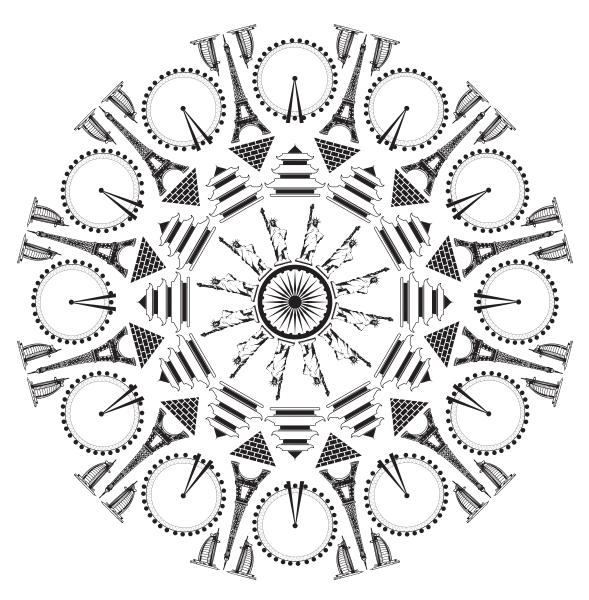


Cascade JAN-JUNE 2014



GLOBAL FOOTPRINT

KIRLOSKAR BROTHERS LIMITED

Editor Shipra Tripathi

Managing Editor Preeti Sapre

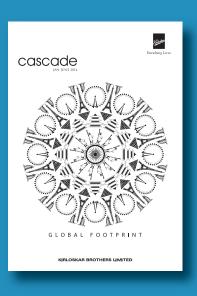
Editorial Team Shweta Naik Vidya Yakkundi

Global Headquarters Yamuna, Survey No. 98/(3-7) Baner, Pune - 411 045 India

Contact Tel. : +91 20 2721 4444 preeti.sapre@kbl.co.in shweta.naik@kbl.co.in vidya.yakkundi@kbl.co.in

www.kirloskarpumps.com

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Concept

Globalisation has given rise to a graceful interplay between all world economies, creating a paradigm where none can exist in isolation and all revolve around each other.

The world's history is rich with symbols that remind us of the past glories of the great that walked among us, and the time has come for us as a nation to leave an indelible mark in this globalised, connected world. We as organisation aspire to be its modern monument of success, innovation and perfection, a beacon of global leadership. At the heart of it all, we are and will always continue to be driven by an ethos, a culture and a spirit, that is indubitably Indian.

Foreword



In the past year we have consolidated our strengths, lowering our debts and thereby improving our financial health. We look forward to an eventful year ahead with new thoughts and a vision.

ACK 22-3

Sanjay Kirloskar Chairman & Managing Director Kirloskar Brothers Limited

The new financial year started with a lot of excitement about the elections and the formation of the new government. As Mr. Modi leads his team, we from industry look forward to improvements and a fulfillment of our aspirations as a truly and fully globalised nation.

Visualising the next is imperative for inclusive growth to take place in the world's largest democracy. There are no quick fixes for the maladies that plague us today. Tough and decisive reform oriented policies will need to be promulgated to get sustainable progress on track. On our side we have strengthened our manufacturing abilities to match that of the global best. We have the ability to shift gears and accelerate to a new trajectory. As we create a new vision for ourselves and challenge our abilities to take new and stretched targets, we look forward to a level playing field globally.

DIRECTOR'S DESK



Jayant Sapre Director Kirloskar Brothers Limited

Dynamism is the hallmark of a great organisation. A willingness to take new challenges head on, an ambition to be among the world's best, and a continuous search for innovative solutions, are part of this dynamism. Enthusiastic about change, this organisation has come a long way in giving a voice to young people who believe in bringing new thinking to the average everyday working of Kirloskar Brothers Limited (KBL)

KBL celebrated Innovation Day to commemorate the birth Anniversary of Mr. S. L. Kirloskar, the guiding force of our organisation. With most of the officer cadre of the organisation possessing very high levels of education, it is easy to fall into the rut of "I know it all". Innovation requires the mind to remain inquisitive and seeking. It is to encourage this that the innovation portal has also been launched. It really is a pleasure to see people using the portal to upload ideas and thoughts that are innovative. With this initiative we have given a forum for everyone to question and to suggest out of the box solutions and ideas.

I believe that in each one of us there is a change agent waiting to come out. I look forward to being a part of the innovation driven change going forward. I also look forward to more participation from one and all.

