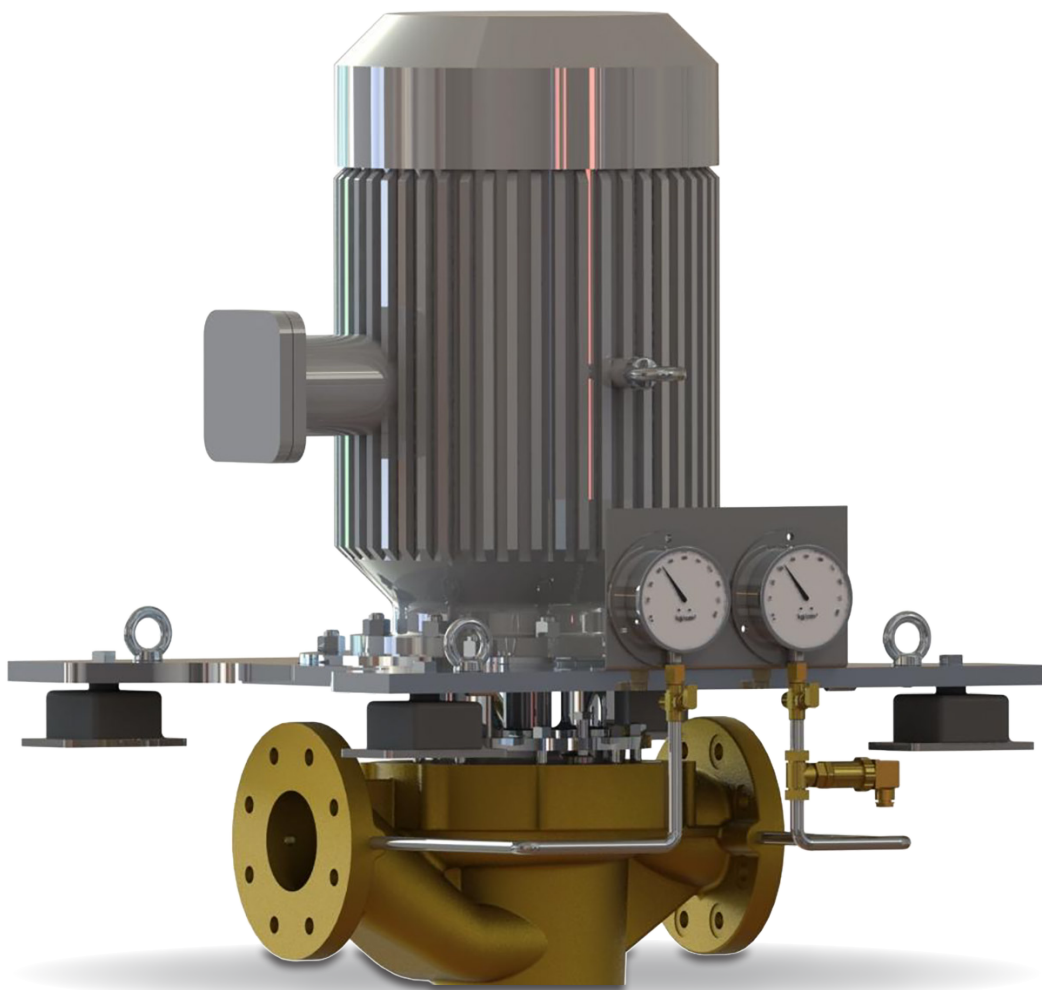




Enriching Lives

## KIRLOSKAR VERTICAL INLINE MONOBLOCK MARINE PUMPS

TYPE: INM



**KIRLOSKAR BROTHERS LIMITED**

Established 1888

A Kirloskar Group Company

# ABOUT KBL

Kirloskar Brothers Limited (KBL) is a world-class pump manufacturing company with expertise in the engineering and manufacturing of fluid management systems. Established in 1888 and incorporated in 1920, KBL is the mother company of the Kirloskar Group. KBL provides complete fluid management solutions for large infrastructure projects in the areas of water supply, power plants, irrigation, building & construction, oil & gas industry, and marine & defence. KBL manufactures industrial, agriculture and domestic pumps, valves and hydro-turbines.

Over the years, KBL has developed innovative products, which have enabled it to carve a niche globally. It is a global conglomerate and is equipped with the best technologies in the world. It is also India's largest centrifugal pump manufacturer with nine manufacturing facilities in India along with other international subsidiaries and operations in the Netherlands, South Africa, Thailand, the United Kingdom, and the United States of America. KBL has over 16,000 channel partners globally and is supported by best-in-class Pan-India network of authorised service and refurbishment centres.

