

# MANAGEMENT DISCUSSION AND ANALYSIS



## ECONOMIC REVIEW

### Global Economy

The global economy is facing headwinds namely, ongoing geopolitical tensions, supply chain bottlenecks and persistent inflationary pressure; events that bear the risk of derailing post-pandemic recovery. This economic situation has hampered industrial recovery, and raised the burden of uncertainty on investment. The rise in the federal funds rate, in particular, sparked the most aggressive tightening of the monetary policy in decades.

Global GDP growth is estimated at 3.4% in CY 2022, 2.9% in CY 2023 and 3.1% in CY 2024. Advanced economies that demonstrated growth of 2.7% in CY 2022 are expected to witness 1.2% growth in CY 2023 and 1.4% in CY 2024. Emerging market and developing economies which grew 3.9% in CY 2022 are expected to grow at 4% in CY 2023 and 4.2% in CY 2024. Most countries are expected to experience lower headline (consumer price index) inflation in CY 2023 than in CY 2022. Global inflation is set to fall from 8.8% in CY 2022 to 6.6% in CY 2023 and 4.3% in CY 2024.

### Indian Economy

Driven by strong domestic demand and fixed investment growth resilient to global headwinds, the Indian economy is anticipated to grow at 7% in FY 2022-23, according to the Finance Ministry. The FY 2022-23 witnessed high services exports, moderation in oil prices and a fall in import-intensive consumption demand. These events support the expectation of a fall in the current account deficit in FY 2022-23 and FY 2023-24 further aided by robust revenue collections.

The easing of global inflationary pressure led by a decline in international commodity prices supported by robust government measures are expected to aid economic growth in India. According to the first advanced estimates by National Statistics Office (NSO), in FY 2022-23, GDP growth rate is projected at 7%, lower than the 8.7% witnessed in FY 2021-22 wherein pent-up demand led to a boost in growth.

In FY 2023-24, the Indian economy is expected to become the fastest growing economy in the world. Indian GDP growth is estimated at 6.9% in FY 2022-23 and 6.6% in FY 2023-24 by the World Bank.

India's inflation trajectory is expected to be significantly impacted by extreme weather conditions like heat waves and the potential for an El Niño year, volatility in international commodity prices and the possibility of a pass-through of input costs to output prices.

(Source: NSO, World Bank, PIB)

## INDUSTRY OVERVIEW & DEVELOPMENTS

### Global Market for Pumps

Globally, pump consumption increased by 13% in 2022 to USD 64.4 Billion led by robust growth in Europe, Saudi Arabia, India and North America. However, this growth being price-driven does not reflect a rebound in economic activity. Product shortages and increased input prices, particularly higher cost of energy, is hampering growth in most industrial end-use markets. The manufacturing and automobile sectors are facing headwinds caused by supply chain issues, which has dampened demand across a range of pump end-use markets such as chemicals, rubbers and

metals. Labour shortages and inflationary pressures have constrained demand from the construction sector. The net zero target is weighing on investment in oil and gas sector.

Regionally, European demand is expected to expand by 17.7% in 2022. This largely reflects the price effect rather than robust manufacturing activity, which is likely to be the hardest hit by supply chain issues. Demand in Russia and Ukraine will be severely curtailed owing to the war and sanctions. Demand in Asia is estimated to expand by 6.1% with China growing at 4.4%. North American demand is expected to grow by 13.5% with the US market set to expand by 11.9%.

The outlook for aggregate output of pump consuming industries is set to grow by 1.1% in 2023 and by 2.9% in 2024. In 2023, the annual pump demand is predicted to grow by 0.5% mostly driven downward by a correction in producer prices and slowdown in volume activity. Consumption is, however, expected to accelerate in the medium term. Centrifugal pumps account for 65% of the total market, while positive displacement pumps make up the remaining 35%. Although global risks are progressively declining, industrial outcome will strengthen at a slower pace. The warm European winter somewhat mitigated the impact of the geopolitical turmoil in the region. Additionally, strong labour markets in Europe and the US, the re-opening of China, and decrease in commodity prices have all contributed positively to the regional economy.

