Enriching Lives

Fluid Management for a Better Tomorrow

KIRLOSKAR BROTHERS LIMITED

'YAMUNA' - Global Headquarters, Pune, India

Kirloskar Brothers Limited (KBL) is a world-class pump manufacturing company with expertise in engineering and manufacture of systems for fluid management. Established in 1888 and incorporated in 1920, KBL is the flagship company of the $2.1 billion Kirloskar Group.

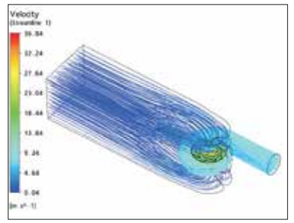
KBL is the only pump manufacturing company in India and ninth in the world to be accredited with the N and NPT certification by American Society of Mechanical Engineers (ASME).

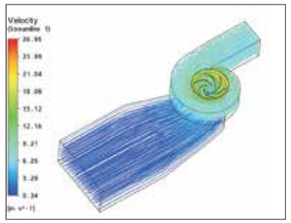
r&d and engineering capabilities

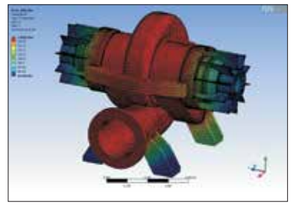
The applied research work conducted in Kirloskar Brothers Limited (KBL) has resulted in appropriate technology for development of many new series of pumps like horizontal split case, multistage, small end suction, large end suction, mixed flow pumps and many more to come. KBL has introduced India's first energy efficient pump to the more recent solar motor pumps, concrete volute pumps, metallic volute pumps, sodium pumps and magnetic drive pumps.

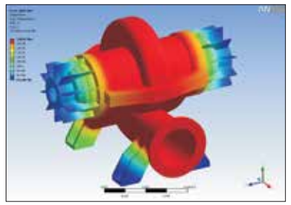
hydraulic research centre

- One of Asia's largest Hydraulic Research Centre (HRC) for testing Pumps at duty conditions up to 5000 kW motor and discharge up to 50,000 m^3/hr
- Closed circuit NPSH testing capabilities
- Computerised data acquisition system
- Physical sump and pump model study
- Conceptualised and built under the guidance and supervision of British Hydraulic Research Association
- Testing at 50 Hz & 60 Hz frequency covering all global supply voltages (3.3 to 13.2 kV)









FEATURES

- High performance product design and development
- Sump Model Studies
- Intake studies analysis using computational fluid dynamic techniques
- Surge analysis
- Structural analysis
- Cavitation studies
- Seismic analysis
- Thermal analysis
- Vibration analysis
- Transient analysis

water resource management

We have the capabilities to design, supply, test, erect and commission Sewage Pumping Stations (SPS) and Sewage Treatment Plants (STP) based on advanced technologies.

Rand Water
Location: Johannesburg, South Africa
Supply of 10 Nos., UPH 500/60 Split Case Pumps, motor rating 1.5 MW & 5 nos. UPH 500/80 Split Case Pumps, motor rating 2.7 MW. Total head 350 m.

IPCO ASAL JV Malaysia
Location: Langkawi Water Supply Scheme, Malaysia
Vertical Turbine Pumps and Large Split Case Pumps for water supply scheme

Hyderabad Metropoliton Water Supply & Sewerage Board (HMWSSB)
Location: Andhra Pradesh, India
Supply of Horizontal Split Case Pumps for clear water pumping stations

Burj Khalifa
Location: Dubai, United Arab Emirates
Supply of High Pressure Pumps for Desalination Plant

oil & gas

Petrochemicals are essential fluids for a rapidly growing world of today.

KBL pumps and valves are used in downstream processes in the petrochemical industry.

Our Pumps are also used in fire fighting on offshore platforms, safeguarding these valuable resources.