KBL is the first Indian pump manufacturing company to be certified for Integrated Management System, (ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018).

Its factories deploy Total Quality Management tools using the European Foundation for Quality Management (EFQM) model.

## Indian subsidiaries and joint ventures

- Kirloskar Ebara Pumps Limited (KEPL) manufactures API, Non-API pumps, and steam turbines.
- Kirloskar Corrocoat Private Limited (KCPL) is the leading solution provider in long-term corrosion protection and energy conversion.

- Karad Projects and Motors Limited (KPML) is a motor manufacturing company with expertise in the manufacture of stampings, stators, rotors, AC rotating machines, aluminium die-cast connecting rods and pump assemblies. The company also houses a notable foundry facility specialising in the manufacture of a wide range of carbon steel, alloy steel, stainless steel and cast iron castings for industries such as pumps, valves, turbines, shipping, heavy engineering applications, among others.

## International, subsidiaries and joint ventures

- SPP Pumps Limited, United Kingdom, is a 140-year-old leading pumps manufacturer of centrifugal pumps and associated systems, a global principal in the design, supply and servicing of pumps, renowned fire pump packages and high-quality equipment for a wide range of applications and industry sectors. It is the largest pump manufacturer in the United Kingdom.
- SyncroFlo, Inc., United States of America manufactures pre-assembled pumping systems and provides solutions for HVAC systems, fire protection and turf irrigation.
- Rodelta Pumps International is a Dutch pump manufacturing company that offers products for flood control, irrigation, drinking water, wastewater, pulp & paper, power, chemical, oil & gas and general industries.
- Kirloskar Brothers Thailand Limited (KBTL), Bangkok is the Thailand Board of Investment (BOI) promoted headquarters and assembly plant of the KBL Group companies for the ASEAN and East Asia regions.
- Braybar Pumps (Pty) Limited, Republic of South Africa is engaged in the manufacturing and sales of high-head multi-stage pumps, rubber-lined slurry pumps and metal-lined bearings.

## Pumps | Valves | Hydro Turbines | Turnkey Projects

Water Resource Management | Irrigation | Power | Industry | Oil & Gas | Marine & Defence | Building & Construction | Distribution (Small Pumps) | Valves | Customer Service & Spares



Global Headquarter:  
"Yamuna", Baner, Pune.

## **RANGE:**

Delivery Size	:	Up to 150 mm.
Flow	:	Up to 350 m <sup>3</sup> /hr (350 TPH)
Head	:	Up to 100 meter
Speed	:	1450 and 2900 rpm (50 Hz) 1750 and 3500 rpm (60 Hz)
Suction Pressure	:	Up to 5 kg/cm <sup>2</sup>
Working Pressure	:	Up to 16 kg/cm <sup>2</sup>
Fluid Temperature	:	Up to 1200°C

## **APPLICATION:**

- Marine Application – On Board and Offshore
- Sea water
- Ballast and Bilge system
- Air conditioning chilled water.
- Fire-fighting and emergency water systems
- Transfer of Fuel oil, light lube oil, diesel etc.
- Main and auxiliary engine cooling.
- Main seawater ballast.
- Brine and HVAC chilled/water circuits
- Cargo / tank cleaning water circulation
- Portable water supply.

## **CONSTRUCTIONAL FEATURES:**

The pumps comply with the requirements of the DME-465 standard. These are vertical, radially split, single-stage In-line Monoblock centrifugal pumps. The pumps feature a back-pullout design and are compact yet easy to assemble and maintain. The suction and delivery nozzles are of the same size and are aligned on a common axis.

The pumps are fitted with grease-lubricated ball bearings integrated within the motor unit. A DIN-type mechanical seal is provided to ensure dynamic sealing of the liquid along the pump shaft at the stuffing box.

These pumps are available in both mid-mounted and bottom-mounted configurations using a support plate. For naval and marine applications, shock mounts are provided as a standard scope of supply beneath the motor stool or support plate.

### **Pump Casing:**

Computer aided hydraulic design with a smooth hydraulic finish of the volute passage ensures higher efficiency, resulting in a lower energy bill. It is radially split, axial suction & delivery with the same nozzle sizes and has integral flanges drilled as per BSEN 1092-2. Flange drilling as per other standards can also be supplied, depending upon customer requirement.