(Source: Oxford Economics - Spring 2023 Overview)

### Indian Pump Market

The Indian pump market ranks sixth globally and second in the APAC region. In 2021, the pumps market (excluding parts) posted a 16.6% growth to USD 2.1 Billion in 2022. This rise in growth is primarily led by rapid urbanisation, surge in industrial activity and ongoing government support to agriculture and infrastructure sectors. Agriculture, which accounts for nearly 50% of pump end-use demand, is expected to witness robust consumption growth and fuel demand in the pump market. Similarly, demand for pumps is expected to witness an 18.5% rise in construction, the second largest pump end-use market. However, inflation is a major barrier for growth in the pump sector. In the short term, the risk of monetary tightening can curb business spending on infrastructure and subsequent pump demand.

In 2023, growth of the pumps market (excluding parts) is expected to moderate at 4.8% as inflationary pressure will erode domestic purchasing power and higher interest rates can depress fixed investment spending. Both these factors will significantly weigh down industrial production growth, which is expected to slow to 1.8%, as against 4.5% in the previous year. The aggregate growth of sectors with major demand for pumps, is expected to fall to 2.1% in 2023, and the effect on pumps demand will most likely be compounded by a lower quantum of investments across the economy.

The economic weakness prevalent in 2023 is expected to be transitory and demand for pumps is anticipated to return to a growth of ~4.1% by 2024, as the worst effects of interest rate increases fade and global demand rises again. Over 2023-26, pump demand is expected to grow at 5-6% annually led by an acceleration in investment spending and weighted end-use output.

(Source: Oxford Economics - Spring 2023 Overview)

### COMPANY OVERVIEW

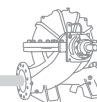
Kirloskar Brothers Limited (KBL/the Company) is a diversified Indian multinational corporation with a focus on engineering and manufacturing a wide range of pumps, valves, hydro-turbines and systems for multiple applications.

KBL is an innovation-driven business, prudently far-sighted and prepared to effectively surmount industry challenges. The Company strives to empower its people, enhance business, strengthen infrastructure and create new opportunities for growth through complete fluidity management. The Company's capabilities span from large infrastructure projects such as water supply, power generation, irrigation, oil & gas and marine & defence to small pumps for domestic and agricultural use.

The Company manufactures over 75 types of pumps with a flow capacity of 120,000 m<sup>3</sup>/hr. KBL is well-equipped to meet the growing demands of local and global clients. It has 14 state-of-the-art manufacturing facilities (including subsidiaries), out of which 5 are based outside India. KBL has 16,250 channel partners in India and 250 overseas. The business is supported by a best-in-class network of authorised sales and refurbishment centres across the country.



**The Indian pump market ranks sixth globally and second in the APAC region. In 2021, the pumps market (excluding parts) posted a 16.6% growth to USD 2.1 Billion in 2022. This rise in growth is primarily led by rapid urbanisation, surge in industrial activity and ongoing government support to agriculture and infrastructure sectors.**



All Total Quality and Productive Maintenance (TQPM) enabled manufacturing facilities are certified for Integrated Management System comprising ISO 9001:2015 (QMS), ISO 14001:2015 (EMS), ISO 45001:2018 (OH&S) and ISO 50001:2018 (EnMS) Management System Standard.

## Manufacturing Units

### Kirloskarvadi plant

The financial year 2022-23 has been yet another successful year for business at Kirloskarvadi, providing the right impetus to raise the bar for its annual performance, which has once again reached a new benchmark. KBL has achieved its highest sales revenue to date, including the largest despatch and a record-breaking number of over 60,000 pumps sold. Additionally, the cast iron foundry is operating at its highest-ever tonnage of 8,370 tonnes.

In view of the ongoing disruption in the supply chain, KBL is committed to ensuring timely delivery of shipments on time in full despatches from the Kirloskarvadi plant.

The Company launched its new end-suction pump (DBxe) and vertical inline pump (KW-LC), that sets new benchmarks in the pump industry with exclusive design parameters and a wide variety of expansive features. Its journey towards Total Quality and Productive Maintenance (TQPM) has been a resounding success. The establishment of cross-functional teams helped to focus on equipment upgrades led by a systematic approach to identify and eliminate losses that

affected equipment effectiveness. Kirloskarvadi is committed to continuing to strive to achieve greater success in FY 2023-24 to enrich lives.

