*
TOTAL		**1,500.05**		*1,500.05*
B(II) Reconciliation of the number of equity shares and share capital:				
Issued, subscribed and fully paid up equity shares outstanding at the beginning of the year:				
Equity shares of ₹ 10 each	**1,00,00,50,000**	**1,000.05**	*50,000*	*0.05*
Preference shares of ₹ 10 each	**500,000,000**	**500.00**	–	–
Add: Shares issued during the year:				
Equity shares of ₹ 10 each	**–**	**–**	*1,00,00,00,000*	*1,000.00*
Preference shares of ₹ 10 each	**–**	**–**	*50,00,00,000*	*500.00*
Issued, subscribed and fully paid up equity shares outstanding at the end of the year:				
Equity shares of ₹ 10 each	**1,00,00,50,000**	**1,000.05**	*1,00,00,50,000*	*1,000.05*
Preference shares of ₹ 10 each	**500,000,000**	**500.00**	*500,000,000*	*500.00*

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

B(III) Terms/rights attached to equity and preference shares

(a) Equity shares:

Equity shares of the Company are issued at a par value of ₹ 10 per share. Each holder of equity shares is entitled to one vote per share.

(b) Preference shares:

The Company has issued 10% redeemable preference shares with rights and privileges as provided below:

- Dividend payable is 10% p.a. non-cumulative (Nil for C.Y. and pro-rata from date of allotment for P.Y.).
- Preference shares are non-convertible, redeemable at par at the end of 15 years from the date of allotment
- Company has anytime call option and Larsen & Toubro Limited has anytime put option after 10 years.

B(IV) Shareholders holding more than 5% of equity share as at the end of the year:

	As at 31.03.2015		*As at 31.03.2014*	
	Number of shares	**Shareholding %**	*Number of shares*	*Shareholding %*
Larsen & Toubro Limited:				
Equity shares of ₹ 10 each	**1,000,050,000**	**100%**	*1,000,050,000*	*100%*
Preference shares of ₹ 10 each	**500,000,000**	**100%**	*500,000,000*	*100%*

NOTE C : RESERVES AND SURPLUS

	As at 31.03.2015		*As at 31.03.2014*	
	(₹ Crore)	**(₹ Crore)**	*(₹ Crore)*	*(₹ Crore)*
Capital reserve				
As per last Balance Sheet	**0.02**		–	
Addition/(deduction) during the year (net)	**–**		*0.02*	
		0.02		*0.02*
Hedging reserve (net of tax): [Note Q(10)]				
As per last Balance Sheet	**(116.66)**		–	
Transfer pursuant to scheme of arangement	**–**		*(148.27)*	
Addition/(deduction) during the year (net)	**64.37**		*31.61*	
		(52.29)		*(116.66)*
Surplus Statement of Profit and Loss				
As per last Balance Sheet	**97.23**		*(0.01)*	
Depreciation charge against retained earnings [Note Q(4)]	**(4.69)**		–	
Deferred tax charge against retained earnings	**1.62**		–	
Profit/(Loss) for the year	**(654.12)**		*105.73*	
	(559.96)		*105.72*	
Less: Proposed dividend on preference shares	**–**		*7.26*	
Additional tax on dividend	**–**		*1.23*	
		(559.96)		*97.23*
TOTAL		**(612.23)**		*(19.41)*

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

NOTE : D

D(I) LONG-TERM BORROWINGS

	As at 31.03.2015 (₹ Crore)	As at 31.03.2014 (₹ Crore)
Loans and advances from related parties (unsecured)	**148.60**	*260.00*
(Inter corporate borrowing from Holding Company, repayment due on 30 April 2016)		
	148.60	*260.00*

D(II) OTHER LONG-TERM LIABILITIES

	As at 31.03.2015 (₹ Crore)	As at 31.03.2014 (₹ Crore)
Forward contract payable	**14.28**	*2.25*
Embedded derivatives payable	**34.75**	*33.68*
	49.03	*35.93*

D(III) LONG-TERM PROVISIONS

	As at 31.03.2015 (₹ Crore)	As at 31.03.2014 (₹ Crore)
Provision for employee benefits		
Post-retirement medical benefits plan [Note Q(5)(iii)(a)]	**9.97**	*7.07*
Interest rate guarantee-provident fund [Note Q(5)(iii)(a)]	**2.04**	*3.86*
	12.01	*10.93*

NOTE E :

E(I) SHORT TERM BORROWINGS

	As at 31.03.2015			As at 31.03.2014		
	Secured (₹ Crore)	Unsecured (₹ Crore)	Total (₹ Crore)	Secured (₹ Crore)	Unsecured (₹ Crore)	Total (₹ Crore)
Loans repayable on demand from banks	**112.19**	**–**	**112.19**	*184.99*	*–*	*184.99*
Short term loans and advances from banks	**48.44**	**301.18**	**349.62**	*89.87*	*172.25*	*262.12*
Commercial paper (due on 30 April, 2015)	**–**	**397.04**	**397.04**	*–*	*–*	*–*
Loans from related parties (Inter corporate borrowing from Holding Company)	**–**	**–**	**–**	*–*	*339.70*	*339.70*
	160.63	**698.22**	**858.85**	*274.86*	*511.95*	*786.81*

Loans repayable on demand from banks include fund based working capital facilities viz. cash credits and demand loans. Working capital facilities and other non-fund based facilities viz. bank guarantees and letters of credit, are secured by hypothecation of inventories, book debts and receivables.

E(II) TRADE PAYABLES

	As at 31.03.2015 (₹ Crore)	As at 31.03.2014 (₹ Crore)
Acceptances	**212.93**	*502.94*
Due to related parties:		
Holding Company and fellow subsidiary companies	**315.15**	*428.46*
Micro and small enterprises [Note Q(19)]	**15.62**	*15.64*
Due to others	**1,636.04**	*1,761.85*
	2,179.74	*2,708.89*

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

	As at 31.03.2015 (₹ Crore)	As at 31.03.2014 (₹ Crore)
E(III) OTHER CURRENT LIABILITIES		
Interest accrued but not due on borrowings	**1.95**	*3.51*
Interest accrued and due on borrowings	**0.39**	*0.02*
Due to customers (construction related activity)	**404.43**	*360.00*
Advances from customers	**575.78**	*313.70*
Embedded derivative payable	**57.65**	*101.98*
Forward contracts payable	**84.81**	*50.75*
Other payable (including sales tax, service tax and others)	**70.56**	*76.77*
	1,195.57	*906.73*

	As at 31.03.2015 (₹ Crore)	(₹ Crore)	As at 31.03.2014 (₹ Crore)	(₹ Crore)
E(IV) SHORT TERM PROVISIONS				
Provision for employee benefits :				
Gratuity [Note Q(5)(iii)(a)]	**3.76**		*0.27*	
Compensated absences	**38.04**		*37.04*	
Post-retirement medical benefits plan [Note Q(5)(iii)(a)]	**0.03**		*0.04*	
Bonus provision	**0.09**		*0.12*	
Interest rate guarantee (PF) [Note Q(5)(iii)(a)]	**–**		*0.75*	
		41.92		*38.22*
Others:				
Proposed preference dividend	**–**		*7.26*	
Additional tax on dividend	**–**		*1.23*	
Other provisions (AS 29 Related) [Note Q(12)(a)]	**36.54**		*37.26*	
		36.54		*45.75*
		78.46		*83.97*

NOTE F : FIXED ASSETS

F(I) FIXED ASSETS - TANGIBLE

(₹ Crore)

Particulars	COST					DEPRECIATION/AMORTISATION						NET BOOK VALUE	
	As at 31-03-2014	Pursuant to acquisition of HC Undertaking*	Additions	Deductions	**As at 31-03-2015**	As at 31-03-2014	Pursuant to acquisition of HC Undertaking*	Additions	Transferred toretained earnings [Note Q(4)]	Deductions	**As at 31-03-2015**	**As at 31-03-2015**	As at 31-03-2014
Land													
Free Hold	1.03	–	–	–	**1.03**	–	–	–	–	–	–	**1.03**	1.03
Lease Hold	76.87	–	20.76	–	**97.63**	2.51	–	0.89	–	–	**3.40**	**94.23**	74.36
Sub total - land	77.90	–	20.76	–	**98.66**	2.51	–	0.89	–	–	**3.40**	**95.26**	75.39
Buildings	173.34	–	9.40	–	**182.74**	15.02	–	8.20	0.30	–	**23.52**	**159.22**	158.32
Plant and equipment	1,002.20	–	28.98	23.22	**1,007.96**	373.11	–	78.46	0.34	19.86	**432.04**	**575.92**	629.09
Computers	56.31	–	5.93	3.27	**58.97**	39.99	–	7.11	2.48	3.13	**46.45**	**12.52**	16.32
Office equipments	20.08	–	1.36	0.01	**21.43**	9.35	–	3.93	1.55	0.02	**14.82**	**6.61**	10.73
Furniture and fixtures	15.01	–	1.24	–	**16.25**	8.51	–	1.21	–	–	**9.72**	**6.53**	6.50
Vehicles	34.92	–	2.35	3.73	**33.54**	13.67	–	4.56	0.02	2.52	**15.73**	**17.81**	21.25
Total	**1,379.76**	–	**70.02**	**30.23**	**1,419.55**	**462.16**	–	**104.36**	**4.69**	**25.53**	**545.68**	**873.87**	**917.60**
Previous year	*–*	*1,162.54*	*240.58*	*23.36*	*1,379.76*	*–*	*367.42*	*99.41*	*–*	*4.67*	*462.16*		
Add: Capital work in progress												**12.44**	25.13
Total - Tangible assets												**886.31**	942.73

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

F(II) FIXED ASSETS - INTANGIBLE (₹ Crore)

Particulars	COST					DEPRECIATION/AMORTISATION						NET BOOK VALUE	
	As at 31-03-2014	Pursuant to acquisition of HC Undertaking*	Additions	Deductions	**As at 31-03-2015**	As at 31-03-2014	Pursuant to acquisition of HC Undertaking*	Additions	Transferred toretained earnings [Note Q(4)]	Deductions	**As at 31-03-2015**	**As at 31-03-2015**	As at 31-03-2014
Specialised softwares	4.99	–	1.95	–	**6.94**	3.01	–	0.78	–	–	**3.79**	**3.15**	1.98
Total- Specialised softwares	**4.99**	–	**1.95**	–	**6.94**	**3.01**	–	**0.78**	–	–	**3.79**	**3.15**	**1.98**
Previous year	*–*	*4.51*	*0.51*	*0.03*	*4.99*	*–*	*2.39*	*0.63*	*–*	*0.01*	*3.01*		
Total - Intangible assets												**3.15**	1.98

Note: Obsolescence during the year - ₹ 0.30 crore *(previous year ₹ 0.02 crore)*.