ConocoPhillips
Location: Indonesia
Over 450 pumps installed in more than 70 offshore oil fields

British Petroleum
Location: Caspian Sea
Supply of Sea Water Lift Pumps

Reliance Refineries, Jamnagar
Location: Gujarat, India
Supply of Vertical Turbine Pumps for fire water application

Indian Oil Corporation Limited
Location: Gujarat, India
Supply of Large Split Case Pumps for cooling water application

power

Kirloskar Brothers Limited (KBL) is the only Indian company that provides Primary Heat Transfer Pumps for Nuclear Power plants.

We are one of the 9 global pump companies to be certified with N & NPT by American Society of Mechanical Engineers, ensuring safety and allowing full 'nuclear power' potential to be achieved in the future.

Coronel PP
Location: Chile, South America
Supply of Vertical Turbine Pumps for cooling water application

Bechtel
Location: Prairie, USA
Supply of Vertical Turbine Pumps for cooling water application

Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI)
Location: Tamil Nadu, India
India's first Primary Sodium Pump for 500 MW prototype fast breeder nuclear reactor

Coastal Gujarat Power Limited (CGPL)
Location: Gujarat, India
Supply of 10 sets of Concrete Volute Pumps, world's largest circulating water system for sea water application

irrigation

Our expertise are in concept to commissioning in fluid handling systems for the irrigtation sector.

We offer : surge analysis, pump model study, project management, design and system engineering,layout finalisation, feasibility report, site selection, spares management, operation and management and site erection, commissioning and piping services.

Benban
Location: Egypt
Turnkey project with supply of Vertical Turbine Pumps

Location: Portugal
Supply of Vertical Turbine Pumps

Sardar Sarovar Narmada Nigam Limited (SSNNL)
Location: Gujarat, India
Supply of Concrete Volute and Vertical Turbine Pumps for World's Largest Pumping Scheme

Bheema Stage-1 Pump House
Location: Andhra Pradesh, India
Supply of Francis Turbine Pumps installed 60 meters below the ground level irrigating 111,000 acres of land

building & construction

Cities are growing rapidly with advanced infrastructure, transforming the face of the world as we speak.

But space constraint is a perpetual issue and the only solution is to go higher up.

Kirloskar Pumps are facing the challenges head on.

The Shard
Location: London, United Kingdom
Supply of Fire Fighting Pumpsets

Burj Al Arab
Location: Dubai, United Arab Emirates
Supply of FM listed fire pumpsets and Booster Pumps for heating, ventilation and air-conditioning (HVAC) application

Delhi Metro Rail Corporation
Location: New Delhi, India
Supply of Fire Fighting Pumpsets and pumps for heating, ventilation and air-conditioning (HVAC) application

Gujarat International Finance Tec-City (GIFT City)
Location: Gujarat, India
Largest Horizontal Split Case Double Suction Pump for secondary variable pumping system for India's first district cooling heating, ventilation and air-conditioning (HVAC) application

marine & defence

We have a substantial presence onboard Indian Naval Ships and in all Dockyards, both Public Sector Undertakings and Private Shipyards.

Garden Reach Shipbuilders and Engineers Ltd. (GRSE), Kolkata
Location: West Bengal, India
Supply of Mixed Flow Non-Clog Pumps for Dock Drainage System

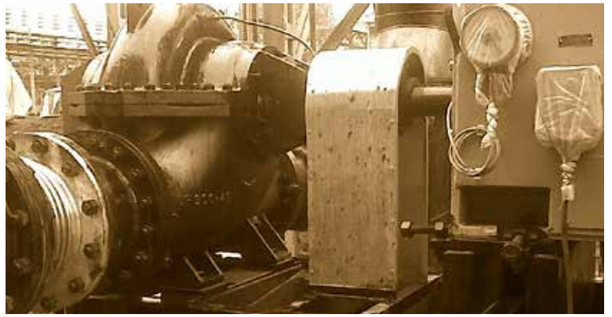
KBL Pump House

Mazagon Dockyard Ltd., Mumbai
Location: Maharashtra, India
Supply of Mixed Flow Non-Clog Pumps for Impounding Pumping System

KBL Pump House

industry

For the global manufacturing industries we provide need based customised pumps to facilitate efficient Process Delivery, thus improving the productivity & efficiency of the Manufacturing plants.