### Dewas Plant

In FY 2022-23, various new pump models were introduced including GMC/KDI-EE5 Monobloc, KVM 10 & 15m<sup>3</sup>/hr with IE2-motor, KDI-EE4 Monobloc & Eterna CW+ Pumps. Different cost-saving and continual improvement projects were undertaken and completed.

### Kaniyur Plant

In FY 2022-23, various new pump models were launched at the Company's Kaniyur plant including Pamba Puzha, Jalnayak, Jalsena and Jalhansa.

The plant has won awards under different categories such as:

- Quality case study in NCQC held at Aurangabad conducted by QCFI
- Silver award for best productivity improvement project by Coimbatore Productivity Council

### Sanand Plant

The plant has developed and launched 118 units, including KS4 UVA Series and KS3 PURNA. Of these, 103 models are BIS certified while 93 are BEE certified. The plant has supplied more than 1,300 pump sets under the Jal Jeevan Mission (JJM) scheme of Government of India.





The Sanand plant won awards under different categories including:

- Winner in Excellence in Sustainability 2022 in the large category, at the Manufacturing Today Conference and Awards 2022
- Runner Up in Excellence in Product Innovation & Design 2022 in the large category, at the Manufacturing Today Conference and Awards 2022
- Awarded 3 Gold and 1 Silver medal by the Quality Circle Forum of India, Vadodara Chapter, for Quality Circle competition, SMED case study, TQPM Implementation and KAIZEN case study competition respectively
- Received 'Abhilekhan' award for maintaining the best QC record book in the Quality Circle competition by Quality Circle Forum of India, Vadodara Chapter

## OPERATIONAL REVIEW

### Water

In FY 2022-23, the water resources management department received substantial orders from large OEMs and contractors in Uttar Pradesh, Rajasthan, and Uttarakhand. Furthermore, it secured a significant number of orders for the multi-stage pumps, split-case pumps and large VT pumps.

The Company sold 79 units of value-added products including lowest life-cycle cost (LLC™) series pumps, Autoprime pumps, cloud-based remote monitoring and predictive maintenance systems (KirloSmart™) and promoting Pump as Turbine (PAT) concept in Maharashtra, Gujarat, Tamil Nadu and North-Eastern states, which resulted in improved revenues. The Company also bagged its largest-ever order, for nine large VT pumps with 43.5 metre suspension length for Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB), Sunkishala project, which reflects KBL's strong engineering expertise.

With the addition of KirloSmart™, an Internet of Things (IoT) solution incorporated into various tender specifications, the Company anticipates that IoT-based applications will become a mandatory requirement in the future for the execution of project orders.

With the widespread implementation of Jal Jeevan Mission (JJM) and AMRUT 2.0 projects by state governments to improve water distribution in rural India, there is a huge potential for growth in the water sector. The solar business is experiencing growth in the institutional segment and the open market. The Company's efforts in both the water and solar segments have resulted in significant orders from large OEMs and mid-sized contractors.

### Irrigation

In FY 2022-23, the Company successfully completed the production of 132 vertical turbine (VT) pumps (Small VT, Medium VT, Large VT), specially designed to pump water from deep reservoirs. The Company successfully executed major irrigation projects in Uttar Pradesh, Madhya Pradesh, Gujarat and Odisha, which involved the despatch of large and medium-range VT pumps.

In the medium term, there are opportunities emerging in the large metallic volute pump (MVP) business as the government's river linkage programme – a large-scale civil engineering project to manage water resources – has finally gotten off the drawing board and actively taking shape in various states.

### Valves

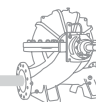
In FY 2022-23, the valves sector witnessed robust growth with an increase in fresh order intake. Strong government focus on clean drinking water and sanitation projects has created ample opportunities in this sector. Additionally, this segment received repeated orders for large-sized valves in major irrigation projects. The successful execution of export orders in the Middle-East improved client confidence and is expected to generate additional business.

