#### **Kirloskar Brothers Limited**

#### **Introduction:**

Kirloskar Brothers Limited (KBL) is a multinational Indian company.<sup>1</sup> KBL was incorporated in 1920 and has over 123 years of engineering expertise in Fluid Management Systems.<sup>2</sup> It is the largest pump manufacturing and exporting company in India.<sup>3</sup> KBL's focus areas are Irrigation, Water Resource Management, Building and Construction, Industry, Power, Gas, Oil and Defense.<sup>3</sup>

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# The Kirloskar Legacy 1

1888 Kirloskar Brothers Limited was established at Belgaum

**1901** First product: Fodder cutter by Kirloskar Brothers Limited

1904 Manufacture of first 6 Iron Ploughs

1910 Left Belgaon and shifted base to Kundal now Kirloskarvadi

1920 Kirloskar Brothers went Public Limited

**1926** Kirloskar Brothers Limited takes its first step towards export to Germany, Japan

1927 India's First oil engine manufacturing facility was established at Kirloskarvadi

**1948** Kirloskar Brothers begins export

**1967** Export department starts at Kirloskar Brothers Limited

2003 Kirloskar Brothers acquires SPP Pumps in England

**2007** Sardar Sarovar Narmada Nigam Limited Project's pumping scheme using Kirloskar Pumps is commissioned

#### **Achievements / Milestones**

Kirloskar Brothers Limited has been pioneers in the engineering field and has introduced many "firsts" in India; <sup>1,3</sup>,

- 1903 India's first iron plough
- 1926 India's first centrifugal pump
- 1927 India's first diesel engine
- 1940 India's first lathe and electric motor
- 1954 India's first reciprocating compressor
- 1985 India's first canned motor pump
- 1995 India's first concrete volute pump

Additionally KBL has, to its credit;<sup>3</sup>

- Patent for energy efficient siphon design
- World's largest pumping station

Kirloskar Brothers Limited has been awarded with the Golden Peacock award for their CSR activities in 2010.<sup>2,15</sup> KBL has been awarded the All India Exports Excellence award 28 times in row in the product group of "Pumps, Compressors, Hydraulic and Pneumatic Power Engines and Parts." <sup>2,15</sup>

# **Offerings:**

KBL's product range can be listed as below: <sup>3</sup>

- Pumps up to 26 MW
- Valves up to 4500 mm butterfly valves
- Hydel turbines up to 20 MW
- LT induction motors up to 315 frame for industrial, agricultural, domestic pumps
- Turnkey EPC pump projects and Hydel power projects
- The smallest as well as largest pumps and variants available in over 75 different types up to the a flow of 120,000 m<sup>3</sup>/hr

# **Packaged Services** <sup>2</sup>

- Fire Fighting System
- HVACR System (Heating Ventilation Air Conditioning and Refrigeration System)
- Condition Monitoring System
- Solar Pumping System

#### Intellectual Services <sup>2</sup>

- Design and Development of pumps, hydro turbines, valves and special pumps
- Design of hydro turbines
- CFD study of pumps, turbines, valves
- Multi-phase flow analysis
- CFD sump study
- Physical Sump model study
- FEA analysis
- Surge analysis of transmission main

# **Turnkey Projects** <sup>2</sup>

- Power
- Irrigation
- Water Resource Management

# **Products** <sup>2</sup>

The product basket of KBL is as follows:

- A. Pumps<sup>2</sup>
  - 1. Special & Engineered Pumps
  - 2. End Suction Pumps
  - 3. Multistage Pumps
  - 4. Split case Pumps
  - 5. Submersible Pumps
  - 6. Sump Pumps
  - 7. Vacuum Pumps
  - 8. Monobloc Pumps