NOTE G : LONG TERM LOANS AND ADVANCES

	As at 31.03.2015 (₹ Crore)	*As at 31.03.2014 (₹ Crore)*
Unsecured considered good		
Capital advances	**–**	*19.38*
Other loans and advances		
Security deposits	**15.22**	*13.56*
Advances recoverable in cash or in kind	**48.48**	*55.29*
Forward contract receivable	**39.34**	*17.92*
Embedded derivative receivable	**6.16**	*1.91*
Balances with customs, port trust etc.	**–**	*0.04*
	109.20	*108.10*

NOTE H :

H(I) INVENTORIES (at cost or net realisable value whichever is lower)

	As at 31.03.2015 (₹ Crore)	*As at 31.03.2014 (₹ Crore)*
Components	**0.60**	*14.82*
Construction material	**14.81**	*2.74*
Manufacturing work -in- progress [Note Q(22)(c)]	**20.60**	*1.19*
Stores and spares	**5.48**	*2.28*
	41.49	*21.03*

H(II) TRADE RECEIVABLES

	As at 31.03.2015 (₹ Crore)	**(₹ Crore)**	*As at 31.03.2014 (₹ Crore)*	*(₹ Crore)*
Unsecured:				
Debts outstanding for more than 6 months				
Considered good	**640.68**		*806.97*	
Considered doubtful	**18.84**		*18.53*	
	659.52		*825.50*	
Other debts: [Note H(II)(a)]				
Considered good	**803.66**		*905.90*	
Considered doubtful	**–**		*–*	
	1,463.18		*1,731.40*	
Less:Allowance for doubtful debts	**18.84**		*18.53*	
		1,444.34		*1,712.87*
Retention money				
Unsecured:				
Other retention money:				
Considered good		**288.01**		*461.79*
		1,732.35		*2,174.66*

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

H(II) (a) Unsecured-other debts includes ₹ 559.54 crore *(previous year ₹ 376.68 crore)* contractually not due.

H(III) CASH AND BANK BALANCES

	As at 31.03.2015 (₹ Crore)	*As at 31.03.2014 (₹ Crore)*
Cash and cash equivalents		
Balance with banks	**196.51**	*127.83*
Remittance in transit (current year ₹ 23,481)	**0.00**	*58.36*
Cash on hand	**0.55**	*0.92*
Other bank balances		
Fixed deposits with banks including interest accrued thereon (current year ₹ 25,000)	**0.00**	*–*
	197.06	*187.11*

H(IV) SHORT TERM LOANS AND ADVANCES

	As at 31.03.2015		*As at 31.03.2014*	
	(₹ Crore)	**(₹ Crore)**	*(₹ Crore)*	*(₹ Crore)*
Unsecured considered good				
Fellow subsidiaries				
Others		**222.33**		*269.75*
Other loans and advances				
Security deposits		**8.64**		*8.64*
Advances recoverable in cash or in kind		**566.64**		*440.35*
Income tax receivable of current year (net of provision current year Nil, previous year ₹ 44 crores)		**50.68**		*8.17*
Considered doubtful				
Other loan and advances	**42.69**		*42.69*	
Less: Allowance for doubtful loan and advances	**(42.69)**		*(42.69)*	
		–		*–*
		848.29		*726.91*

H(V) OTHER CURRENT ASSET

	As at 31.03.2015 (₹ Crore)	*As at 31.03.2014 (₹ Crore)*
Due from customers (construction and project related activity)	**1,243.29**	*2,094.41*
	1,243.29	*2,094.41*

NOTE I : CONTINGENT LIABILITIES

(a)	Claims against the Company not acknowledged as debts	**–**	*2.95*
(b)	Sales-tax liability that may arise in respect of matters in appeal	**20.00**	*20.66*
(c)	Excise duty/Service tax liability that may arise in respect of matters in appeal/challenged by the Company	**1.37**	*–*
(d)	Income-tax liability (including penalty) that may arise in respect of which the Company is in appeal	**2.57**	*2.40*

Notes:

1. The Company does not expect any reimbursements in respect of the above contingent liabilities.
2. It is not practicable to estimate the timing of cash outflows, if any, in respect of matters at (a) to (d) above pending resolution of the appellate proceedings.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

NOTE J : COMMITMENTS

	As at 31.03.2015 (₹ Crore)	As at 31.03.2014 (₹ Crore)
Estimated amount of contracts remaining to be executed on capital account (net of advances)	13.41	62.30

NOTE K : REVENUE FROM OPERATIONS

	2014-15		2013-14	
	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)
Sales and service: [Note Q(22)(a)]				
Manufacturing and trading activity	97.68		19.07	
Construction and project related activity	5,492.22		8,597.53	
Engineering and service fees	21.91		33.79	
		5,611.81		8,650.39
Other operational revenue:				
Income from hire of plant and equipment	30.15		18.29	
Technical fees	1.10		7.41	
Income from services to Group companies	26.17		34.46	
Premium earned (net) on related forward exchange contract	26.81		9.75	
Insurance claim recoveries	40.57		1.73	
Miscellaneous income	11.86		15.00	
		136.66		86.64
		5,748.47		8,737.03

K(I) Revenue from sales and service include ₹ (6.61) crore *[previous year ₹ 10.29 crore]* for price variations net of liquidated damages in terms of contracts with the customers.

NOTE L : OTHER INCOME

	2014-15 (₹ Crore)	2013-14 (₹ Crore)
Interest income		
Others	0.17	0.10
Net gain/(loss) on sale of fixed assets (net)	2.33	0.39
Provision no longer required written back	14.85	0.40
	17.35	0.89

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

NOTE M : MANUFACTURING, CONSTRUCTION AND OPERATING EXPENSES

	2014-15		2013-14	
	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)
Materials consumed				
Raw materials and components [Note Q(22)(b)]	1,699.01		2,759.40	
Less: scrap sales	28.00		27.58	
		1,671.01		2,731.82
Construction materials		546.66		329.23
Stores,spares and tools consumed		63.72		120.94
Sub-contracting charges		2,457.53		3,202.91
Changes in inventories of work- in- progress and stock-in- trade:				
Closing stock:				
Work-in-progress	55.78		52.97	
Less:opening stock:				
Work-in-progress	52.97		79.72	
		(2.81)		26.75
Other manufacturing ,construction and operating expenses:				
Power and fuel [Note (O)(I)]	55.38		131.80	
Royalty and technical know-how fees	0.69		0.75	
Packing and forwarding [Note (O)(I)]	7.99		9.15	
Hire charges - plant and equipment and others	349.90		309.93	
Engineering, technical and consultancy fees	280.41		205.70	
Insurance [Note (O)(I)]	17.14		11.59	
Rent [Note (O)(I)]	28.69		45.60	
Rates and taxes [Note (O)(I)]	7.32		7.28	
Travelling and conveyance [Note (O)(I)]	125.24		144.77	
Repairs to plant and equipment	2.65		4.46	
Repairs to buildings [Note (O)(I)]	0.00		–	
General repairs and maintenance [Note (O)(I)]	24.01		21.79	
Bank guarantee charges	26.07		9.02	
Miscellaneous expenses [Note (O)(I)]	66.36		34.24	
		991.85		936.08
		5,727.96		7,347.73

NOTE N : EMPLOYEE BENEFITS EXPENSE

	2014-15		2013-14	
Salaries, wages and bonus		522.00		588.34
Contribution to and provision for:				
Provident funds and pension fund	12.93		11.30	
Superannuation/ employee pension schemes (including provisions current year ₹ 0.34 crore, previous year ₹ 0.30 crore)	0.34		0.93	
Gratuity provision [Note Q(5)(iii)(b)]	3.51		1.08	
		16.78		13.31
Expenses on Employee Stock Option Schemes [Note Q(5)]		5.28		8.70
Insurance expenses-medical and others [Note (O)(I)]		12.83		5.30
Staff welfare expenses		48.47		39.43
		605.36		655.08

