

The Kirloskar logo is a black square containing the word "Kirloskar" in a white, stylized, cursive font.

Enriching Lives

After Market Business  
**REVERSE ENGINEERING**



**KIRLOSKAR BROTHERS LIMITED**

Established 1888

A Kirloskar Group Company

# Reverse Engineering

Kirloskar Brothers Limited (KBL) is the first and the largest pump engineering company in India. We are among the most trusted brands in the global fluid management industry with an experience and legacy extending over a century. We are a leading provider of reliable and robust pumping solutions for virtually every application. Our supreme service standards are a basis of our continued customer trust. We offer repair and maintenance services for all types of pumping solutions. With over 450 authorised service centres and more than 125 authorised service and spare dealers, KBL today operates one of the largest service networks in the global pump industry.

Often, customers face difficulties in finding replacement parts for their old or obsolete pumps. Even if available, the delivery time or commercial term for such parts is really unfavourable sometimes. This is where our re-engineering capabilities provide a suitable and reliable alternative with the best-in-class service assurance which is a benchmark of Team KBL.

KBL bestows a special focus on reverse engineering technology. We have dedicated state-of-the-art facilities duly backed by our experienced engineering team to offer you model solutions customised exactly as per your requirements.

Our mother plant in Kirloskarvadi houses Asia's largest hydraulic research centre wherein any pump up to the largest size can be run and tested at its design speed. The centre has a testing facility that ensures that the pump performance meets specification before installation, irrespective of the size or type of the KBL pump. It also provides a rigorous testing ground for new pump design, development and improvement of existing pumps.

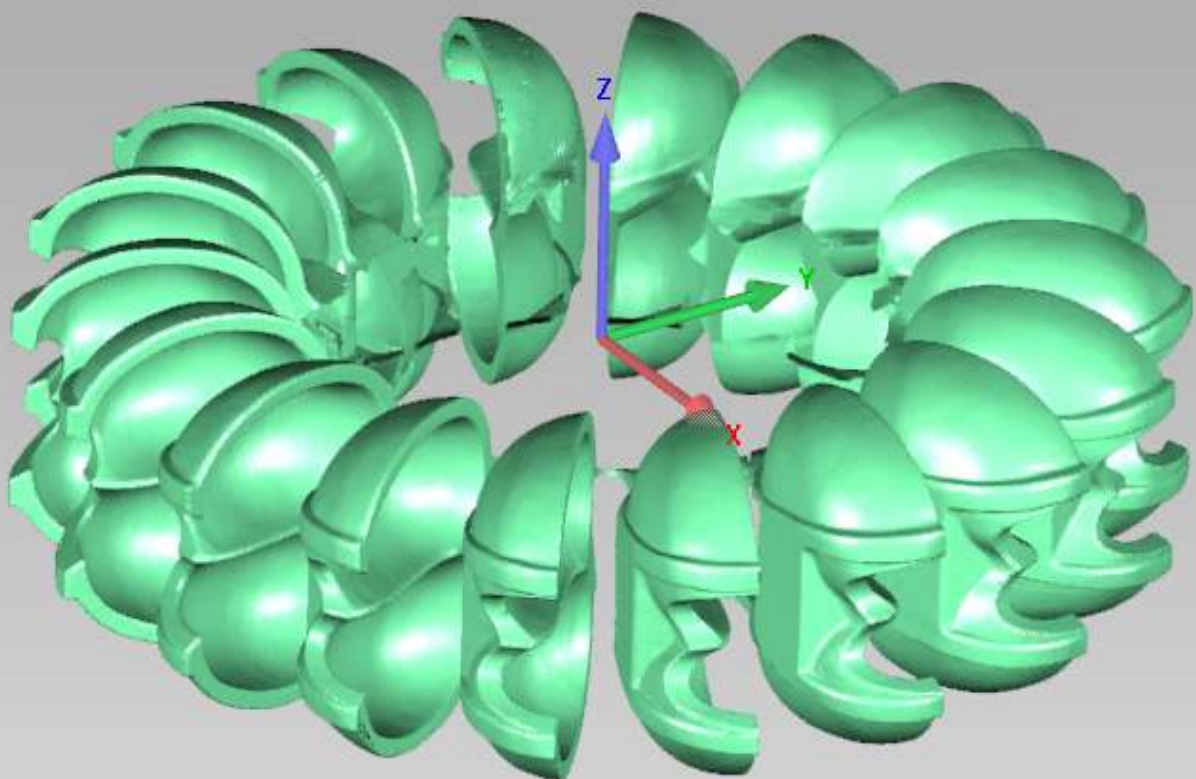
We are the only pump manufacturer in India to have a dedicated 3D printing machine, which helps us to replicate a part or create a product prototype to a high degree of accuracy. The parts or product may be turned or cast, a process which is critical in reverse engineering. For casting, we have Replicast®, a precision foundry process that enables an improved product finish and reduces the overall costs. Our dedicated Replicast team works closely with our engineering team to ensure 100% precision. With such technological capabilities, we are well-equipped to re-engineer pumps and valves of any age and manufacturer.

KBL is the only pump manufacturer in India to receive the prestigious ESCO Certification, which is testimony to an organisation's distinction in energy audits through superior design and retrofitting capabilities. We specialise in undertaking detailed quality pump auditing using sophisticated auditing instruments by experienced and certified energy auditors.



# Why Reverse Engineering?

- Reverse Engineering can be applied in cases where either the old pump details are not available, the OEM is not traceable or it is an obsolete pump model from some other manufacturer. Many imported pumps having exorbitant prices and the customer, in such cases, often keeps searching for the indigenous source.
- Amidst the persisting COVID-19 pandemic situation, many customers are hesitating to order materials from overseas.
- There are several Chinese plants PAN India that are keen to capitalise on their re-engineering capabilities.
- Thus, reverse engineering is also an integral step towards boosting the 'Make in India' and 'Atma Nirbhar Bharat Abhiyan' model.
- OEM/improved quality, Kirloskar warranty, Kirloskar expertise to increase MTBF of the equipment with attractive & competitive price for their imported pumps.
- It is applicable for both API & Non-API Pumps.



# Benefits of reverse engineering

- Reverse engineering is a long-term solution.
- We have a well-equipped Sales and Service team PAN India and overseas to support our valued end users.
- Our infrastructure is in place, with KBL being home to the world's biggest 3D printing machine
- Lead time is an added advantage for us
- Optimal cost-effective solution.
- We can produce parts for all API, Non API pumps with MOC from Cast Iron to Super Duplex.
- We are capable of casting R55, Alloy20 and other grade of critical MOCs in house which is rarest among the pump manufacturers across the globe.
- KBL having the largest 3D printing machine available in house.
- KBL having state of art CNC machine shop including Asia's largest vertical turret lathe machine and other machines available with us.
- Expertise in CFD analysis with professional R&D team.
- We are having Asia's largest hydraulic research lab.
- Well equipped Sales and Service team to give support to our esteemed customers.



## Value added service

- 3D Printing machine
- CFD analysis
- Lowest life cycle cost series (LLC) of pumps
- Energy Audit Service
- Critical MOCs
- Kirlosmart



## Pumps | Valves | Turbines | Turnkey Projects

Water & Irrigation | Power | Industry | Oil & Gas | Marine & Defence | Building & Construction  
Small Pumps | Solar Pumping System

### **KIRLOSKAR BROTHERS LIMITED**

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#### OUR COMPANIES



United Kingdom



U.S.A.



South Africa



India



The Netherlands

#### **Registered Office & Global Headquarters**

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