### **Impeller:**

The Impellers are enclosed type. Hydraulic balancing of impellers is achieved either by back vanes or balancing holes. The impellers are statically and dynamically balanced. Reliable fixing of the impeller on the shaft is achieved by using a helicoil insert under the impeller nut.

### **Stuffing Box:**

The stuffing box is sealed by a highly engineered mechanical seal, which is specially designed for pumping seawater.

### **Motor Bearings:**

Motor Bearings are grease-lubricated.

### **Direction of rotation:**

Clockwise when viewed from drive end.

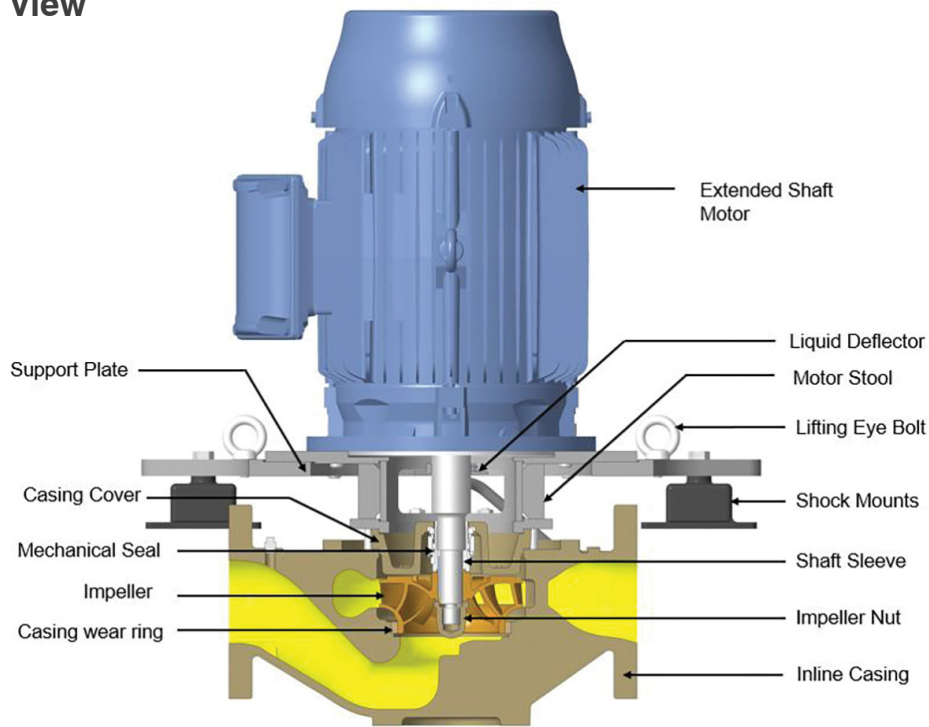
### **Material of Construction:**

Pump Casing / Casing Cover	: Ni.Al.Bronze NES 747 /Gunmetal
Impeller	: Ni.Al.Bronze NES 747 / Gunmetal
Motor Shaft	: St.St ASTM A 276 type 431, 410, 316.
Wear rings	: Ni.Al.Bronze NES 747 /Gunmetal
Motor Stool	: Mild Steel- IS 2062
Fasteners	: Nickel Aluminum Bronze / SS316

### **Features & Advantages:**

1. Comply with Indian Navy Marine Design standard DME 465 requirements.
2. Space-Efficient Vertical Inline
3. Pump and motor align vertically and inline with the piping — small footprint.
4. Monoblock Compact Construction -
5. Pump mounted on Extended shaft tailored Motor without couplings
6. Eliminates shaft alignment issues and simplifies installation and servicing
7. Reliable Motor Shaft Design
8. Extended Motor shaft design reliable for NSS –II shock grades
9. Easy Installation & Integration
10. Inline configuration fits directly into piping without complex foundations.
11. Reduced piping complexity means lower installation cost and less downtime.
12. High Reliability & Reduced Maintenance
13. Pumps are supplied with DIN seal . Pull out design helps to remove the motor unit without disturbing piping.