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

NOTE O : SALES, ADMINISTRATION AND OTHER EXPENSES

	2014-15		2013-14	
	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)
Power and fuel [Note O(I)]		3.35		3.26
Packing and forwarding [Note O(I)]		2.44		0.01
Professional fees		31.63		30.69
Audit fees [Note Q(14)]		0.51		0.25
Insurance [Note O(I)]		2.65		3.11
Rent [Note O(I)]		8.14		9.39
Rates and taxes [Note O(I)]		2.95		2.14
Travelling and conveyance [Note O(I)]		14.48		22.30
Repairs to buildings [Note O(I)]		0.96		1.24
General repairs and maintenance [Note O(I)]		19.57		13.23
Directors' fees		0.07		–
Telephone, postage and telegrams		10.52		11.87
Advertising and publicity		4.16		1.23
Stationery and printing		7.04		7.81
Bank charges		5.76		7.44
Overheads charged by Holding Company and fellow subsidiaries		99.79		123.51
Miscellaneous expenses [Note O(I)]		16.46		12.68
Bad debts and advances written off	0.79		2.89	
Less:Allowance for doubtful debts and advances written back	0.75		2.22	
		0.04		0.67
Allowance for doubtful debts and advances (net)		1.06		(2.97)
Provision / (reversal)for foreseeable losses on construction contracts		(34.17)		73.08
Exchange (gain) /loss (net)		(9.97)		81.02
Other provisions [Note Q(12)]		(0.72)		6.18
		186.72		408.14

O(I) Aggregation of expenses disclosed vide notes M, N and O in respect of specific items are as follows:

Sr. No.	Nature of expenses	2014-15				2013-14			
		Note M	Note N	Note O	Total	Note M	Note N	Note O	Total
		(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)
1	Power and fuel	55.38	–	3.35	58.73	131.80	–	3.26	135.06
2	Packing and forwarding	7.99	–	2.44	10.43	9.15	–	0.01	9.16
3	Insurance	17.14	12.83	2.65	32.62	11.59	5.30	3.11	20.00
4	Rent	28.69	–	8.14	36.83	45.60	–	9.39	54.99
5	Rates and taxes	7.32	–	2.95	10.27	7.28	–	2.14	9.42
6	Travelling and conveyance	125.24	–	14.48	139.72	144.77	–	22.30	167.07
7	Repairs to buildings	0.00	–	0.96	0.96	–	–	1.24	1.24
8	General repairs and maintanance	24.01	–	19.57	43.58	21.79	–	13.23	35.02
9	Miscellaneous expenses	66.36	–	16.46	82.82	34.24	–	12.68	46.92

NOTE P : FINANCE COSTS

	2014-15	2013-14
	(₹ Crore)	(₹ Crore)
Interest expenses	97.32	25.91
Exchange loss (attributable to finance costs)	20.25	16.05
	117.57	41.96

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

NOTE Q : OTHER NOTES FORMING PART OF THE ACCOUNTS

Q(1) The Balance Sheet as on March 31, 2015 and the Statement of Profit and Loss for the year ended March 31, 2015 are drawn and presented as per the format prescribed under schedule III of the Companies Act, 2013.

Q(2) The expenditure on research and development activities recognised as expense in the Statement of Profit and Loss is ₹ 11.48 crore *(previous year: ₹ 11.48 crore)*. Further, the Company has incurred capital expenditure on research and development activities of ₹ 0.54 crore *(previous year: ₹ 0.14 crore)*.

Q(3) a) Disclosures pursuant to Accounting Standard (AS) 7 (Revised) "Construction Contracts":

	Particulars	**2014-2015 (₹ Crore)**	*2013-14 (₹ Crore)*
i)	Contract revenue recognised for the financial year [Note (K)]	**5,492.22**	8,597.53
ii)	Aggregate amount of contract costs incurred and recognised profits (less recognised losses) as at end of the financial year for all contracts in progress as at that date	**20,440.04**	21,069.19
iii)	Amount of customer advances outstanding for contracts in progress as at end of the financial year	**553.60**	292.00
iv)	Retention amounts by customers for contracts in progress as at end of the financial year	**288.01**	461.79

b) The Company has made provision, as required under the applicable law or accounting standard for material foreseeable losses on long term contracts

Q(4) Disclosures pursuant to Accounting Standard (AS) 6 "Depreciation Accounting":

Consequent to revision in useful life of certain assets on adoption of schedule II to the Companies Act, 2013, the depreciation for the year ended March 31, 2015 is higher and the loss before tax is higher by ₹ 11.04 crore.

Further, an amount of ₹ 3.07 crore (net of deferred tax of ₹ 1.62 crore) representing the carrying amount of assets with revised useful life as nil as on April 1,2014, has been charged to the opening reserves as on April 1, 2014 pursuant to the Companies Act, 2013.

Q(5) Disclosure pursuant to Accounting Standard (AS) 15 (Revised) "Employee Benefits"

i. Defined contribution plans: [Note A(6)(b)(i)] ₹ 8.03 crore *(previous year: ₹ 5.72 crore)* is recognised as an expense and included in "employee benefits expense" (Note N) in the Statement of Profit and Loss.

ii. The assets of the gratuity fund of Larsen & Toubro Limited ("L&T") that pertain to the employees of the Company will be transferred to the gratuity fund of the Company when it is formed. The fair value of plan assets that pertain to the Company are as valued by the actuarial valuer as at March 31, 2015 and are disclosed below under present value of defined benefit obligations.

iii. Defined benefit plans: [accounting policy no. A(6)(b)(ii)]

a) The amounts recognised in Balance Sheet are as follows:

	Particulars	**Gratuity plan**		**Post-retirement medical benefit plan**		**Trust-managed provident fund plan**	
		As at 31.3.2015 (₹ Crore)	*As at 31.3.2014 (₹ Crore)*	**As at 31.3.2015 (₹ Crore)**	*As at 31.3.2014 (₹ Crore)*	**As at 31.3.2015 (₹ Crore)**	*As at 31.3.2014 (₹ Crore)*
A)	**Present value of defined benefit obligation**						
	– Wholly funded			**–**		**209.06**	*184.55*
	– Wholly unfunded	**29.18**	*25.23*	**10.00**	*7.11*		
	Less: Fair value of plan assets	**25.42**	*24.96*	**–**		**209.29**	*186.32*
	Less: Unrecognised past service costs	**–**		**–**			
	Amount to be recognised as liability or (asset)	**3.76**	*0.27*	**10.00**	*7.11*	**(0.23)**	*(1.77)*
B)	**Amounts reflected in the Balance Sheet**						
	Liabilities	**3.76**	*0.27*	**10.00**	*7.11*	**2.87**	*7.03*
	Assets	**–**				**–**	*–*
	Net liability/(asset)	**3.76**	*0.27*	**10.00**	*7.11*	**2.87**	*7.03*
	Net liability/(asset) - current	**3.76**	*0.27*	**0.03**	*0.04*	**0.83**	*3.89*
	Net liability/(asset) - non-current	**–**		**9.97**	*7.07*	**2.04**	*3.86*

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

b) The amounts recognised in Statement of Profit and Loss are as follows:

	Particulars	Gratuity plan		Post-retirement medical benefit plan		Trust-managed provident fund plan	
		As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)	As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)	As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)
1	Current service cost	2.26	2.41	0.68	0.70	11.56	11.13
2	Interest cost	2.31	2.07	0.71	0.62	14.83	12.44
3	Expected (return) on plan assets	(1.77)	(1.59)		–	(14.83)	(12.44)
4	Actuarial losses/(gains)	0.71	(1.81)	1.50	(0.49)	0.83	(1.77)
5	Past service cost				–		
6	Actuarial gain/(loss) not recognised in books				–	(0.83)	1.77
Total (1 to 6)		3.51	1.08	2.89	0.83	11.56	11.13
I	Amount included in "employee benefit expenses"	3.51	1.08	2.89	0.83	11.56	11.13
Actual return on plan assets		3.85	0.80	–	–	14.00	1.79

c) The changes in the present value of defined benefit obligation representing reconciliation of opening and closing balances thereof are as follows:

Particulars	Gratuity plan		Post-retirement medical benefit plan		Trust-managed provident fund plan	
	As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)	As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)	As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)
Opening balance of the present value of defined benefit obligation	25.23	0	7.11	0	184.55	0
Add: Current service cost	2.26	2.41	0.68	0.70	11.56	11.13
Add: Interest cost	2.31	2.07	0.71	0.62	14.83	12.44
Add: Contribution by plan participants						
i) Employer						
ii) Employee					20.59	18.43
iii) Transfer-in/(out)		25.11		6.28		142.55
Add/(less): Actuarial losses/(gains)	2.78	(2.61)	1.50	(0.49)		
Less: Benefits paid	(3.40)	(1.75)		–	(22.47)	
Closing balance of the present value of defined benefit obligation	29.18	25.23	10.00	7.11	209.06	184.55

d) Changes in the fair value of plan assets representing reconciliation of the opening and closing balances thereof are as follows:

Particulars	Gratuity plan		Trust-managed provident fund plan	
	As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)	As at 31.3.2015 (₹ Crore)	As at 31.3.2014 (₹ Crore)
Opening balance of the fair value of the plan assets	24.96	–	186.32	0
Add: Expected return on plan assets*	1.77	1.59	14.83	12.44
Add/(Less): Actuarial gains/(losses)	2.09	(0.79)	(0.83)	1.77
Add: Contribution by the employer		3.78	10.85	11.13
Add/(less) : Transfer in/(out)		22.13		142.55
Add: Contribution by plan participants			20.59	18.43
Less: Benefits paid	(3.40)	(1.75)	(22.47)	
Closing balance of the plan assets	25.42	24.96	209.29	186.32

Notes: The fair value of the plan assets under the trust managed provident fund plan has been determined at amounts based on their value at the time of redemption, assuming a constant rate of return to maturity.