National Peroxide Limited
Location: Maharashtra, India
Supply of LLC pumps supplied for industrial application

Majis Industrial Services Co.
Location: Sohar, Oman
Turnkey project comprising the supply of Vertical Turbine Pumps and Butterfly Valves

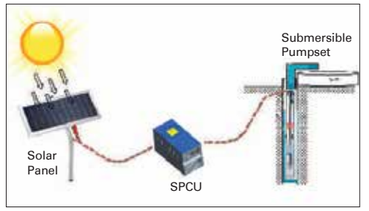
Essar Steel Hazira Plant
Location: Gujarat, India
Supply of Horizontal Split Case and Vertical Turbine Pumps

sustainable solutions

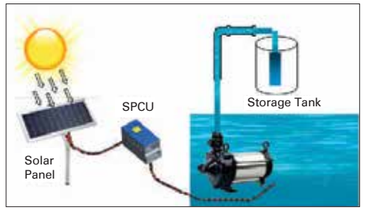
Kirloskar Brothers Limited (KBL)'s DNA is based on 'Think Green' philosophy. Our pumps are corro-coat coated with least shaft deflection over the life cycle of the product and lowest cost of ownership ensuring maximum energy efficiency.

This philosophy along with our 'AAA' Motto: Appropriate, Adaptable, Affordable has won us many accolades and a special place in the hearts of our customers.

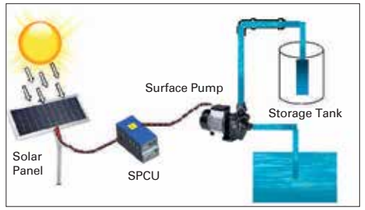
solar pumping system



Solar Borewell Submersible Pumping System



Solar Open Well Submersible Pumping System



Solar Surface Pumping System

- Pump and motor set
- Jalverter™ (Solar power conditioning unit)
- Solar PV modules
- Module Mounting Structure (with / without tracking manual / automatic) Pipes and Cables
- Foundation set (consisting of foundation bolts, structure base and civil construction material - cement, sand and stones
- Earthing kit

FEATURES OF JALVERTER™

- High operating efficiency on field
- Reliable and Safe
- Ease / comfort of operation and maintenance
- Versatility and flexibility of use
- 'Value Add' with unique optional accessories like:
  - Dual mode unit
  - Battery charger cum booster unit
  - Flexible output unit (3 ph./ 1ph. AC output)

hydropower strengths and its impact on economic, social and environmental aspects

Hydropower supplies nearly one-fifth of the world's electricity, second in importance only to fossil fuel generated electricity (coal, oil, gas). Classified as a clean, renewable energy source, hydropower reduces the net production of greenhouse gases by displacing other forms of power generation. In contrast to most other renewable sources of electricity, hydropower can supply significant portion of the world's electricity needs.

social aspects

- Leaves water available for other uses
- Often provides flood protection
- May enhance navigation conditions
- Often enhances recreational facilities
- Enhances accessibility of the territory and its resources (access roads and ramps, bridges)
- Provides opportunities for construction and operation with a high percentage of local manpower
- Improves living conditions
- Sustains livelihoods (freshwater, food supply)

environmental aspects

- Produces no atmospheric pollutants
- Neither consumes nor pollutes the water it uses for electricity generation purposes
- Produces no waste
- Avoids depleting non-renewable fuel resources (i.e., coal, gas, oil)
- Very few greenhouse gas emissions relative to other large-scale energy options
- Can create new freshwater ecosystems with increased productivity
- Enhances knowledge and improves management of valued species due to study results
- Can result in increased attention to existing environmental issues in the affected area

economic aspects

- Provides low operating and maintenance costs
- Provides long life span (50 to 100 years and more)
- Meets load flexibly (i.e hydro with reservoir)
- Provides reliable service
- Includes proven technology
- Can instigate and foster regional development
- Provides highest energy efficiency rate (payback ratio and conversion process)
- Can generate revenues to sustain other water uses
- Creates employment opportunities
- Saves fuel
- Can provide energy independence by exploiting national resources
- Optimises power supply of other generating options (thermal and intermittent renewables)

