



# Larsen & Toubro Limited

## Industrial Machinery, Kansbahal Works

### UNIT PROFILE :

**Larsen & Toubro Limited** is one of the leading private sector multifaceted engineering organization with leading edge capabilities in all its business sectors.

Kansbahal Business Unit (KBU) is one of the Strategic Business Unit under the Machinery & Industrial Product Division of the organization engaged in manufacturing of Cast Products and Industrial Machinery (Crushing System and Paper Machine).

The Cast Product Division of the Unit specialties in production of tailor made SG Iron and High Alloyed Wear Resistant Castings. The division primarily caters to core sector industries like windmill, cement, paper , thermal power , mineral .....

The casting is produced at the unit through induction furnace route using scrap as the basic raw material and is complemented with good machining facilities to offer comprehensive solution to the customer.

The unit is certified for **ISO 9001:2000** for its product , Environment management system in accordance to **ISO 14001:2004** & Occupational Health & Safety as per **OHAS 18001:1999**

The commitment to quality and customer satisfaction with a focus on environment and safety is the main driving force for all activities within the organization. The concern for environment is an integral part of Company's vision.

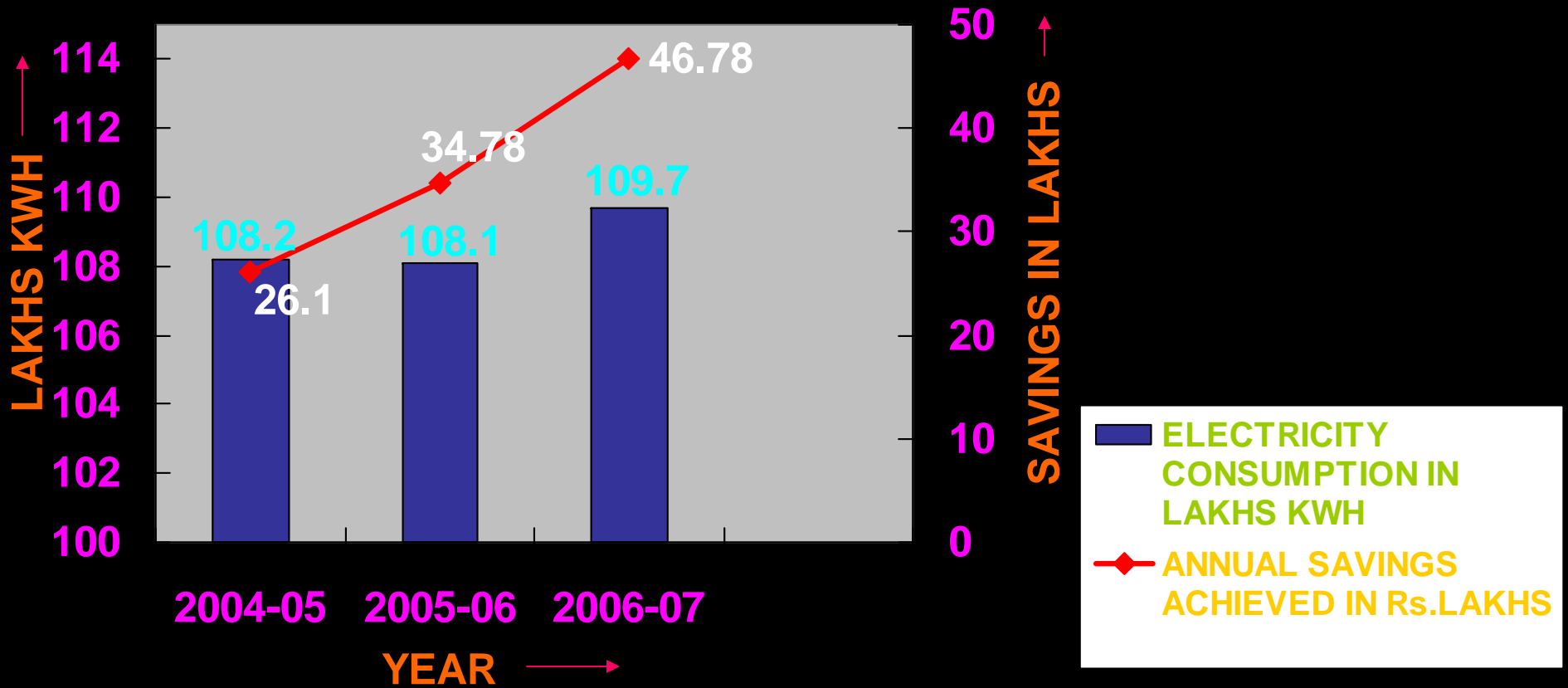
KBU started as an Indo-German venture in 1960 and over the period has evolved into a world class integrated manufacturing center with facilities for fabrication, machining, assembly and casting. This is complemented by excellent design, engineering, quality control and logistic expertise.