* Basis used to determine the overall expected return:

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Expected return on plan assets is determined based on the assessment made at the beginning of the year on the return expected on its existing portfolio, along with the estimated increment to the plan assets and expected yield on the respective assets in the portfolio during the year.

e) The major categories of plan assets as a percentage of total plan assets are as follows:

Particulars	Gratuity plan		Trust-managed provident fund plan	
	As at 31.3.2015	*As at 31.3.2014*	**As at 31.3.2015**	*As at 31.3.2014*
	(₹ Crore)	*(₹ Crore)*	**(₹ Crore)**	*(₹ Crore)*
Government of India securities	**–**	*45%*	**24.67%**	*24.35%*
State government securities	**–**	*–*	**15.12%**	*14.84%*
Corporate bonds	**–**	*50%*	**7.56%**	*7.63%*
Equity shares of listed companies	**–**	*2%*		
Insurer managed funds	**–**	*3%*		
Public sector unit bonds	**–**	*–*	**42.27%**	*41.48%*
Special Desposit Scheme	**–**	*–*	**10.31%**	*11.62%*
Mutual Funds	**–**	*–*	**0.07%**	*0.08%*
Others	**100%**	*–*	**–**	*–*

f) Principal actuarial assumptions at the Balance Sheet date (expressed as weighted averages):

		As at 31.03.2015	*As at 31.03.2014*
		(₹ Crore)	*(₹ Crore)*
1	Discount rate:		
	a) Gratuity plan	**7.83%**	*9.19%*
	b) Post-retirement medical benefit plan	**7.83%**	*9.19%*
2	Expected return on plan assets:	**7.50%**	*7.50%*
3	Annual increase in healthcare costs (see note below)	**5.00%**	*5.00%*
4	Salary growth rate:		
	a) Gratuity plan	**5.00%**	*5.00%*

5. Attrition rate:
   a) For post-retirement medical benefit plan, the attrition rate varies from 2% to 8% *(previous year: 2% to 8%)* for various age groups.
   b) For gratuity plan, the attrition rate varies from 1% to 6% *(previous year: 1% to 6%)* for various age groups.
6. The estimates of future salary increases, considered in actuarial valuation, take into account inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.
7. The interest payment obligation of trust-managed provident fund is assumed to be adequately covered by the interest income on long term investments of the fund. Any shortfall in the interest income over the interest obligation is recognised immediately in the Statement of Profit and Loss as actuarial losses.
8. The obligation of the Company under the post-retirement medical benefit plan is limited to the overall ceiling limits. At present, healthcare cost, as indicated in the principal actuarial assumption given above, has been assumed to increase at 5% p.a.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

9. A one percentage point change in assumed healthcare cost trend rates would have the following effects on the aggregate of the service cost and interest cost and defined benefit obligation:

Particulars	Effect of 1% increase		Effect of 1% decrease	
	2014-2015	*2013-2014*	**2014-2015**	*2013-2014*
	(₹ Crore)	*(₹ Crore)*	**(₹ Crore)**	*(₹ Crore)*
Effect on the aggregate of the service cost and interest cost	**0.38**	*0.27*	**(0.30)**	*(0.21)*
Effect on defined benefit obligation	**1.82**	*1.2*	**(1.43)**	*(0.95)*

g) The amounts pertaining to defined benefit plans are as follows

	Particulars	As at 31.03.2015	As at 31.03.2014
		(₹ Crore)	*(₹ Crore)*
1	Post-retirement medical benefit plan (unfunded)		
	Defined benefit obligation	**10.00**	*7.11*
	Experience adjustment plan liabilities	**(0.99)**	*0.61*
2	Gratuity plan (unfunded)		
	Defined benefit obligation	**29.18**	*25.23*
	Plan assets	**25.42**	*24.96*
	Surplus/(deficit)	**(3.76)**	*(0.27)*
	Experience adjustment plan liabilities	**0.01**	*(0.28)*
	Experience adjustment plan assets	**2.09**	*(0.79)*
3	Trust managed provident fund plan (funded)		
	Defined benefit obligation	**209.06**	*184.55*
	Plan assets	**209.29**	*186.32*
	Surplus/(deficit)	**0.23**	*1.77*

General descriptions of defined benefit plans:

1. Post-retirement medical benefit plan:

   The Post-retirement medical benefit plan provides for reimbursement of health care costs to certain categories of employees post their retirement. The reimbursement is subject to an overall ceiling sanctioned based on cadre of the employee at the time of retirement.

2. Trust managed provident fund plan:

   The Company's provident fund plan is managed by its holding company through a Trust recognised under the Provident Fund and Miscellaneous Provisions Act, 1952. The plan envisages contribution by employer and employees and guarantees interest at the rate notified by the provident fund authority. The contribution by employer and employee together with interest are payable at the time of separation from service or retirement, whichever is earlier. The benefit under this plan vests immediately on rendering of service.

   The interest payment obligation of trust-managed provident fund is assumed to be adequately covered by the interest income on long term investments of the fund. Any shortfall in the interest income over the interest obligation is recognized immediately in the Statement of Profit and Loss as actuarial loss. Any loss / gain arising out of the investment risk and actuarial risk associated with the plan is also recognized as expense or income in the period in which such loss / gain occurs.

Q(6) Disclosures pursuant to Accounting Standard (AS 17) "Segment Reporting"

a) Information about business segments (information provided in respect of revenue items for the year ended March 31, 2015 and in respect of assets/liabilities as at March 31, 2015 denoted as "CY" below, previous year denoted as "PY")

   i) Primary segments (business segments): The Company operates in only one segment, i.e. integrated EPC projects on turnkey basis in Hydrocarbon sector.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

(ii) Secondary segments (geographical segments):

(₹ Crore)

Particulars	Domestic		Overseas		Total	
	CY	PY	CY	PY	CY	PY
External revenue by location of customers	3670.99	*4,014.87*	2077.48	4,722.16	5748.47	8,737.03
Carrying amount of segment assets by location of assets	3727.97	*3,851.03*	1333.17	2,405.90	5061.14	6,256.93
Cost incurred on acquisition of tangible and intangible fixed assets (PY includes assets acquired on transfer of HC Undertaking)	51.55	*736.87*	7.72	*255.93*	59.27	992.80

b) Segment reporting: segment identification, reportable segments and definition of each reportable segment:

i) Primary/secondary segment reporting format:

[a] The risk-return profile of the Company's business is determined predominantly by the nature of its products and services. Accordingly, the business segments constitute the primary segments for disclosure of segment information.

[b] In respect of secondary segment information, the Company has identified its geographical segments as (i) domestic and (ii) overseas. The secondary segment information has been disclosed accordingly.

ii) Segment identification:

Business segments have been identified on the basis of the nature of products/services, the risk-return profile of individual businesses, the organisational structure and the internal reporting system of the Company.

iii) Reportable segments:

Reportable segments have been identified as per the criteria specified in Accounting Standard (AS) 17 "Segment Reporting" issued by the Institute of Chartered Accountants of India.

Q(7) Disclosure of related parties/related party transactions pursuant to Accounting Standard (AS 18) "Related Party Disclosures"

i. Related parties who exercise control

Sr. No.	Name of the related party	Relationship
1	Larsen & Toubro Limited	Holding Company

ii. List of related parties with whom there were transactions during the year:

Sr. No.	Name of the related party	Relationship
1	Larsen & Toubro Limited	Holding Company
2	L&T Sargent & Lundy Limited	Fellow Subsidiary
3	L&T Valdel Engineering Limited	Fellow Subsidiary
4	L&T Shipbuilding Limited	Fellow Subsidiary
5	L&T Electrical and Automation FZE	Fellow Subsidiary
6	L&T Gulf Private Limited	Fellow Subsidiary
7	L&T Special Steels and Heavy Forgings Private Limited	Fellow Subsidiary
8	L&T Sapura Shipping Private Limited	Fellow Subsidiary
9	L&T Sapura Offshore Private Limited	Fellow Subsidiary
10	EWAC Alloys Limited	Fellow Subsidiary
11	Larsen & Toubro Infotech Limited	Fellow Subsidiary
12	Larsen & Toubro Electromech LLC	Fellow Subsidiary
13	L&T Modular Fabrication Yard LLC	Fellow Subsidiary
14	Larsen & Toubro Kuwait Construction General Contracting Company, WLL	Fellow Subsidiary
15	Larsen & Toubro ATCO Saudi LLC	Fellow Subsidiary
16	Larsen & Toubro Heavy Engineering LLC	Fellow Subsidiary

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Sr. No.	Name of the related party	Relationship
17	L&T Valves Limited	Fellow Subsidiary
18	PT TAMCO Indonesia	Fellow Subsidiary
19	Larsen Toubro Arabia LLC	Fellow Subsidiary
20	L&T Geostructure LLP	Fellow Subsidiary
21	Larsen & Toubro Readymix and Asphalt Concrete Industries LLC	Fellow Subsidiary
22	Tamco Switchgear (Malaysia) SDN BHD	Fellow Subsidiary
23	L&T Technology Services Limited	Fellow Subsidiary
24	L&T Infrastructure Engineering Limited	Fellow Subsidiary
25	L&T - MHPS Boilers Private Limited	Fellow Subsidiary
26	L&T Howden Private Limited	Fellow Subsidiary
27	L&T Information Technology Services (Shanghai) Co. Ltd.	Fellow Subsidiary

iii. Key management personnel with whom transactions were carried out during the year:

Key management personnel:		
1	**Mr. K. Ravindranath**	(Whole-time director)
2	**Mr. U. Dasgupta**	(Whole-time director)

iv. Disclosure of related party transactions: **(₹ Crore)**

Sr. no.	Nature of transaction/relationship/major parties	2014-2015		*2013-2014*	
		Amount	**Amounts for major parties**	*Amount*	*Amounts for major parties*
1	Purchase of goods & services (including commission paid)				
	Holding Company (Larsen & Toubro Limited)	**107.62**		*81.84*	
	Fellow subsidiaries, including:	**835.69**		*1044.56*	
	Larsen & Toubro Electromech LLC		**487.53**		*486.67*
	L&T Modular Fabrication Yard LLC		**62.96**		*363.86*
	L&T Valves Limited		**37.09**		*18.60*
	L&T Gulf Private Limited		**21.16**		*10.48*
	Larsen & Toubro Kuwait Construction General Contracting Company, WLL		**14.96**		*64.75*
	Larsen & Toubro Heavy Engineering LLC		**39.20**		*42.64*
	L&T Sapura Shipping Private Limited		**–**		*19.67*
	L&T Sapura Offshore Private Limited		**35.99**		*0.54*
	L&T Valdel Engineering Limited		**34.81**		*33.65*
	EWAC Alloys Limited		**0.22**		*2.73*
	L&T Sargent & Lundy Limited		**0.30**		*0.82*
	Larsen & Toubro International FZE		**–**		*0.15*
	Larsen Toubro Arabia LLC		**(0.11)**		*–*
	LT Electrical and Automation FZE		**19.90**		*–*
	L&T Special Steels and Heavy Forgings Private Limited		**0.01**		*–*
	L&T Geostructure LLP		**69.09**		*–*
	Larsen & Toubro Readymix and Asphalt Concrete Industries LLC		**5.53**		*–*
	Tamco Switchgear (Malaysia) SDN BHD		**4.88**		*–*
	L&T Information Technology Services (Shanghai) Co. Ltd.		**2.13**		*–*
	L&T Infrastructure Engineering Limited		**0.04**		*–*
	Total	**943.31**		*1126.38*	

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Sr. no.	Nature of transaction/relationship/major parties	2014-2015		*2013-2014*	
		Amount	**Amounts for major parties**	*Amount*	*Amounts for major parties*
2	Sale of goods/contract revenue & services				
	Holding Company (Larsen & Toubro Limited)	**0.26**		*1.22*	
	Fellow subsidiaries, including:	**28.20**		*102.51*	
	Larsen & Toubro ATCO Saudi LLC		**–**		*78.53*
	Larsen Toubro Arabia LLC		**26.59**		*18.23*
	Larsen & Toubro Electromech LLC		**–**		*3.06*
	L&T Modular Fabrication Yard LLC		**0.09**		*1.65*
	L&T Electrical and Automation FZE		**–**		*0.10*
	L&T Special Steels and Heavy Forgings Private Limited		**1.03**		*0.53*
	L&T Gulf Private Limited		**–**		*0.14*
	L&T Sargent & Lundy Limited		**–**		*0.27*
	L&T Technology Services Limited		**0.37**		
	L&T Valdel Engineering Limited		**0.08**		
	L&T - MHPS Boilers Private Limited		**0.04**		*–*
	Total	**28.46**		*103.73*	
3	Purchase/lease of fixed assets				
	Holding Company (Larsen & Toubro Limited)	**0.48**		*11.24*	
	Fellow subsidiaries, including:	**1.87**		*16.74*	
	Larsen and Toubro Infotech Limited		**1.86**		*–*
	L&T Valdel Engineering Limited		**0.01**		*–*
	L&T Shipbuilding Limited		**–**		*16.11*
	L&T International FZE		**–**		*0.56*
	EWAC Alloys Limited		**–**		*0.07*
	Total	**2.35**		*27.98*	
4	Sale of fixed assets				
	Holding Company (Larsen & Toubro Limited)	**0.04**			
	Fellow subsidiaries:	**0.10**		*0.62*	
	Larsen Toubro Arabia LLC		**0.01**		*–*
	Larsen and Toubro Electromech LLC		**0.01**		*–*
	L&T Technology Services Limited		**0.08**		*–*
	Larsen & Toubro ATCO Saudi LLC		**–**		*0.62*
	Total	**0.14**		*0.62*	
5	Receiving of services from:				
	Holding Company (Larsen & Toubro Limited)	**100.30**		*123.04*	
	Fellow subsidiaries, including:	**6.85**		*5.93*	
	Larsen & Toubro Infotech Limited		**6.13**		*5.15*
	L&T Gulf Private Limited		**–**		*0.63*
	L&T Sargent & Lundy		**–**		*0.10*
	L&T Valdel Engineering Limted		**0.05**		*0.04*
	EWAC Alloys Limited		**–**		*0.01*
	Larsen and Toubro ATCO Saudi LLC		**0.26**		*–*
	L&T Electrical and Automation FZE		**0.37**		*–*
	PT Tamco Indonesia		**0.04**		*–*
	Total	**107.15**		*128.97*	

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Sr. no.	Nature of transaction/relationship/major parties	2014-2015		2013-2014	
		Amount	Amounts for major parties	Amount	Amounts for major parties
6	Charges for deputation of employees to related parties				
	Fellow subsidiaries, including:	6.25		6.10	
	L&T Sapura Shipping Private Limited		5.75		5.34
	L&T Sapura Offshore Private Limited		–	–	0.76
	L&T Technology Services Limited		0.50		
	Total	6.25		6.10	
7	Rent received, overheads recovered and miscellaneous income				
	Holding Company (Larsen & Toubro Limited)	8.16		36.29	
	Fellow subsidiaries, including:	43.38		41.44	
	Larsen & Toubro ATCO Saudi LLC		14.01		20.39
	Larsen Toubro Arabia LLC		13.05		6.87
	L&T Modular Fabrication Yard LLC		1.62		6.84
	Larsen & Toubro Kuwait Construction General Contracting Company, WLL		0.97		3.20
	L&T Valdel Engineering Limited		0.18		2.04
	L&T Valves Limited		0.10		0.17
	L&T MHPS Boilers Private Limited		0.08		0.07
	Larsen & Toubro Electromech LLC		9.26		(0.52)
	L&T Gulf Private Limited		0.95		0.73
	L&T Sapura Offshore Private Limited		0.04		0.04
	L&T Sapura Shipping Private Limited		1.38		1.40
	Larsen & Toubro Saudi Arabia LLC		–		0.20
	L&T MHPS Turbine Generators Private Limited		0.01		0.01
	L&T Special Steels and Heavy Forgings Private Limited		0.02		–
	L&T Howden Private Limited		0.01		–
	L&T Shipbuilding Limited		1.63		–
	L&T- Sargent and Lundy Limited		0.02		–
	L&T Technology Services Limited		0.05		–
	Total	51.54		77.73	
8	Interest paid to				
	Holding Company (Larsen & Toubro Limited)	76.00		8.46	
	Total	76.00		8.46	
9	Dividend on preference shares paid to				
	Holding Company (Larsen & Toubro Limited)	7.26		–	
	Total	7.26		–	
10	Rent paid,including lease rentals under leasing/hire purchase arrangements including loss sharing on equipment finance				
	Holding Company (Larsen & Toubro Limited)	3.89		–	
	Total	3.89		–	
11	Transfer of Hydrocarbon business from				
	Holding Company (Larsen & Toubro Limited)	–		1760.02	
	Total			1760.02	
12	Payment of salaries/ perquisites				
	(Key management personnel)*				
	Mr. U. Dasgupta		1.56		1.57
	Mr. K. Ravindranath		1.08		0.78
	Total	2.64		2.35	

* In addition to this, the Company has reimbursed ₹ 0.75 cr to Larsen & Toubro Limited towards share of remuneration paid to Mr.K Venkataramanan, being Key management personnel which have been included in point 5 supra.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

v. Amount due to/from related parties **(₹ Crore)**

Sr. no.	Nature of transaction/relationship/major parties	As at 31.3.2015		*As at 31.3.2014*	
		Amount	**Amounts for major parties**	*Amount*	*Amounts for major parties*
1	Accounts payable (including acceptance & interest accrued)				
	Holding Company (Larsen & Toubro Limited)	**130.17**		*278.49*	
	Fellow subsidiaries, including:	**186.42**		*156.47*	
	Larsen & Toubro Electromech LLC		**42.69**		*59.23*
	L&T Modular Fabrication Yard LLC		**25.15**		*39.05*
	Larsen & Toubro ATCO Saudi LLC		**0.52**		*0.23*
	L&T Valves Limited		**17.53**		*11.34*
	Larsen and Toubro (East Asia) SDN.BHD		**1.33**		*0.59*
	EWAC Alloys Limited		**0.25**		*0.23*
	L&T Special Steels and Heavy Forgings Private Limited		**–**		*0.01*
	L&T Geostructure LLP		**39.69**		*1.11*
	L&T Gulf Private Limited		**7.99**		*5.15*
	L&T FinCorp Limited		**–**		*3.08*
	Larsen and Toubro Infotech Limited		**3.31**		*3.59*
	Larsen and Toubro International FZE		**0.30**		*0.62*
	Larsen & Toubro Kuwait Construction General Contracting Company, WLL		**1.32**		*1.35*
	Larsen & Toubro Heavy Engineering LLC		**9.07**		*6.96*
	L&T Shipbuilding Limited		**1.67**		*9.05*
	L&T Sapura Offshore Private Limited		**5.88**		*0.55*
	L&T Sapura Shipping Private Limited		**–**		*3.40*
	L&T Sargent & Lundy Limited		**0.12**		*0.45*
	PT TAMCO Indonesia		**0.16**		*0.12*
	TAMCO Switchgear (Malaysia) SDN BHD		**1.16**		*0.23*
	L&T Valdel Engineering Limited		**10.18**		*10.13*
	L&T Electrical and Automation FZE		**14.59**		*–*
	Larsen & Toubro Readymix and Asphalt Concrete Industries LLC		**2.69**		*–*
	L&T Technology Services Limited		**0.72**		*–*
	L&T Infrastructure Engineering Limited		**0.10**		*–*
	Total	**316.59**		*434.96*	
2	Loans & advances recoverable				
	Holding Company (Larsen & Toubro Limited)	**66.55**		*121.91*	
	Fellow subsidiaries, including:	**200.53**		*167.17*	
	Larsen Toubro Arabia LLC		**51.06**		*29.95*
	Larsen & Toubro ATCO Saudi LLC		**42.38**		*28.07*
	L&T Valves Limited		**6.28**		*3.01*
	L&T MHPS Boilers Private Limited		**0.06**		*0.13*
	Larsen & Toubro Electromech LLC		**19.09**		*15.79*
	LT Electrical and Automation FZE		**0.59**		*0.33*