KBL's contribution to green sustainable energy

Type of Turbine	No. of Projects	No. of Units	Total MW
Horizontal Francis	20	44	95.05
Vertical Francis	01	01	03.50
Horizontal Kaplan	12	24	37.10
Vertical Kaplan	04	06	30.11
Horizontal Pelton	01	02	04.00
TOTAL	38	77	169.76

Total capacity addition by KBL : 169.76 MW
Total capacity commissioned by KBL : 100.86 MW
Contribution to Green Energy : 317,091 CER
(Carbon Emission Reduction)

Ankhe Kanak, Vietnam
Type of turbine: Vertical Kaplan Turbine
Project capacity: 2 x 6500 kW
Application: Electricity generation from run-off the river hydro power station

Darna HEP, Maharashtra, India
Type of turbine: Horizontal 'S' Type tubular Kaplan Turbine
Project capacity: 2 x 2450 kW
Application: Electricity generation from dam based hydro power station

Konal HEP, Maharashtra, India
Type of turbine: Vertical Kaplan Turbine
Project Capacity: 2 x 5500 kW
Application: Electricity generation from dam based hydro power station

RanniPerunad, Kerala, India
Type of turbine: Horizontal 'S' Type tubular Kaplan Turbine
Project Capacity: 2 x 2000 kW
Application: Electricity generation from run-off river type hydro power station

pump energy assessment and solution cell

In line with KBL's Mission, Vision and Values on reducing carbon footprints and offering sustainable solutions to our customers, the Pump Energy Assessment & Solutions cell was formed. This helps the customers to reduce the electricity bills thereby reduce carbon footprint and also gives sustainable cost advantage over competition.

KBL actively promotes the concept of lowest life cycle cost of a product. The initial cost of buying the product is less than 20% of the cost of ownership of the equipment, and 80% of the cost is really the cost of energy used as well as that of maintenance of the equipment. To supplement our sustainable LLC concept KBL offers Pump Energy audits.

A dedicated cell has been formed within KBL, comprising a team of Bureau of Energy Efficiency Certified Energy Managers and Auditors. These experts are fully equipped with sophisticated sets of measuring instruments like Ultrasound Flow Meters, Power Analyzers, Stroboscope, etc. This measures the pump and pumping system's efficiency.

Based on measured parameters, detailed recommendations report is submitted to customer, taking care of customer's latest requirements. The efficiency of the new pumps has helped reduce electricity bills up to 30%.

We have successfully carried out the audits in almost all types of sectors / segments / customers like Power, Irrigation, Steel, Cement, Pharmaceutical, Agricultural, Water Utilities, etc.

Some of our key customers for these audits have been Godrej, Aditya Birla, Deepak Fertilisers, Shree Cements, Trident group, Balarampur Cini Mills and several others.

We have also conducted audits of Agricultural Pumps under AgDSM (Agricultural Demand Side Management Scheme) at Nipani & Byadgi locations in Karnataka with FICCI and at Dodballapur near Bangalore with Enzen Global Solutions. All the recommended changes have ensured Energy Savings achieved in the range of 20% to 51% over old pumps.

We are ESCO (Energy Service Company) Grade-2 company, certified by Bureau of Energy Efficiency. We are also registered with various agencies like GEDA (Gujarat Energy Development Agency), MEDA (Maharashtra Energy Development Agency), Energy Efficiency Services Ltd., Delhi.

concept of Lowest Life-Cycle Cost (LLC)™

Increased emphasis on whole life cost while evaluating pumping schemes has led to the development of our 'LLC™ Series' of pumps.

The concept behind this series is simply to provide our customers with pumping solutions offering them the lowest total cost of ownership.

LLC™ analysis is a management tool that can help companies minimise waste and maximise energy efficiency for many types of systems, including pumping system.

The LLC™ of any piece of equipment is the total "Lifetime" cost to purchase, install, operate, maintain and dispose of that equipment.