Cascade has evolved over the past few years to become a dynamic and news baring magazine. It is strengthened by the contributions of all the writers. This edition of the magazine comes to you reflecting our global ambitions. It is an indicator of things to come. Apart from ensuring that we look at a greater part of the market share in India, KBL has focused its lens overseas. The past two years have been a time of great consolidation and introspection. Showcasing our facilities to a number of customers and potential customers has paid off. It has given them the confidence to look at us as a potential source of products that are globally competitive.

This edition of cascade carries some of our achievements in ASEAN, Africa as well as in Latin America. These markets have the potential to overtake the traditional markets in their growing demand in the future. While we strengthen our reach in the traditional markets of the US and Europe, these new markets have given us the opportunity to look at lateral growth. Our 'Triple A' technologies find resonance in these countries.

> We now look forward to being recognised as one of the top most organisations in the world in fluid handling solutions.

EDITOR'S WORD



Shipra Tripathi Vice President & Head Corporate Global Marketing & Communication Kirloskar Brothers Limited

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Global Footprints in the Power Sector

- Ravindra P. Ulangwar, Vice President & Head, Business Sector Head-Power & Irrigation



A robust power sector is the key to achieving sustained economic growth of any country. Kirloskar Brothers Limited (KBL) is active in this critical sector of the economy by providing energy efficient and cost effective pumping solutions for various critical applications for power plants like circulating water (CW), condensate extraction (CE), closed cycle cooling water, sea water intake and other general service applications.

This journey began in the early 90's when many foreign power companies started participating in 'Fast Track Independent Power Projects' declared by Government of India.

KBL worked very closely with various major global EPC companies like ABB, Alstom, Ansaldo, Bechtel, Doosan, Daelim, DSD and Siemens for their projects in India. Excellent performance of our products in Indian projects further encourgaed these global EPC's to invite KBL to participate in their international projects.

" KBL is the market leader in India and is spreading its footprints aggressively in key International markets, having many prestigious installations in power sector in virtually every part of the world."

After successful completion of its first CW pump package for 480 MW Termozulia in Venezuela in 2007 for MAN Ferrostal AG, Germany, today many pumps and valves supplied by KBL are working successfully for various power projects in Australia, CIS countries, Europe, Latin America, Middle East, Far East, UK and USA.

Approvals from EPC companies and end users is one of the most important criterion for international business in the global power sector. In a systematic manner, over the period of many years, KBL has built a strong reputation in the international market and today has been approved by all major EPC companies and end users in the power sector. This certification has been issued after visits to KBL facilities and a thorough assessment of processes and systems.

Recently, SNC - Lavalin, a leading EPC company has signed a Supplier of Choice (SoC) agreement with KBL for sourcing of pumps for all their global projects. This will help KBL further expand international business not only in power but also in the oil & gas, mining and industry sectors.

Prestigious N/ NPT Certifications from American Society of Mechanical Engineers (ASME)

KBL's Kirloskarvadi plant has been certified by ASME for N/ NPT and Material Organisation (MO) certification. N/ NPT certifications enable KBL to supply pumps and pump parts for Class I application within nuclear reactors, particularly in the international market. Additionally, under MO certification, KBL is qualified to supply castings and other raw materials including consumables for captive requirements to other N/ NPT certified companies.

KBL is the first and only pump manufacturing company in India and 9th in the world to receive this distinction. This will place KBL in a unique position to cater to the requirement of pumps for nuclear power projects in the international market. All leading global EPC companies like AREVA, EDF, FLOUR and SNC - Lavalin, WESTINGHOUSE have already qualified KBL as their approved supplier.



The Way Forward

A cost effective, reliable and energy efficient product range, state of art manufacturing facilities and technologically advanced Research & Development and testing capabilities all provide KBL with a unique advantage to serve the diverse requirements of the international market.

Being local is essential to becoming global.

With this in mind, KBL has established a strong sales and service network in key international markets like Europe, Far East, Middle East, Africa, UK and USA.

This helps KBL understand the requirements of each market in a better manner and also provide prompt services to serve customers in the international market.

Clearly, KBL has established itself as a leading player in the power sector and is now poised to take big strides in the international market.



POWER OUTLOOK - SOUTH EAST ASIA

- Bhavesh Kansara & Atul Suryawanshi, Power Sector, South East Asia



Thailand: There were two main challenges faced by Kirloskar Brothers Limited (KBL) when it came to entering into upcoming power projects in the region - A) Major equipment for these projects was supplied through the investor's country of origin; B) A common clause experienced in this region was of restriction to products of Indian and Chinese origin. Nevertheless in 2008, a breakthrough was achieved with the supply of Circulating Water Pumps, Condensate Extraction and Auxiliary Pumps to the GLOW Power Plant in Rayong, executed by Doosan Heavy Industries and Construction Co. Ltd. (South Korean EPC).