## Cut-Sectional View



## NON-FERROUS FOUNDRY REGISTERED WITH INDIAN NAVY

- Kirloskar Brothers Limited's (KBL) non-ferrous foundry at Kirloskarvadi plant is qualified as a Category-1 supplier to the Indian Navy for Nickel Aluminum Bronze (NAB) and Gun Metal (GM) castings, approved by DGQA (WP) on 09 December 2025.
- The KBL Foundry demonstrates a robust quality assurance framework and full compliance with stringent naval quality and reliability standards.
- Through comprehensive documentary scrutiny and on-site evaluation, the KBL Foundry achieved a Category-1 rating (score above 85%), enabling self-certification with final inspection.
- The KBL Foundry's proven metallurgical expertise ensures consistent production of high-integrity NAB and GM castings critical to pump performance and service life.
- The KBL Foundry is a reliable and capable source for naval-grade castings, supporting critical marine and offshore pump applications with assured quality and delivery.



# HYDRAULIC INSTITUTE R&D LAB CERTIFICATE

Kirloskar Brothers Limited (KBL) has achieved a landmark milestone as its state-of-the-art pump testing laboratory at Kirloskarvadi, Maharashtra, received approval from the Hydraulic Institute (HI) under its prestigious Pump Test Lab Approval Program. This makes KBL the first company in India to earn this global recognition, reaffirming its commitment to engineering excellence and adherence to international quality standards.

The certification follows a rigorous audit by Intertek, a leading provider of Total Quality Assurance. KBL's Kirloskarvadi facility is home to one of Asia's largest hydraulic testing labs, which can test pumps ranging from 5 kW to 10000 kW, ensuring the highest levels of accuracy, reliability and performance validation. The HI approval confirms the lab's compliance with ISO 17025 standards and HI 40.7 testing protocols.

## Kirloskar Brothers Limited

Kirloskarvadi, Tal-Palus, Dist-Sangli - 416308 Maharashtra, India

*The pump test laboratory located at the above address has been audited by Intertek per the requirements of HI 40.7 Program Guideline for Pump Test Laboratory Approval and has been approved by the Hydraulic Institute as an Approved Pump Test Laboratory*

*— Pump test standard(s) —*

**HI 40.6 Methods for Rotodynamic Pump Efficiency Testing**

*— Pump type(s) certified to test —*

**In-Line (IL)**

**End-Suction Frame Mounted (ESFM)**

**End-Suction Closed-Coupled (ESCC)**

**Radially-Split, Multi-Stage, Vertical, Diffuser Casing (RSV)**



Approval Registration Number:

000133

Approval Date:

October 30, 2025

Expiration Date:

October 30, 2026

A handwritten signature in black ink.

Michael Michaud  
Executive Director, Hydraulic Institute



## DEDICATED TEST LAB FOR INDIAN NAVY PUMPS

- Dedicated Test Laboratory for Indian Navy pumps has been established at the Kirloskarvadi plant to meet stringent naval qualification and acceptance requirements.
- Equipped with naval standard facilities to conduct performance, endurance, and functional testing of pumps as per Indian Navy and DQA standards.
- Ensures accurate validation of pump parameters such as flow, head, efficiency, vibration and noise for mission-critical applications.
- Enables in-house testing and faster certification, reducing dependency on external facilities and improving delivery timelines.
- Pumps can be supplied with certification from DGQA or IRS/ABS/DNV class authorities, ensuring compliance with naval and international standards.
- Reinforces KBL's commitment to quality, reliability, and lifecycle performance of pumps supplied to the Indian Navy.







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Established 1888  
A Kirloskar Group Company

### REGISTERED OFFICE & GLOBAL HEADQUARTERS

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**Email:** [marketing@kbl.co.in](mailto:marketing@kbl.co.in) | **Fax No.** 020 67211060

**Website:** [www.kirloskarpumps.com](http://www.kirloskarpumps.com) | **CIN No.** L29113PN1920PLC000670

### OUR COMPANIES



BRAYBAR PUMPS (PTY) LTD  
Republic of South Africa



KARAD PROJECTS AND MOTORS LIMITED  
India



KIRLOSKAR BROTHERS (THAILAND) LIMITED  
Thailand



KIRLOSKAR CORROCOAT PRIVATE LIMITED  
India



KIRLOSKAR EBARA PUMPS LIMITED  
India



RODELTA PUMPS INTERNATIONAL B.V.  
The Netherlands



SPP PUMPS LIMITED  
United Kingdom



SYNCROFLO, INC.  
U.S.A.

As we are constantly endeavouring to improve the performance of our products/equipment, we reserve the right to make alterations from time to time and as such our products/equipment may differ from that detailed in this publication. For latest information you may get in touch with our Regional Sales Offices.