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Sr. no.	Nature of transaction/relationship/major parties	As at 31.3.2015		*As at 31.3.2014*	
		Amount	**Amounts for major parties**	*Amount*	*Amounts for major parties*
	L&T Special Steels and Heavy Forgings Private Limited		**0.62**		*0.12*
	L&T Gulf Private Limited		**2.01**		*1.05*
	L&T Howden Private Limited		**0.02**		*0.01*
	L&T Hydrocarbon International LLC		**4.16**		*0.15*
	Larsen & Toubro Heavy Engineering LLC		**10.74**		*19.50*
	Larsen & Toubro Kuwait Construction General Contracting Company, WLL		**9.12**		*5.58*
	L&T Shipbuilding Limited		**2.58**		*20.08*
	L&T Modular Fabrication Yard LLC		**20.10**		*15.81*
	L&T Sapura Offshore Pvt Ltd.		**12.29**		*11.88*
	L&T Sapura Shipping Pvt. Ltd.		**16.74**		*12.88*
	L&T Valdel Engineering Limited		**1.36**		*2.45*
	Larsen & Toubro Infotech Limited		**–**		*0.04*
	L&T Sargent & Lundy Limited		**0.23**		*0.12*
	Larsen & Toubro Saudi Arabia LLC		**–**		*0.20*
	L&T MHPS Turbine Generators Private Limited		**–**		*0.02*
	L&T Technology Services Limited		**1.10**		*–*
	Total	**267.08**		*289.08*	
3	Unsecured loans (including lease finance)				
	Holding Company (Larsen & Toubro Limited)	**148.60**		*599.70*	
	Total	**148.60**		*599.70*	

Q(8) Disclosure in respect of leases pursuant to Accounting Standard (AS 19) "Leases"

Where the Company is a lessee:

a) Operating leases:

i. The Company has taken various commercial premises and plant and equipment under cancellable operating leases. These lease agreements are normally renewed on expiry.

ii. [a] The Company has taken certain assets like cars, technology assets, etc. on non-cancellable operating leases, the future minimum lease payments in respect of which are as follows:

(₹ Crore)

Particulars		Minimum lease payments	
		As at 31.3.2015	*As at 31.3.2014*
1.	Payable not later than 1 year	**0.54**	*1.23*
2.	Payable later than 1 year and not later than 5 years	**0.13**	*0.79*
3.	Payable later than 5 years	**–**	*–*
	Total	**0.67**	*2.02*

[b] The lease agreements provide for an option to the Company to renew the lease period at the end of the non-cancellable period. There are no exceptional/restrictive covenants in the lease agreements.

iii. Lease rental expense in respect of operating leases: ₹ 8.21 crore *(previous year: ₹ 7.29 crore).*

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Q(9) Basic and diluted earnings per share [EPS] computed in accordance with pursuant to Accounting Standard (AS) 20 "Earnings per Share".

		2014-2015	*2013-2014*
Basic			
Profit / (loss) after tax as per accounts (₹ crore)		**(654.12)**	*105.73*
Less: Preference dividend and dividend distribution tax		**–**	*8.49*
Profit / (loss) after tax as per accounts (₹ crore)	**A**	**(654.12)**	*97.24*
Weighted average number of shares outstanding	**B**	**1,00,00,50,000**	*1,00,00,50,000*
Basic EPS (₹)	**A/B**	**(6.54)**	*0.97*
Diluted			
Profit / (loss) after tax as per accounts (₹ crore)		**(654.12)**	*105.73*
Less: Preference dividend and dividend distribution tax		**–**	*8.49*
Profit / (loss) after tax as per accounts (₹ crore)	**A**	**(654.12)**	*97.24*
Weighted average number of shares outstanding	**B**	**1,00,00,50,000**	*1,00,00,50,000*
Diluted EPS (₹)	**A/B**	**(6.54)**	*0.97*
Face value per share (₹)		**10**	*10*

Q(10) Major components of deferred tax liabilities and deferred tax assets: pursuant to Accounting Standard (AS 22) "Accounting for Taxes on Income"

(₹ Crore)

Particulars	**Deferred tax liabilities/ (assets) as at 31.3.2014**	**Deferred tax liabilities/(assets) on acquisition of HC Undertaking**	**Charge/(credit) to Statement of Profit and Loss**	**Other charges/ (credits)**	**Deferred tax liabilities/ (assets) as at 31.3.2015**
Deferred tax liabilities:					
Difference between book and tax depreciation	62.14	–	0.86	–	**63.00**
Depreciation charged against retained earnings	–	–	–	(1.62)	**(1.62)**
Disputed statutory liabilities paid and claimed as deduction for tax purposes but not debited to the Statement of Profit and Loss	1.60	–	0.03	–	**1.63**
Total	63.74	–	0.89	(1.62)	**63.01**
Deferred tax (assets):	–				
Provision for doubtful debts and advances (including ₹ 14.50 crores transferred from holding company for erstwhile HC undertaking)	(6.30)	–	(0.23)	(14.50)	**(21.03)**
Loss on derivative transactions to be claimed for tax purposes in the year of transfer to the Statement of Profit and Loss, charged to reserves	(60.07)	–	–	32.38	**(27.69)**
Unpaid statutory liabilities/provision for compensated absences debited to the Statement of Profit and Loss	(14.34)	–	0.39	–	**(13.95)**
Accumulated losses	–	–	(313.06)	–	**(313.06)**
Unabsorbed depreciation	–	–	(36.22)	–	**(36.22)**
Total	(80.71)	–	(349.12)	17.88	**(411.95)**
Net deferred tax liability/(assets)	(16.97)	–	(348.23)	16.26	**(348.94)**
Previous year	–	(47.35)	14.10	16.27	**(16.97)**

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Q(11) Disclosures in respect of joint ventures pursuant to Accounting Standard (AS 27) "Financial Reporting of Interests in Joint Ventures"

Sr no.	Joint venture / consortium with	Description of interest / (description of job)	Country of residence
1	Toyo Engineering Company	Jointly controlled operations (Execution of naphtha cracker associated unit for IOCL, Panipat)	India
2	Pipavav Defence & Offshore Engineering Company	Jointly controlled operations [Execution of Sagar Pragati Conversion Project (MOPU) for ONGC]	India

Note: Contingent liabilities, if any, incurred in relation to interests in joint ventures as at March 31, 2015 ₹ Nil *(previous year ₹ Nil)*; share in contingent liabilities incurred jointly with other ventures as at March 31, 2015 ₹ Nil *(previous year ₹ Nil)*; contingent liabilities in respect of liabilities of other venturers of joint ventures as at March 31, 2015 ₹ Nil *(previous year ₹ Nil)* and capital commitments, if any, incurred in relation to interests in joint ventures as at March 31, 2015 ₹ Nil *(previous year ₹ Nil)*.

Q(12) Disclosures required by pursuant to Accounting Standard (AS) 29 "Provisions, Contingent Liabilities and Contingent Assets":

a) Movement in provisions:

(₹ Crore)

Sr. no	Particulars	Class of provisions			
		Expected tax liability in respect of indirect taxes	**Litigation related obligations**	**Contractual rectification cost-construction contracts**	**Total**
1	Balance as at 1.4.2014	14.32	0.79	22.15	**37.26**
2	Additional provision during the year	4.83	–	23.54	**28.37**
3	Provision used during the year	–	–	–	**–**
4	Provision reversed during 2014 - 2015	6.19	–	22.90	**29.09**
5	Balance as at 31.3.2015 (5=1+2-3-4)	**12.96**	**0.79**	**22.79**	**36.54**

b) Nature of provisions:

i. Expected tax liability in respect of indirect taxes represents mainly the differential sales tax liability on account of non-collection of declaration forms for the period prior to 5 years.

ii. Provision for litigation related obligations represents liabilities that are expected to materialise in respect of matters in appeal.

iii. Contractual rectification cost represents the estimated cost the Company is likely to incur during defect liability period as per the contract obligations in respect of completed construction contracts accounted under AS 7 (Revised) "Construction Contracts".

c) The impact of pending litigations on the financial position of the Company has been disclosed in Note (I) to the Balance Sheet.

Q(13) In line with the Company's risk management policy, the various financial risks are hedged by using a combination of forward contracts, swaps and other derivative contracts, besides the natural hedges.

