


Enabling Productivity, Precision and Energy Efficiency


75+
years of
experience


5 million
motors


15,000+
servo solutions


45,000
gearless
machines
for elevators

Powering Precision in Material Handling

Material handling plays an important role in the industrial landscape of India, supporting the seamless movement of goods within manufacturing plants, warehouses, and distribution networks. India's infrastructure development programs also have their foundation in efficient material handling.

In recent times, material handling has seen a surge in investments, with Government spending directed towards core industrial sectors such as Power, Defence, Steel, Cement, et al, that require material handling equipment in various applications. There is also a shift to automated solutions, eco-friendly equipment and advanced systems to cater to warehouse expansion by e-commerce giants.

Material handling equipment are diverse and pertain to the movement, storage, protection, and control of materials for various applications. Cranes and hoists are specifically used to transport materials from one location to another, within a facility or between locations, and are essential for operations that require strength, precision, and repeatability.

We manufacture crane and hoist duty motors from 0.37 to 400 kW and frame size 71 to 355L. These motors can be customized to meet specific load, speed, and environmental conditions, ensuring optimal performance and longevity in diverse applications. They are engineered to withstand harsh

industrial environments, including high temperatures, dust, moisture, and vibration. This makes them ideal for heavy industries such as steel, cement, and mining.

We don't just supply equipment-we empower our customers with the knowledge to operate and maintain our motors efficiently. We offer technical training sessions, workshops, and operational manuals to help clients maximize the value of their investment.

Our Product Range

Type of Motor	Power (kW)	Frame Size	Pole
Crane and Hoist Duty Motors	0.37 to 400	71 to 355	4, 6 and 8
Integral Brake Motors	0.37 to 9.3	71 to 132	2, 4, 6 and 8
External Brake Motors	0.37 to 22	71 to 200	2, 4, 6 and 8

We offer above range in B3, B5, B14, along with combination of B35 (foot cum flange), B34 (foot cum face) and both side face mounting arrangements as per customer's need, suitable for starting methods DOL, Star Delta well as VFD.



Winners of Velocity Quiz # 4

Aarti Lokhande (Mumbai)
V Srihari Babu (Hyderabad)
V Selvam (Coimbatore)

Congratulations!

You will receive your prizes soon

Correct answers

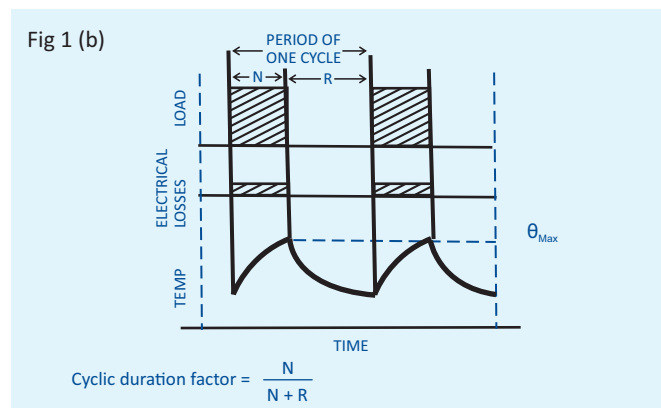
1) IIC 2) Electrical and Electronics Engineering
3) 1.5kW to 45 kW 4) Ammeter

Bharat Bijlee is synonymous with electrical engineering in India. Our key business lines are Power Systems (Power Transformers, EPC Projects) and Industrial Systems (Motors, Drives & Automation, Magnet Technology Machines). Headquartered in Mumbai, we have sales and service network across India. The company's manufacturing facilities are located in Airoli, Navi Mumbai on a 1,70,321 sqm. campus.

Our Crane Duty Motors Duty Cycle

a) S3 - Intermittent Periodic Duty

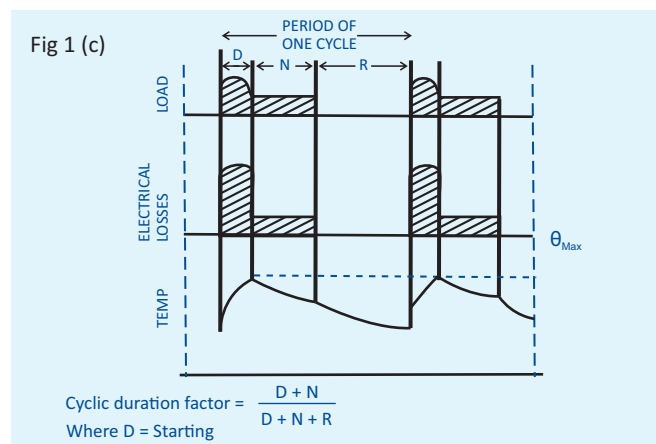
This includes a period of operation at constant load and a de-energized period, which is too short to attain thermal equilibrium during one cycle. The starting current does not significantly affect the temperature rise for this type of duty.



b) S4 - Intermittent Periodic Duty with Starting

This includes a period of starting, a period of operation at constant load and a de-energized period, which is too short to attain thermal equilibrium during one cycle. The starting affects temperature rise, as load GD is higher than rotor GD and/or number of start/hour is high, for this type of duty. The

motor is stopped after switching off either by natural deceleration, or by a mechanical brake, without additional heating of the windings.