# Larsen & Toubro Limited

## Kansbahal Works

### POWER CONSUMPTION Vs SAVINGS

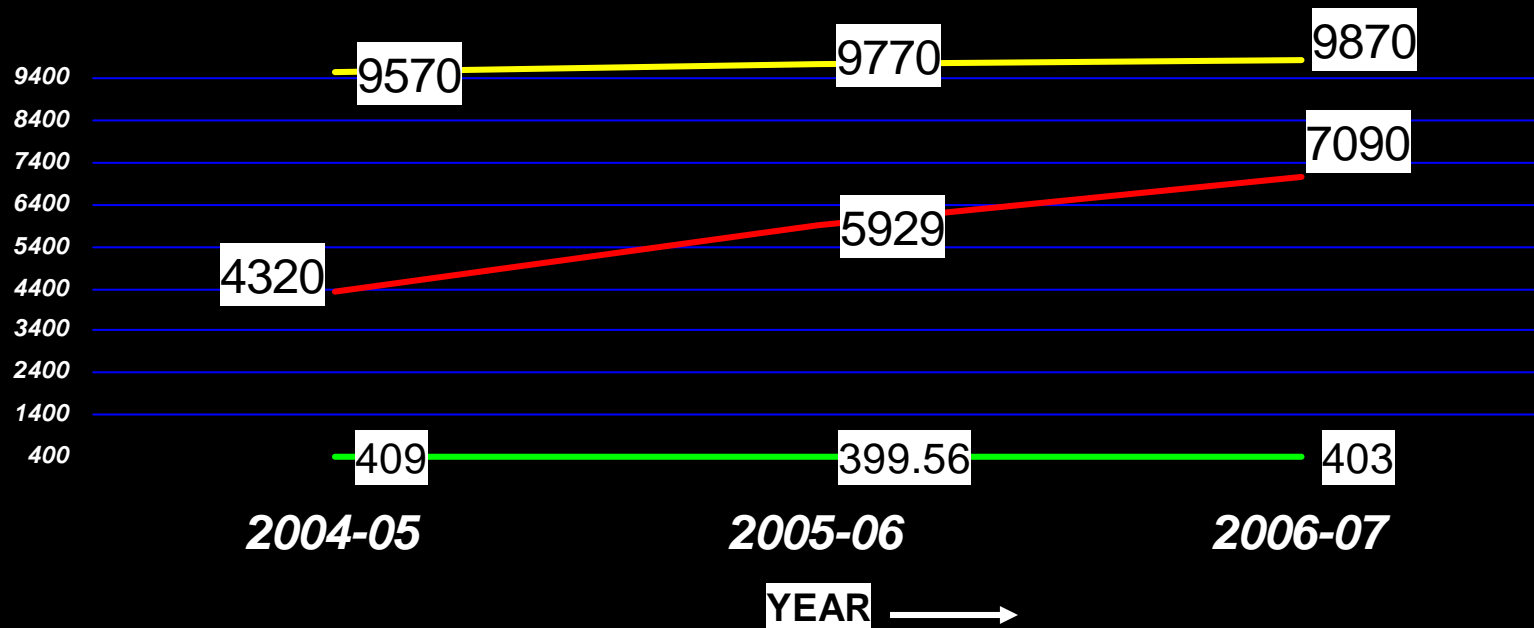




# Larsen & Toubro Limited

## Industrial Machinery, Kansbahal Works

COMPARISON FOR SALES TURNOVER , PLANT LOAD & COST OF ELECTRICITY CONSUMPTION OF THE UNIT



- SALES TURNOVER IN LAKHS
- PLANT CONNECTED LOAD IN KW
- COST OF ELECTRICITY CONSUMPTION IN LAKHS



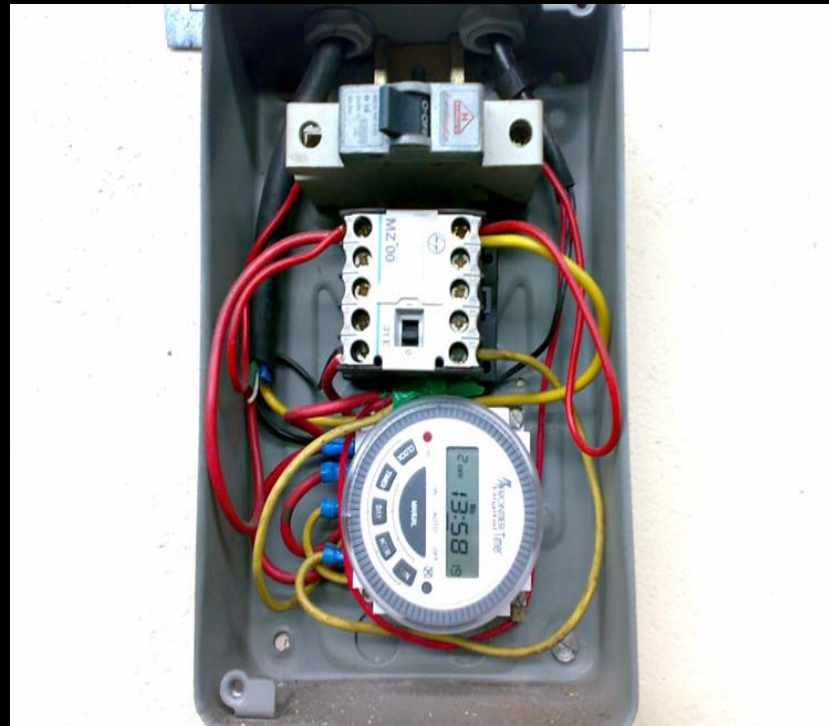
**Larsen & Toubro Limited**  
**Kansbahal Works**