(a) The particulars of derivative contracts entered into for hedging purposes outstanding as at March 31, 2015 are as under:

(₹ Crore)

Category of derivative instruments	Amount of exposures hedged	
	As at 31.3.2015	*As at 31.3.2014*
For hedging foreign currency risks		
a) Forward contracts for receivables including firm commitments and highly probable forecasted transactions	**3,506.53**	*1,591.88*
b) Forward contracts for payables including firm commitments and highly probable forecasted transactions	**2,047.78**	*1,070.22*

(b) Un-hedged foreign currency exposures as at March 31, 2015 are as under: **(₹ Crore)**

Un-hedged foreign currency exposures	As at 31.03.2015	*As at 31.03.2014*
i Receivables, including firm commitments and highly probable forecasted transactions	**6,714.15**	*5,937.14*
ii Payables, including firm commitments and highly probable forecasted transactions	**6,452.52**	*5,757.55*

(c) The Company has made provision, as required under the applicable law or accounting standards, for material foreseeable losses on derivative contracts, where necessary.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Q(14) Auditors' remuneration (excluding service tax) and expenses charged to the accounts: **(₹ Crore)**

Particulars	**2014-15**	*2013-14*
As auditor	**0.16**	*0.09*
For Taxation matters	**0.16**	–
Certification work	**0.12**	*0.15*
For Other services	**0.06**	*0.00*
For reimbursement of expenses	**0.01**	*0.01*

Q(15) Pursuant to the Employees Stock Options Scheme established by the holding company (i.e. Larsen & Toubro Limited), stock options were granted to the employees of the Company. Total cost incurred by the holding company, in respect of the same is ₹ 27.52 crore *(previous year ₹ 22.57 crore)*. The same is being recovered over the period of vesting by the holding company. Accordingly, cost of ₹ 13.98 crore *(previous year ₹ 8.70 crore)* has been recovered by the holding company up to current year, out of which, ₹ 5.28 crore *(previous year ₹ 8.70 crore)* was recovered during the year. Balance ₹ 13.54 crore *(previous year ₹ 13.87 crore)* will be recovered in future periods.

Q(16) Value of imports (on C.I.F. basis): **(₹ Crore)**

Particulars	**2014-15**	*2013-14*
Raw materials	**65.04**	*57.68*
Components and spare parts	**432.78**	*202.44*
Capital goods	**2.11**	*1.38*

Q(17) Expenditure in foreign currency: **(₹ Crore)**

Particulars	**2014-15**	*2013-14*
On overseas contracts	**3,025.21**	*5,153.85*
Royalty and technical know-how fees	**0.69**	–
Professional/consultation fees	**12.85**	*9.22*
Commission brokerage and discount charges	**–**	*0.25*
Bank and finance charges	**0.03**	*0.08*
Logistic charges	**30.48**	*31.35*
Sales marketing and advertising expenses	**7.66**	*7.58*
Membership and subscription charges	**1.17**	*0.21*
Insurance charges	**14.39**	*5.61*
Telecommunication expenses	**–**	*0.03*
Other matters	**494.56**	*737.84*

Q(18) Earnings in foreign exchange:

(₹ Crore)

Particulars	**2014-15**	*2013-2014*
Export of goods	**4.47**	*1.65*
Construction and project related activities	**3,359.37**	*6,361.04*
Export of services	**61.01**	*46.57*
Other receipts	**40.21**	*21.84*

Q(19) The Company has amounts due to suppliers under The Micro, Small and Medium Enterprises Development Act, 2006,[MSMED Act] as at March 31, 2015. The disclosure pursuant to the said Act is as under:

(₹ Crore)

Particulars	**2014-2015**	*2013-2014*
Principal amount due to suppliers under MSMED Act, 2006	**15.62**	*15.64*
Interest accrued, due to suppliers under MSMED Act on the above amount, and unpaid	**0.00**	*0.00*
Payment made to suppliers (other than interest) beyond the appointed day during the year	**0.04**	*0.13*
Interest paid to suppliers under MSMED Act (other than Section 16)	**–**	–
Interest paid to suppliers under MSMED Act (Section 16)	**0.00**	*0.00*
Interest due and payable towards suppliers under MSMED Act for payments already made	**–**	–
Interest accrued and remaining unpaid at the end of the year to suppliers under MSMED Act	**0.00**	*0.00*

Q(20) There are no amounts which are required to be transferred to the Investor Education & Protection Fund as at March 31, 2015.

NOTES FORMING PART OF THE ACCOUNTS (CONTD.)

Q(21) The amount of expenditure incurred on corporate social responsibility during the current financial year is ₹ 0.65 crore.

Q(22) Details of sales, raw materials and components consumed, manufacturing work-in-progress and purchase of stock in trade:

a) Sales:

Class of goods	**2014-2015**	*2013-2014*
	(₹ Crore)	*(₹ Crore)*
(i) Manufacturing and trading activity:		
Plant and equipment and modules for Chemical, Oil and Gas industries	**97.68**	*16.00*
Others	**–**	*3.07*
Total	**97.68**	*19.07*
(ii) Construction and project related activity:		
Plant and equipment and modules for Chemical, Oil and Gas industries	**3,614.49**	*3,953.29*
Chemical plant and machinery	**434.66**	*3,027.27*
Others	**1,443.07**	*1,616.97*
Total	**5,492.22**	*8,597.53*
(iii) Engineering and service fees	**21.91**	*33.79*
Total Sales & service (i) to (iii) -[Note K]	**5611.81**	*8,650.39*

b) Raw materials and components consumed:

i) Class of goods :

Class of goods	**2014-15**	*2013-14*
	(₹ Crore)	*(₹ Crore)*
Equipment, components for oil & gas industries, etc	**1549.36**	*1,263.55*
Chemical plant components	**149.65**	*1495.85*
Total [Note M]	**1699.01**	*2759.40*

ii) Classification of goods:

Classification of goods	**2014-15**		*2013-14*	
	% to total consumption	**(₹ Crore)**	*% to total consumption*	*(₹ Crore)*
Imported	**78.34**	**1330.94**	*79.20*	*2185.40*
Indigenous	**21.66**	**368.07**	*20.80*	*574.00*
Total	**100.00**	**1699.01**	*100.00*	*2759.40*

c) Details of Work-in- progress [Note H (I)]:

Class of goods	**2014-15**	*2013-14*
	(₹ Crore)	*(₹ Crore)*
Equipment, components for oil & gas industries, etc	**20.60**	*1.19*
Total [Note H(I)]	**20.60**	*1.19*

Q(23) The figures for previous year have been regrouped/reclassified wherever necessary.

As per our report attached

SHARP & TANNAN
Chartered Accountants
Firm's Registration No.109982W
by the hand of

FIRDOSH D. BUCHIA
Partner
Membership No.38332

Place : Mumbai
Date : April 28, 2015

For and on behalf of the Board

P. S. KAPOOR
Company Secretary & Chief Financial Officer

K. VENKATARAMANAN
Managing Director
DIN: 001647

U. DASGUPTA
Director
DIN: 00129114

Place : Mumbai
Date : April 28, 2015

LANDMARK PROJECTS

The track record is an emphatic statement of capability. The Company's extensive track record demonstrates the depth and variety of its capability spectrum with proven ability to handle jobs of scale and complexity in multiple geographies. Some Landmark Projects executed by the erstwhile Hydrocarbon business of Larsen & Toubro Limited, presently known as L&T Hydrocarbon Engineering Limited.

MHN Complex for ONGC - One of Biggest Projects in Indian Waters

ONGC – India's giant public sector oil & gas corporation awarded one of its biggest ever contracts to the Company for the Mumbai High North (MHN) Process Platform & Living Quarter Project and MHN Process Gas Compressor Modules Project.

MHN Process Platform & Living Quarters Project in Mumbai High North Field

The USD 1.1 billion complex comprised of a process platform with three Process Gas Compression Modules, a living quarter platform, two flare platforms and four interconnecting bridges. The project involved a total 80,000 MT of fabrication.

MHN Project set multiple benchmarks for Indian offshore projects:

• Largest jacket (13,500 MT)

• Heaviest load out (4,521 MT)

• Heaviest lift at offshore (4,000 MT)

• Longest bridge on India's West Coast (137 m)

• Largest offshore living quarters module (150men)

• Heaviest topside (operating weight 27,000 MT).

Sail-away of jacket for Asia's largest process platform (13,500 MT, 8-legged launch-type with 23 pre-installed risers) from Modular Fabrication Facility at Sohar in Oman

Zawtika Development Project, for PTTEPI, Thailand

For PTT Exploration and Production International, Thailand, the Company executed the Zawtika Development Project Phase -1A.

The Company demonstrated its ability to meet the challenges of high seismic zone of the Gulf of Mottama, 300 km south of Yangon. This involved Rare Intensity Earthquake (RIE) analysis involving non-linear mathematical modeling using data for 2000 years return period, materials & corrosion testing of highest standards, complex safety studies like CFD (Computational Fluid Dynamics) explosion modeling, concept of wrap plates and related Finite Element Analysis.

The project scope included engineering, procurement, fabrication, installation, pre-commissioning and offshore hookup of 3 Wellhead Platforms and laying of 21 km of intra-field sea lines. The project involved over 37,000 MT of fabrication. Topsides were transported on self-propelled vessels and 24 single-piece skirt piles with an overhang of 27m; were transported using a special cradle arrangement.