" Kirloskar Brothers (Thailand) Limited (KBTL) has taken a proactive approach to identify and develop power sector business in the region. We have employed a focussed approach and covered countries such as Thailand, Indonesia, Vietnam and South Korea."

> KBTL continuously engaged with the power producer, Electricity Generating Authority of Thailand (EGAT) for product presentations, training programmes and for arranging their visits to factories and installations in India. These measures have been fruitful, as KBL has secured the status of 'Approved Vendor' for the upcoming Mae Moh Thailand Power Project.

Indonesia: With a promising economic growth rate of 6%, Indonesia could have a case for being included in the BRIC economies. Naturally, this increase in development would have to be supported by adequate and efficient infrastructure. The country's government has been keeping a keen eye on the rising demand and requirement for power and in 2010 announced an ambitious plan of adding 10,000 MW of power every year until 2015.





KBL was introduced to PT PLM (Govt. Power Producer & Distributor), PLN subsidiaries (Consultant & EPC) and more than 20 local private EPCs, through these partners. All parties gelled well and favourable associations were developed through regular visits and technical seminars where capabilities and experience with power plants were discussed in depth. By 2012, results started to show and Kirloskar Brothers (Thailand) Limited bagged a breakthrough order of 3 x 18 MW Sangatta CF captive power plants for supplying circulating water pumps (CWP), auxiliary pump package and established a reference.

" Due to our continuous efforts, KBL is now an approved vendor with EGAT, Thailand and PT PLN Indonesia. This is just the beginning and efforts would continue further to make KBL as a preferred brand to keep powering South East Asia."

In 2013, this was followed by securing 2 x 7 Sumbawa CFPP for supplying CWP, boiler feed pumps (BFP), auxiliary pump package to PT PLN. Officials from PT PLN and local EPCs attended FAT at KBL and KEPL facilities in India and were impressed with the capabilities. Furthermore, the Letter of Intent (LOI) was received for 2 x 7 MW Berau CFPP and targeting 120 MW Tanjung Encang CCPP.

South Korea: In recent times, South Korean EPCs have been dominating projects in the power and oil & gas sectors across the globe; especially in the Middle Eastern, African and Latin American regions. Korean EPCs usually favour local suppliers for new projects, keeping in mind the national interests. Taking cognisance of this as our biggest hurdle, we have started networking with end-users and investors with increased vigour and purpose. This approach will be favourable for us as it will increase our chances of retaining our position as the preferred vendor's choice.

KBL's FIFTH AUTHORISED REFURBISHMENT CENTRE

KBL opens one more refurbishment centre in Bellary, Karnataka.



Kirloskar Brothers Limited (KBL) is happy to announce the opening of its fifth Authorised Refurbishment Centre (ARC) at Bellary, Karnataka which is fully operational. The first of its kind in Karnataka, the ARC was inaugurated by Mr. Sanjay Kirloskar, Chairman and Managing Director, KBL.

The ARC facility in Bellary spreads across 2,000 sq.ft. and will offer service and repair facilities for all small, medium and large pumps manufactured by KBL. The facility will offer services like overhauling of pumps, impeller balancing, hydro testing, corrocoating, performance enhancement, testing, shot blasting and painting, it will also cater to customers with an Annual Maintenance Contract (AMC). Genuine spares are available at KBL refurbishment centres across India for ensuring longer pump life and enhanced energy efficiency.

" KBL has six manufacturing plants and four established refurbishment centres in New Delhi, Surat, Vadodara and Jamshedpur."

Speaking at the inaugural event, Mr. Kirloskar said, "By expanding our refurbishment centres across India, we aim to strengthen our relationship with our customers. The centre in Bellary will cater to our bulk pump users by continuously implementing upgraded methods to increase the efficiency of our pumping equipment. Like all initiatives at KBL, this extends our vision of providing sustainable and competitive solutions."

The main objective behind commencing this new facility is to provide better conveniences of saving transportation cost, reduction in downtime and saving energy by upgrading the pumps. KBL's large customer base in the state, mainly from the steel industry, is certainly going to benefit from the new facility in Bellary.

KBL PARTNERS WITH TATA POWER

Installing the world's largest water pumping system for the 4000 MW UMPP.



Kirloskar Brothers Limited (KBL) has once again demonstrated just why it is a leading global fluid management company and in the process, has done India proud and set new records. This was achieved when KBL collaborated with Tata Power and installed the world's largest circulating water pumping system for Tata Power's Mundra Ultra Mega Power Plant (UMPP), in a project that will meet 2% of the nation's power needs.

Coastal Gujarat Power Limited (CGPL), Tata Power's wholly–owned subsidiary, has implemented the 4000 MW (800 MW x 5 units) UMPP, requires massive volumes of water to condense the heat generated in the production of power.