# **ENERGY CONSERVATION INITIATIVES**



# Larsen & Toubro Limited

## Kansbahal Works



**AUTOMATIC TIMER FOR SHOP LIGHTING ( 100 No x 400 W ROOF LIGHT)**

**YEAR : 2006-07**

**A : AUTOMATIC SWITCH-OFF THE LIGHTS DURING OFF WORKING HRS**

**B : POWER SAVING FOR GIVEN CONNECTED LIGHTS**

**UNIT SAVED : 6000 KWH / ANNUM**



# Larsen & Toubro Limited

## Kansbahal Works



**ENERGY OPTIMIZER INSTALLED FOR 6 T FURNANCE**  
**YEAR : 2006-07**

**A : OPERATE AT MAXIMUM KVA OF GIVEN LOAD**

**B : OPERATE WITHIN CONTRACTUAL MAXIMUM DEMAND**

**UNIT SAVED: 5 UNITS/TONNE**



# Larsen & Toubro Limited

## Kansbahal Works



**DIMMER CIRCUIT FOR SHOP LIGHTING ( 100 No x 400 W ROOF LIGHT)**

**YEAR : 2006-07**

**A : REDUCE VOLTAGE AT OFF-PEAK HRS**

**B : REDUCTION IN KWH CONSUMPTION**

**UNIT SAVED : 6000 KWH / ANNUM**



# Larsen & Toubro Limited

## Kansbahal Works

**FURNANCE WITHOUT LID**



**FURNANCE WITH LID**



**HYDRAULIC LID INSTALLED AT 6 T INDUCTION FURNACE**

**YEAR : 2006-07**

**A : PREVENT RADIATION LOSSES**

**B : REDUCED ENERGY CONSUMPTION**

**C : INCREASE MACHINE EFFICIENCY**

**D : REDUCED POWER CONSUMPTION**

**UNIT SAVED : 25 UNITS / TONNE**



# Larsen & Toubro Limited

## Kansbahal Works



**COIL INSTALLED FOR 6 T FURNANCE  
YEAR : 2005-06**

**A: INCREASE FLUX LINKAGES BETWEEN COIL &  
CHARGE MATERIALS**

**B : FASTER MELTING RATE**

**C : INCREASE MACHINE EFFICIENCY**

**D : REDUCE POWER CONSUMPTION**

**UNIT SAVED: 30 UNITS/TONNE**



# Larsen & Toubro Limited

## Kansbahal Works



### AUTOMATIC POWER FACTOR CORRECTION PANEL

YEAR : 2004- 05

A : REDUCE PLANT KVA DEMAND

B : REDUCE LINE LOSSES & SAVING ENERGY

C : ACHIEVE UNITY POWER FACTOR

AMOUNT SAVED : Rs.21 LAKHS



# Larsen & Toubro Limited

## Kansbahal Works



**RECIPROCATING COMPRESSOR REPLACED BY ENERGY EFFICIENT PLC BASED SCREW COMPRESSOR**

**YEAR : 2004-05**

**A : IT DOES NOT REQUIRE ANY EXTERNAL COOLING WHICH RESULTS SAVING IN POWER CONSUMPTION**

**UNIT SAVED : 400000 KWH / ANNUM**



# **Larsen & Toubro Limited**

## **Kansbahal Works**

### **ENERGY CONSERVATION FUTURE PLANS**

- **REPLACEMENT OF OBSOLUTE EQUIPMENTS BY AUTOMATIC ENERGY EFFICIENT MACHINE**
- **INSTALLATION OF ENERGY EFFICIENT INDUCTION MELTING FURNACE INPLACE OF ARC FURNACE**
- **REPLACEMENT OF EXISTING CONVENTIONAL WATER PUMP BY ENERGY EFFICIENT PUMP**
- **REPLACEMENT OF EXISTING MERCURY VAPOUR LAMPS BY METAL HALLIDE LAMPS**