### Building and Construction

This segment posted a robust 25% growth in FY 2022-23. The Company commissioned FM/UL fire pumps at GMR Goa International Airport Limited and Sabarmati High-Speed Rail depot, Ahmedabad. KBL participated in the Plumbex exhibition (Delhi), Indian Plumbing Conference (Pune), Acrex exhibition (Mumbai), Lucknow Architects' Festival and Central PWD Engineers Association platinum jubilee event. During the



**The Company sold 79 units of value-added products including lowest life-cycle cost (LLC™) series pumps, Autoprime pumps, cloud-based remote monitoring and predictive maintenance systems (KirloSmart™) and promoting Pump as Turbine (PAT) concept in Maharashtra, Gujarat, Tamil Nadu and North-Eastern states, which resulted in improved revenues.**



year, the Company organised more than 125 seminars across India to promote value-added and new products.

### Industry

In FY 2022-23, the industry business witnessed significant sales growth, driven by steel, chemical, sugar and zero liquid discharge segments. The addition of new clients led to increased business, in terms of both value and volumes. The industry business scaled new heights with breakthrough orders of various packages in the steel & chemicals segment. Replacement business opportunities witnessed 12-15% improvement. Additionally, the business also improved in terms of booking of value-added products within various customer segments.

The market outlook for the steel & chemical segment has improved, which bodes well for future business growth.

The Authorised Pumpset Original Equipment Manufacturer (APOEM) concept was successfully established in almost all zones, which helped to increase the footprint and meet clients' urgent delivery requirements.

Focus on replacing old pumps with energy-efficient products yielded good revenues. The Company bagged ~13% orders as compared with the overall bookings in the domestic segment.

### Oil and Gas

Under its oil & gas division, the Company offers non-API pumps for upstream, midstream and downstream applications, such as crude oil transfer, refinery processes and fertilisers. In FY 2022-23, the segment clocked robust 29% growth in sales, driven by robust demand from the oil & gas sector, among others. The Company's strong focus on innovation, quality and customer satisfaction has enabled it to establish a stronghold in both domestic and international markets.

KBL is well-positioned to capitalise on growing global demand. In FY 2023-24, the Company expects to witness some roadblocks like the 'on-hold' status of major projects. Substantial investments expected to materialise across other O&G segments would cater to KBL's business interests, like

the BINA petrochemical unit, Petronet LNG, Petrochemical Complex in Vadinar, and Jagatsinghpur fertiliser plant expansion project. The Company has a strong pipeline of orders and projects in the oil & gas sector.

### Marine and Defence

KBL remains committed to participating in the Ministry of Defence's indigenisation programmes under the Make in India initiative.

### Power

The power sector effectively delivered on its commitments for order bookings and sales in FY 2022-23, whereby the Company secured significant contracts in the thermal, hydel and nuclear sectors.

KBL achieved a key milestone in the nuclear sector through its indigenous design, manufacture and supply of the boiler feedwater pump for the Rajasthan Atomic Power Station (RAPP) nuclear power plant.

### Small Pump Business

The FY 2022-23 witnessed the strategic remodelling of the small pump business in view of the evolving market environment and past learnings. The growing acceptance of 'energy saving products' in the market led to increased demand for KBL's energy efficient pumps.

Regained economic momentum in FY 2022-23, served to ease the impact of the pandemic witnessed over the previous two years. The need for small pumps increased, thus leading to continued growth of the pumps business.

Strategic promotional activities coupled with new product launches enabled the Company to tap into larger markets. The deployment of digital processes assisted paperless and efficient business operations. Customer engagement and value-based selling also enabled the Company to retain and add a significantly higher number of new key accounts in the industrial segment. These initiatives shall continue to complement the aggressive business plans for the future.

**PRODUCTS LAUNCHED IN FY 2022-23**





Jalsena-I  
(Gold)



Jalsena-II  
(Gold)



Aqua  
Knight



Jalhansa I  
(Silver)



Jalhansa II  
(Silver)





## CUSTOMER SERVICE SUPPORT (CSS)

The CSS – Engineered Service Division (ESD) achieved significant growth during FY 2022-23, with an 11% increase in order booking and a 24% gain in revenue from sales. This marks the highest order booking and sales since the division's inception.

During this period, the ESD service engineers successfully completed the overhaul of seven units of large vertical turbine (VT) pumps at Gardabani TPP, Georgia within a remarkably short period of 22 days. This accomplishment reflects the dedication and exceptional service capabilities of the experienced KBL service team. Through continual efforts and persuasion, KBL also managed to convert several customers – previously working with unreliable service providers – into satisfied KBL customers.