#### B. Valves<sup>2</sup>

- 1. Butterfly Valve
- 2. Sluice Valve
- 3. Non Return Valve
- 4. Kinetic Air Valve
- 5. Foot Valve
- 6. FM approved Gate Valve
- 7. Cast Steel Gate Valve
- 8. Cast Steel Globe Valve
- 9. Cast Steel Check Valve
- 10. Ball Valve
- 11. Steam Trap Device
- 12. Forged Steel Gate, Globe, Check Valve

- C. Hydro Turbines<sup>2</sup>
  - 1. Francis Turbines
  - 2. Kaplan Turbines
  - 3. Pelton Wheel Turbines
- D. Motors<sup>2</sup>
  Three Phase Motor
- E. Alternators<sup>2</sup>
  Brushless Alternators
- F. Mobile Pump Controllers<sup>2</sup>

# Services <sup>2,14</sup>

• Energy Audit Services

### **Joint ventures & Subsidiaries** 2,3,13

- 2003 SPP Pumps Ltd, UK
- 2006 Kirloskar Construction and Engineers Ltd., India
- 2007 The Kolhapur steel Ltd., India
- 2008 Kirloskar Brothers Europe BV, Netherlands
- 2009 Hematic Motors Pvt. Ltd., India
- 2009 Kirloskar Brothers Ltd., Thailand
- 2010 Braybar Pumps, South Africa<sup>12</sup>
- Kirloskar Corrocoat Private Ltd is a joint venture with Corrocoat Ltd,UK
- Kirloskar Ebara Pumps Ltd is a joint venture with Ebara Corporation, Japan

# **Global Presence** 2,3

International manufacturing facilities of KBL are at Atlanta, United Kingdom, UEA and South Africa. The manufacturing units in India are spread as follows: 5 units in the Western Zone, 1 unit in the Central Zone and 1 unit in the South Zone.

#### Sales Network <sup>2,3</sup>

**International Network** 

KBL has overseas offices in Miami, USA; Amsterdam, Netherlands; Dakar, Senegal; Johannesburg, South Africa; Nairobi, Kenya; Ajman, UAE; Bangkok, Thailand; Vientiane, Laos; Phnom Penh, Cambodia and Cairo, Egypt. They have an international network of over 45 Dealers.

#### Indian Network

KBL has numerous Regional Offices across India. Their dealer network is spread though out the country with service centers present all over India.

### **Important certifications** <sup>2,3</sup>

Kirloskar Brothers Limited is an ISO 9001, ISO 14001 certified conglomerate. Their manufacturing facilities are OHSAS 18001 certified.

### **Projects:**

# Sardar Sarovar Nigam Limited, Gujrat <sup>4</sup>

KBL has installed 26 Concrete Volute Pumps, 22 Vertical Turbine Pumps, 5 pumping stations at the Sardar Sarovar Narmada Nigam Limited (SSNNL), Gujrat. KBL holds a patent for the unique and innovative siphon design created at the SSNNL which resulted in minimizing head loss in discharge ducts between a supply and a delivery reservoir and therefore annual energy conservation and electricity saving.

### Egypt <sup>5</sup>

KBL has been supplying pumps to Egypt. Major contracts for pumping stations have been executed in the 1980s for the Government of Egypt. Today, over 100000 Kirloskar pumpsets along the River Nile are irrigating 1,50,000 acres of farmland in Egypt.

# Senegal <sup>6</sup>

KBL propelled the growth in irrigation in Senegal by increasing the total production of rice from 19 % to around 50 % in the first phase. Senegal will achieve food sufficiency by the year 2012-13.

### Lao PDR 7

KBL has completed around 7000 pumpsets installations on the river Mekong. Subsequently rice production has gone up by around 25 times and now Lao PDR, has started exporting its surplus production of rice.

### Cambodia 9

KBL has exported irrigation pump sets to the Ministry of Water resource and Meteorology of the Royal Government of Cambodia. Innovative installation of the pumps on pontoons lead to no fixed civil work and increased mobility. This has resulted in the increased yield of agricultural products and associated Government of Cambodia in economic growth by providing irrigation machinery.

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