Zawtika Wellhead Platform installed in Gulf of Mottama in Myanmar

Yetagun North Development Project, Myanmar

The Yetagun North (Phase-V Development) project was awarded in 2013 by PETRONAS Carigali Myanmar (Hong Kong) Limited. This fast-track project was the first international offshore project for the Company's Kattupalli Yard. Scope involved Engineering, Procurement, Construction, Installation and Commissioning of a new 4-legged wellhead platform (YET-D) at 108 m water depth, a new 10" x 11.2 km pipeline from YET-D to existing Yetagun main process platform (YET-C), host tie-in works and brownfield modification works at YET-C platform.

Yetagun D Platform installed Offshore)

The Company, besides delivering all the project structures within schedule from the Kattupalli Yard, demonstrated its ability to execute extensive brownfield modification works on an existing process platform which included critical activities performed during client-specified shutdown period, by meeting strict quality and schedule requirements in a safe manner.

The Company received HSE Award FY 2014 from the Client for 'Significant contribution through exceptional HSE Performance' amongst International Contractors.

Nasr & Umm Lulu Field Development Project, Abu Dhabi

The Company was awarded an EPCI contract in 2011 by Abu Dhabi Marine Operating Company (ADMA-OPCO), a subsidiary of ADNOC and a major producer of Oil & Gas for the UAE, for Phase-1 of Nasr & Umm Lulu Field Development Projects.

Nasr field is located at 150 km northwest Abu Dhabi, and Umm Lulu field is located at 35 km northwest Abu Dhabi UAE. The projects comprise four wellhead towers and a manifold tower platform, interconnecting bridges, 103 km rigid subsea pipeline and 78 km subsea fibre optic cable.

(Installation of Nasr Wellhead Platform, at Nasr Field Abu Dhabi)

Modularization of brownfield scope – Installed in 3 modules

The Company's demonstrated its capabilities in execution of a large project from its various work centers. Multiple design changes were successfully implemented concurrently during project execution. The project saw multi-location coordination with the design team based in Bangalore, the fabrication facilities at Sohar, Oman and the installation & hook-up at Abu Dhabi. Project also involved major brownfield works at ZADCO existing Central Processing Platform to process oil from Umm Lulu field, involving multi-client interphase. To reduce the offshore campaign, company decided to modularize the works resulting in significant saving for both contractor and client.

The Company successfully achieved first oil from Umm Lulu on 1st October 2014 and Nasr field on 25th January 2015. Presently the project in under advanced stage of completion and expected to be completed soon.

World's Longest Heated Pipeline & Process Terminal for Cairn Energy

The Company executed India's largest onshore oil terminal, Mangala Process Terminal at Barmer (North Rajasthan) for Cairn Energy. The project, spread over three distinct locations: Mangala Processing Terminal (MPT), Rageshwari Gas Terminal (RGT) and Thumbli (NR1) Water Field, was interconnected through pipelines.

Mangala Process Terminal at Barmer in Rajasthan

The Company's capabilities for mid and downstream plant construction was demonstrated through comprehensive development of infrastructure facilities, detailed engineering & construction of all civil and electromechanical works, offsite infrastructure facilities, supply, installation & commissioning of the 33 kVA high voltage power line system and telecom network.

The scope included setting up 18 wells and facilities for 100,000 bpd crude production at MPT, four well-pads and facilities to meet gas requirement at RGT, facilities to meet the water requirement at NR1, 78km of inter-field oil pipeline at MPT, 6 km of inter-field gas pipeline at RGT, 91 km of gas pipeline from RGT to MPT, 22 km of water pipeline from NR1 to MPT and 33 kV of overhead line.

The Company also built the world's longest, continuously heated and Polyurethane Foam (PUF) insulated crude oil pipeline to evacuate the waxy oil up to 320,000 BOPD. The 665 km, 24" crude oil pipeline from Barmer to Salaya in Gujarat, was extended to Bhogat further south in Gujarat. An 8" gas pipeline from the Rageshwari Gas field as well as fibre optic network was also laid alongside the oil pipeline. 32 heating stations en route ensured that the waxy crude did not solidify. Six pig trap stations were also installed.

The carbon steel crude oil pipeline incorporates several special features. Designed for a 93 bar pressure and 90 Deg C temperature, it is insulated with three layers of Polyurethane Foam (PUF) and encapsulated in a High Density Polyethylene outer sheath.

World's Longest Heated and PUF-Insulated Waxy Crude Oil Pipeline from Barmer (Rajasthan) to Bhogat (Gujarat)

Project highlights included the successful execution of 11 concurrent pipeline spreads, covering 2 states, 54 bored crossings of highways/ railways and 24 of major river crossing and over 700 minor crossings.

World's Largest Refinery Complex for Reliance Industries, Jamnagar

The Company played a critical role in building Phase 2 of the world's largest refinery complex at Jamnagar for Reliance Industries Limited, with crude oil processing facility of 5.8 million BOPD.

The scope of work involved erection of FCC Unit, Clean Fuel Package, two units of Crude & Vacuum Distillation Units, Alkylation Unit, Coker Unit, Offsites & Utilities along with Main Control Center / Plant Operations Building and other buildings.

Construction of World's Largest Refinery Complex at Jamnagar

The numbers indicate the scale of the project: 4.6 Lakh cubic meters of concreting, 28,000 MT structural fabrication, 51,000 MT of structural erection, 59 Lakh inch meter of piping erection, 25,000 MT of equipment erection, 4,300 km of electrical cable laying and 2,311 km of instrument cable laying.

Earlier the Company had contributed in a major way towards building Phase-1 of the refinery with a capacity of 6.6 million BOPD

Mangalore Aromatic Complex Project for OMPL

The Company bagged the Mangalore Aromatic Complex Project from ONGC Mangalore Petrochemicals Limited (OMPL) in 2010 against global competition. The plant having production capacity of 905,000 MTPA of Paraxylene & 273,000 MTPA of Benzene, using UOP Process Technology, was successfully commissioned and Performance Guarantee Test Run was conducted in 2014. This complex has nine process units, namely Naphtha Hydro treating Unit, Continuous Catalytic Regeneration Unit, Platforming Unit, Parex Unit, Isomer Unit, Xylene Fractionation Unit, Shell Sulpholane Unit, Tatoray Unit and Benzene & Toluene Fractionation Unit.

(Mangalore Aromatic Complex with Capacity of 905,200 MTPA of Paraxylene and 273,200 MTPA of Benzene)

Characterized by large work volumes, heavy cranage requirement and a peak man-power of more than 6000, the project affirmed the Company's ability to execute mega sized mammoth projects to international benchmarks. The project includes over 100,000 cubic meters of concrete work; more than 10,000 MT of Structural Steel; 450+ equipment including six super over-dimensional consignments (SODC); 150+ pumps & 10 compressors, more than 200,000 inch-meter of underground piping; 1,000,000+ inch-meter above ground piping; 2000+ km of cabling; and 10 heater packages with tonnage in excess of 8000 MT.

In order to cater to large Work Volumes of RCC & Piping Fabrications, dedicated Machines were deployed for Bending / Cutting of Rebars & Automatic Welding Workshop. The project achieved 18 million man hours without LTI.

PMI India awarded this project as Best Project of the Year 2014 – Runner Up (Large Category) which is indeed a very prestigious recognition for the Company.

Reactor and Regenerator Section of Fluidized Catalytic Cracking Unit (FCC INDMAX) for Indian Oil Corporation

Awarded to the Company in 2010, by Indian Oil Corporation Limited (IOCL), the Reactor & Regenerator section of Fluidized Catalytic Cracking Unit (FCCU) for its Paradip refinery, is one of its kind with an enormous capacity - 4.17 MMTPA. The criticality of this project lies in establishing the first Indian FCCU technology: INDMAX, against International benchmarks. In terms of complexity and volume, the plant has critical items like 1135 MT Reactor & 1685 MT Regenerator, refractory application of 4000 MT, specialty valve like Diverter Valve weighing 150 MT, Shop fabrication and erection of 118 Nos of refractory lined flue gas pipe spools ranging from 30 inch to 158 inch diameter & weighing 6 MT to 74 MT, thin metallic expansion FCCU bellows as heavy as 90 MT x 3.5 mtr Diameter, state of art rotary equipment like Flue gas power recovery turbine (19 MW) and Main Air Blower (25 MW), a congested site layout and high structural density of 1.5 MT/ Sq. m (max height – 84 mtr), Structural scope of 9000 MT along with Pre-fabricated Structural Modules weighing from 70 MT to 300 MT, a total of 250 Nos of Heavy Lifts –varying from 20 MT to 775 MT & Super Heavy Lifts - 8 No's (Above 400 MT)

The challenging task of detail engineering was done by L&T Chiyoda (LTC). Procurement also involved many "first" of its kind with global sourcing: 33% of the equipment procured were imported from United States of America, 21% from Europe, 15% from Korea and Far-East and balance 31% from India.

Some of the most innovative approaches were seen during the construction of this plant viz, modular erection for rebar cage along with insert plate for Regenerator top Ring (52.6 MT & 15m Dia. erected at a height of 15.55 meters, weighing -) and Lifting & positioning of pre-assembled rebar cage for reactor table top columns (8 Nos) along with insert plates (each weighing 12 MT at 27 M height), This was the first project where a PSU client has endorsed strategic execution and the initiatives of expeditious completion of job with temporary arrangements in absence of utilities from clients. The project is a class by itself - a mammoth task, huge challenges and unmatched teamwork. But nothing beats the sheer spectacle and magnificence of largest FCC Unit in the history of LTHE standing tall against the testing times.

Currently the plant is completed mechanically and is kept under preservation due to limitation on non-availability of required utilities & feed for commissioning.

L&T Hydrocarbon Engineering

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