In addition to these achievements, the CSS (Small and Medium Pump Division – SMPD) experienced remarkable growth, with a 17% gain in order intake and a 26% increase in sales. The SMPD service revenue also witnessed a substantial growth of 70%.

To ensure exceptional service support, KBL maintains a dedicated and extensive service network that consists of over 82 authorised service and spare dealers and more than 79 authorised service centres for CSS-SMPD and 650 service centres of SPB-CSS throughout the country. This network is well-prepared to handle any service demand for all types of pumps. KBL's unwavering commitment is to exceed customer expectations and deliver customer delight

through constant improvements. The Company achieves this through maintaining frequent interaction with customers, understanding their concerns, and providing prompt, need-based service support.

## International Business

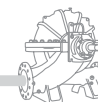
The Company's international businesses continued to deliver a strong performance in 2022, better than 2021, despite the challenges posed by escalating inflationary pressures and global supply chain issues. KBL's wholly-owned international subsidiary, KBI BV, recorded an improvement in profitability in 2022, mainly attributable to the combined result of higher sales and the application of stringent fiscal policies. During 2022, the key goals were to improve cash flow and achieve a reduction in the debt burden across all subsidiaries and at the Group level. Consequently, targeted efforts to improve receivables collection and tighter management of fixed overheads, resulted in sustained improvement in the Group's cash position.

During 2022, the Company's international business witnessed a record-high surge in order intake. As a result, in 2023, the Company is experiencing its largest accumulated backlog in history, amounting to GBP 97 Million which is significantly higher as compared with GBP 68 Million in CY 2021.

The growth in the SPP pumps business can be attributed to the strategic focus on activities of the Engineering Services Division (ESD) and the strong performance of the industrial fire division. The ESD's strategy to leverage synergies within the aftermarket and energy sectors resulted in an increased order intake of GBP 19.1 Million, up 127% over







the previous year. The ESD sales increased 124% to GBP 16.9 Million. Industrial fire order intake returned a growth of 9% with increased sales to GBP 11 Million. In the USA, SPP Pumps Inc also experienced a substantial increase in order intake. A number of new products were launched in the US market even as some products became popular with the data centre and warehousing markets. This growth further bolstered the Group's performance and highlights the organisation's success in capturing opportunities in the US market.

South Africa entities (SPP Pumps Limited and Braybar Pumps Limited) experienced a major business turnaround during 2022 with order intake crossing the ZAR 100 Million mark. The order backlog position was thus strengthened by the end of December 2022 to a new high of ZAR 30 Million, up by 20%. Top line sales increased by 30% (ZAR 95.3 Million) as compared with 2021 while PBT increase was higher by 125%.

In FY 2022-23, Kirloskar Brothers Thailand Limited (KBTL) witnessed strong growth of over 37% compared with the previous year and recorded the highest sales in the Company's history that touched THB 574 Million.

KBI BV has made significant investments to upgrade its facilities and provide key skill development training for its workforce. Notable project initiatives include the implementation of the new Centre of Excellence (CoE) to support the expansion of the aftermarket business and IT solutions which optimise operations and promote continual improvement.

Overall, the Group's international businesses have overcome challenges and delivered exceptional performance, fuelled by record order intake, strategic market focus and significant investment in infrastructure and human capital.

## FINANCIAL REVIEW

- The consolidated revenue from operations grew 22% by ₹ 37,302 Million in FY 2022-23 from ₹ 30,576 Million in FY 2021-22 led by robust growth in end use segments
- Gross profit grew 27.9% to ₹ 18,028 Million in FY 2022-23 from ₹ 14,097 Million in FY 2021-22
- EBITDA grew 78.8% to ₹ 4,264 Million in FY 2022-23 from ₹ 2,385 Million in FY 2021-22. EBITDA margin expanded by 363 bps to 11.4% in FY 2022-23
- Profit after tax grew 150.0% to ₹ 2,358 Million in FY 2022-23 from ₹ 943 Million in FY 2021-22. PAT margin expanded by 324 bps to 6.3% in FY 2022-23