FEATURES

- Sustains efficiency over longer period of time
- Unrivalled longitivety and low cost of ownership
- Enhanced efficiency by glass flake coatings
- Throttle bush reduces energy consumption and facilitates suction lift
- Externally removable bearing housing, reduces down time
- Corrosion resistant rigid stainless steel shaft, restricts shaft deflection & reduces mechanical wear
- Hard metallic serrated wear rings, avoid recirculation and enhance efficiency
- Helps to reduce waste and maximise efficiency

customer services & spares

Kirloskar Brothers Limited (KBL) conducts regular Energy Audits and provide access to refurbishment centres that offer state-of-the-art technology and support.

Authorised Refurbishment Centres

KBL's Authorised Refurbishment Centres (ARCs) will always stand firm as a reliable source to support all its bulk pump users by continuously implementing upgraded methods to increase efficiency of pumping equipments.

Jamshedpur, Jharkhand | Surat, Gujarat | Delhi | Vadodara, Gujarat | Bellary, Karnataka

Quick Response (QR) Code

By implementing QR coding for every KBL pump that goes out in the market, the customer is able to get the important instructions on assembly and maintenance of the product by scanning the QR code. Also, it helps in tracking the complete pump population, offering immediate commissioning response to customers after intimation and offering complete solutions of after sales service and spares procurement.

Genuine Spares

We understand the need for genuine spares to manage quick delivery schedules as it is important to reduce multiple downtime and pump breakdown that are caused due to spurious spares.

For the same, we have set up a network that ensures quick turnaround for our genuine spares so that the performance of your pumps is not compromised.

To know more about genuine spares call us at - 1800 10 34443

Mark of Genuinity

Kirloskar Brothers Limited (KBL) is a world class pump manufacturing company with expertise in engineering and manufacture of systems for fluid management. Established in 1888 and incorporated in 1920, KBL is the flagship company of the $ 2.1 billion Kirloskar Group. As the market leader in fluid management, KBL provides complete fluid management solutions for large infrastructure projects in the areas of water supply, power plants, irrigation, oil & gas and marine & defence. We engineer and manufacture industrial, agriculture & domestic pumps, valves and hydro turbines.

In 2003, KBL acquired SPP Pumps, United Kingdom and established SPP Inc., Atlanta, USA, as a wholly owned subsidiary of SPP, UK and expanded its international presence. In 2007, Kirloskar Brothers International B.V., The Netherlands and Kirloskar Brothers (Thailand) Ltd, a wholly owned subsidiary in Thailand were incorporated. In 2008, KBL incorporated Kirloskar Brothers Europe BV (Kirloskar Pompen BV since June 2014), a joint venture between Kirloskar Brothers International BV and Industrial Pump Group, The Netherlands. In 2010, KBL further consolidated its global position by acquiring Braybar Pumps, South Africa. SPP MENA was established in Egypt in 2012. KBL has a joint venture company with Ebara Corporation, Japan since 1988 for the manufacture of API 610 standard pumps. Kirloskar Corrocoat Private Limited is joint venture cooperation with Corrocoat Ltd., UK since 2006. KBL acquired The Kolhapur Steel Limited in 2007 and Hematic Motors in 2010. In 2014, KBL acquired SyncroFlo Inc., the largest independent fabricator of commercial and municipal domestic water.

KBL has eight manufacturing facilities in India at Kirloskarvadi, Dewas, Kondhapuri, Shirval, Sanand, Kaniyur, Kolhapur and Karad. In addition, KBL has seven manufacturing and packaging facilities in Egypt, South Africa, Thailand, The Netherlands, United Arab Emirates, United Kingdom and United States of America. KBL has 12,700 channel partners in India and 80 overseas and is supported by best in class network of Authorised Centres and Authorised Refurbishment Centres across the country.

All plants of KBL are ISO 9001, ISO 14001 and OHSAS 18001 standards certified. They apply Total Quality Management tools using European Foundation for Quality Management (EFQM) model. The Kirloskarvadi plant of KBL is a state of art integrated manufacturing facility having one of Asia's largest hydraulic research centre with testing facility up to 5000 kW and 50,000 m^3/ hour.

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A Kirloskar Group Company

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Our Group Companies