We have recently expanded our brake motor range - now available upto 30 kW and 200 frame size in IE2 efficiency levels. These motors are engineered to address the rigorous demands of various applications, including Cross Travel/Long Travel (CT/LT) and hoisting in cranes, textile machinery, machine tools, geared motors, and more. In high-quality construction, our brake motors deliver exceptional braking performance and precise control, ensuring safety and reliability across all operations.

Partner Spotlight



Indrajeet Gavali
Director
Indiana Drives & Automation
Navi Mumbai

Indiana Drives & Automation was established in 2020 with the vision of becoming one of the leading system integrators in the automation industry. It has been associated with our Drives & Automation Division since 2021.

The company's focus industries include Plastic, Metal, Material Handling, Textiles, and HVAC (Heating, Ventilation, and Air Conditioning). These sectors are integral to modern manufacturing and infrastructure, each with unique automation requirements. Indiana's

expertise allows us them provide tailored solutions to these industries that help enhance efficiency, productivity, and sustainability. By addressing their specific challenges, it aspires to become a reliable partner in driving innovation and operational excellence.

Indrajeet, the Director of the company, shares "As a channel partner of Bharat Bijlee, we look forward to building a strong and collaborative relationship that allows us to deliver exceptional value to our clients. Moving ahead, we aim to leverage Bharat Bijlee's innovative solutions and high quality products to our customers.

We are excited about expanding our reach in the market and being part of Bharat Bijlee's continued growth and success. Our goal is to further strengthen our partnership, offering solutions that meet the evolving needs of industries, while also exploring new opportunities for joint ventures, product developments, and service excellence. Together, we aspire to contribute to the progress of India's industrial landscape and beyond."

News



Our SynchroVERT® range of energy-efficient motors won an award in the **Excellence in Innovation** category at the 12th Manufacturing Today Awards. The awards event was held in Mumbai on September 20th 2024 and brought together industry leaders to promote smart manufacturing for a more sustainable future.

Our Anil Naik accepted the award, emphasizing how SynchroVERT® is a game-changer over traditional induction motors—tackling climate change while delivering superior performance.



We have expanded our **Centralized Type Test Field (CTTF)** at Airoli works, enabling testing of 1.5 MW LV/MV motors at voltage levels up-to 11kV. The facility utilises regenerative drive technology, which returns a large portion of the energy consumed during motor testing back to the grid. This makes the test set up highly energy efficient and sustainable. The facility has dedicated areas for Type Testing and Routine Testing allowing customers, who visit our plant to witness the tests, to manage their time effectively. Equipped with best-in-class instrumentation, CTTF holds accreditation from National Accreditation Board for Testing and Calibration Laboratories (NABL), and maintains high accuracy in line with both the Bureau of Indian Standards (BIS) as well as international standards.



Our Motors team won **Gold at the 12th CII-IQ National Excellence Practice Competition 2024**, held in August 2024. We competed against 15 teams in the Production/Operations category, and impressed the judges with our case studies on optimisation of flow in manufacturing systems to minimize lead time.



Our Motors division participated in the **India Bio Energy & Tech Expo 2024**, held at the Yashobhoomi IICC New Delhi, in September 2024. We showcased our latest technology for safe area and flameproof motors at our booth. The expo brought together key industry leaders from the bio gas, CNG, and bio energy sectors.

News



Our Drives & Automation Division hosted their 6th Annual Partner Conference in Goa. The theme this year was **Moving to Orbit Next**, highlighting our next-gen range of KEB F6 drives.

Under the leadership of our Bhadrash Dani, the team engaged with partners across India to discuss strategic growth, innovations, and upcoming product launches. Applications of our KEB F6 drive sparked insightful conversations. We also took the opportunity to recognise our top achieving partners of last FY at the conference.

Our participation in the International Sourcing Expo for Elevators & Escalators (ISEE) 2024, Mumbai



We participated in the 2nd ISEE from 5th-7th December 2024 at the Bombay Exhibition Center, Mumbai. The event showcased India as a hub for elevator technology, offering insights and networking opportunities.

Our Magnet Technology Machines (MTM) VP, R Rajaraman inaugurated the stall with our MD Nakul Mehta, in presence of the MTM design and sales team. We showcased the GreenStar® gearless elevator machines, including the new GreenStar® 28 pole - an energy-efficient product for passenger elevators that ensures a smoother and more comfortable ride.

A film on our MTM division debuted at the show, highlighting its journey since 2007, expertise, achievements, and global partnerships. It is available on our YouTube channel here <https://tinyurl.com/mr2fjptv>.