Key Financial Ratios (Reasons where variation is more than 25%)	Year ended March 31, 2023	Year ended March 31, 2022	Absolute Variance (%)
<b>Current Ratio</b>	<b>1.54</b>	1.43	7.72%
<b>Debt-Equity Ratio</b>	<b>0.09</b>	0.21	56.19%
(Reduction in borrowings along with increase in net worth due to higher profits)			
<b>Debt Service Coverage Ratio</b>	<b>2.89</b>	0.94	206.92%
(Reduction in borrowings along with higher profits)			
<b>Interest Coverage Ratio</b>	<b>23.18</b>	11.96	93.91%
(Reduction in borrowings along with increase in operating profits)			
<b>Return on Net Worth (%)</b>	<b>14.00%</b>	9.41%	48.74%
(Higher profits due to better operational performance)			
<b>Inventory Turnover (No. of times)</b>	<b>3.43</b>	3.32	3.47%
<b>Debtors Turnover (No. of times)</b>	<b>6.15</b>	5.22	17.80%
<b>Operating Profit Margin (%)</b>	<b>9.81</b>	7.35	33.47%
(Higher profits due to better operational performance)			
<b>Net Profit Margin (%)</b>	<b>6.55%</b>	4.77%	37.45%
(Higher profits due to better operational performance)			



## RISK MANAGEMENT

The Company's robust risk management framework is in compliance with the requirements under Regulation 21 of the SEBI Listing Regulations, 2015. The risk management policy enables the Company to monitor and mitigate the various risks including internal and external risks. The Company's Board of Directors have constituted a risk management committee tasked with the responsibility to continually monitor various strategic, operational and financial risks. The Committee meets at regular intervals to identify the top risks and prioritises those risks. It then formulates adequate mitigation plans to address any foreseeable risks. The Committee keeps a close watch on changes in the internal and external environment to check the emergence of any new threats.

*Read more about our Risk Management on page 32 of this report*

## HUMAN RESOURCES

The human capital has always been the heart of KBL. One of the Company's main goal is to help employees realise the significance of their contributions in the organisation's ability to recover and expand, while helping them to keep connected with the overarching purpose, vision, mission and values of KBL. The Company understands that support from employees during times of crisis is only possible when they feel supported and connected with the organisation.

KBL's HR strategy enabled it to maximise the potential of its human capital. It also empowered the organisation to achieve its broader business objectives. During the past few years, characterised by the Great Reshuffle occurring in the industry due to the increased demand for talent, employee retention has become a challenge. However, KBL has been well-equipped with preventive measures that enabled it to mitigate employee attrition.

Clear business projections helped the organisation to devise and execute a robust talent acquisition strategy. Advancement of the reward cycle by two months aided in talent retention despite volatility in the external environment. The dedicated technical training wing helped to design the curricula for different positions and roles that served to enhance skill building at all levels of the organisation. Key knowledge topics across the organisation were identified and suitable learning modules were developed. In FY 2022-23, the Company launched a grade-wise organisational level leadership competency model. Accordingly, leadership competencies at each level were defined to enable the achievement of organisational objectives.

A unique talent management approach was designed to identify and nurture entrepreneurial individuals capable of accepting the responsibility of demanding and challenging roles to help the organisation drive the needed change and accomplish its goals.

As part of its transformation journey over the past few years, the Company has intensified its focus on strategic human resource management and development. This is a future-oriented process to develop and implement HR programmes that address and resolve business challenges and directly

contribute to the achievement of major long-term business objectives. In the light of changing market conditions and an evolving business environment, the Company's HR business strategies have been revamped to ensure the recruitment and retention of the right people, and provide ethical and cultural leadership. The organisational HR policy strives to achieve long-term strategic HR objectives while being instrumental in the organisation's strategic growth.

During the year, the Company maintained cordial and peaceful industrial relations across all its manufacturing plants.

*Read more about our Human Resources initiatives on page 60 of this report.*

## INFORMATION TECHNOLOGY

The Company continued to stride forward on its digitalisation journey in FY 2022-23. The Company introduced various new systems that served to widen the scope and reach of digitalisation in various functions and processes. Implementation of the transport management system enabled the Company to improve logistic efficiency, and thus provide better control over transportation, optimise cost, and ensure faster product delivery to consumers.

Implementation of S/4HANA – a SAP tool to perform transactions and analyse business data in real-time – in the group company Karad Projects and Motors Limited (KPML) led to strategic benefits for KBL too. The implementation of the continuous business process improvement (CBPI) programme, helped the Company to focus on automation of business processes, and enabled the application of checks and controls in the system, improved process efficiency, reduction in cost and decrease in manual intervention.

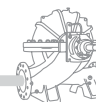
KBL is focussed to build a state-of-the-art IT Infrastructure to be the backbone of its business systems. Cybersecurity remained a priority, and numerous measures were initiated to upgrade the digital security infrastructure. Key strategic decisions were implemented across the group, including common cybersecurity products like email security, XDR and DLP. The Company is committed to continuing its digitalisation journey through FY 2023-24 with the same zest and dedication.

*Read more about our Intellectual Capital on page 54 of this report.*

## RESEARCH AND DEVELOPMENT

In FY 2022-23, the Company's R&D division was engaged in the introduction of various new product series to maintain KBL's technological and competitive edge in the fluid management business.

During this period, the Company launched a new series – DBxe and GKw – that introduced superior efficiency for utility applications and replaced the old DB and CE product series, which had become obsolete. Similarly, a new series of Inline pumps type KW-LC were introduced for HVAC segment. To address the needs of the firefighting market, a complete range extension of pumps in the FM/UL series was launched. The Company also developed a special 315 kW submersible pump type NS for the Russian market. KBL continued to



designed, manufactured and supplied engineered products to cater orders from Irrigation, Nuclear, Hydel segments.

To lead the domestic market, KBL launched new series of 32 mm submersible KS3 pumps with 10 variants. Keeping in view the needs of the industry market, KBL developed a super-premium series with 22 variants of monoblock pumps with IE4 motors. To cater to the nation's agricultural needs, the Company developed 80 mm borewell submersible and above pumps series with 59 variants. Towards import substitution, KBL developed an indigenous submersible type pump-type CW model.

### INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY

Given the diverse business operations and the wide range of products, it was imperative for the Company to set up and continually review an effective and efficient internal control mechanism. The Company thus established a detailed 'code of conduct' as a guide to deal with all its stakeholders. The Company also has in place a whistle-blower policy. Internal controls have been further fine-tuned through proper budgetary controls, clearly defined roles and responsibilities, a schedule of authorities, documented policies and guidelines to enable appropriate decisions, along with an effective review mechanism. There are in-built checks and balances to ensure that the functioning of the business is not unduly affected by controls, and appropriate business ethics are upheld. The internal control mechanism is commensurate with the size and complexity of the business and aligned with evolving business needs.

The Internal Financial Controls (IFC) established by the Company covers all the significant business processes and operation in complete compliance with the Companies Act, 2013. Various internal controls, established at the entity level and process levels, are designed to ensure regulatory compliance and appropriate recording and reporting of financial and operational information. Processes and controls laid down as per IFC are regularly updated to keep pace with the changing business environment.

Internal controls are regularly reviewed by the internal audit department. All significant and material observations are periodically reported to the Audit Committee of the Board, and necessary action is undertaken. The senior management and the Audit Committee of the Board are periodically apprised of the Company's internal processes with respect to internal controls, statutory compliances and adherence.

### QUALITY ASSURANCE

The Company continued its efforts to further strengthen its in-house processes and supplier quality. Focussed action against these enablers, have resulted in a reduction in customer complaints, warranty costs and an improvement in productivity. KBL has also made headway towards modernising its performance test facilities by utilising technology and IT tools. KBL is fostering learning and sharing initiatives across its manufacturing plants through regular workshop sessions on quality, including process quality, system audit, problem-solving tools, TQPM tools, energy saving, business excellence, carbon emission, etc.

### SUSTAINABILITY

As part of its sustainability initiative, the Company is assessing the implementation of manufacturing processes and products and initiating actions to reduce its carbon footprint impact. The Company has also begun to promote awareness about environment, social and governance (ESG) principles across the value chain including its workforce. The Company remains committed to embracing and implement all ESG aspects, regardless of legal obligations, and encourages the same dedication from all its value chain partners.

### CAUTIONARY STATEMENT

Statements in the Management Discussion and Analysis describing the Company's projections and estimates are forward-looking statements and progressive within the meaning of applicable security laws and regulations. Actual results may vary from those expressed and incidental factors.