Mr. Ravindra Ulangwar, Associate Vice President & Head - Power Sector, KBL said, "The world's largest circulating water pumping system is a salute to Indian engineering."

" A mammoth 10.5 million litres of water is circulated every minute with the help of KBL's 10 Concrete Volute Pump Sets, helping meet 2% of India's power needs."

The Mundra UMPP is India's first and most energy efficient coal-based thermal power plant using super critical technology to create lower greenhouse gas emissions whose main power generation equipment is sourced from Japan and Korea; here comes the expertise of Indian technology to create a circulating water pumping system that rubs shoulders with the world leaders.



The layout of the pumping system is designed in such a way that large fluctuations of the sea water level due to tidal variation is taken care of with ease. The motors are installed above the high tide level whereas pumps are installed in such a way that enough submergence is available even during low tide levels.

To accommodate this, motors are connected to the pump shaft with a specially designed cardon shaft. The length of the cardon shaft with universal coupling is 12 m, making it one of the longest pump shafts. The entire pumping system is so large that it has become the largest circulating water system in the world. "

In order to ensure the perfect flow pattern for smooth operation of the pumps, KBL also conducted a Computational Fluid Dynamics (CFD) analysis, followed by a physical model study for the fore-bay and sump at the Hydraulic Research Centre at Kirloskarvadi.

A prototype physical model was built to 1:12 scale ratio. KBL also conducted a pump model study to establish the hydraulic performance of the concrete volute pumps.

The Mundra UMPP will meet 2% of India's power needs. 16 million domestic, industrial and agricultural consumers in the states of Gujarat, Rajasthan, Maharashtra, Haryana and Punjab will benefit from this project.

Lift Irrigation Scheme Success Story Handri Neeva Sujala Sravanti (HNSS) Kurnool, Andhra Pradesh

- Energy Audit Team



Handri Neeva Sujala Sravanti (HNSS) Irrigation Site - 08 pumping Stations, each with 12 pumps. 96 pumps spread over about 200 KMs from Kurnool in Andhra Pradesh. Water levels at the dam were depleting. The department was not able to continue running the pumps as priority was to be given to preserve the water for drinking. We were running against time. We had a difficult task of completing flow measurement of 96 pumps and Performance Guarantee (PG) test completion of 32 pumps before February 25, 2014.

With only 15 days in hand, we deployed 5 teams and total work was divided in two teams. A day-wise schedule was prepared and we began the implementation as planned. One team was headed by Gajanan Sahasrabudhe and other team by Prashant Joshi. A daily review was taken at the end of the day and a plan was made for the next day which helped us complete this herculean task two days ahead of schedule.

During this activity, we faced many challenges like arranging manpower, equipment, fitment of flow meter sensors and getting appointments of Third Party Inspectors. We also had a challenge to overcome the disturbances which rose due to passing of Telangana Bill. The energy audit and irrigation team completed this total project of PG test by taking signatures of inspection authorities on the protocol at 2 am on February 23, 2014 and handed over the site to the contractor successfully.

The following members were involved in this activity, who worked 7 am to 10 pm every day for 15 days.

Pump Energy Assessment & Solutions Cell Team : Gajanan Sahasrabudhe, Prashant Joshi, D Gopinath, Subrata Baruah, Ankit Saxena, Utsav Tayade, Sankar R A Irrigation Sector Team : B Suresh, Rudhra Gunapathi, Naresh Suram

The customer as well as contractor praised the KBL energy audit team. They appreciated the efforts of the KBL team. The KBL team made this impossible task possible, a reality, and applauded the dedication, enthusiasm, skills, discipline and also the quality of instruments used to carry out the work with utmost precision. The customer also added that they have never seen such facilities elsewhere.

We can proudly say... Impossible We Do First... Difficult Comes Later!

LEADER OR MANAGER What are you ?

- Lopamudra Dam, Power Projects-Execution



Although the terms leadership and management are often used interchangeably, there is a huge difference between a leader and a manager. Beginning with the root of the word; 'lead'. Webster's Dictionary defines lead as " *To guide and conduct; to govern; and/or to proceed.* " In contrast, the definition of manage is " *To wield; to direct; to conduct or minister; to have under command; and/or to treat with judgment.* "

Lead By Example

There are many managers in organisations, yet very few are leaders.. Why does this happen ? It happens because most organisations still use old and out-dated methods for hiring into and promoting people from within the organisation. That method is to choose people who are very good at what they do, without consideration as to whether they can motivate and inspire people.

" Managers manage processes, and leaders inspire and motivate others to accomplish goals. Ask yourself, which definition applies to you? Are you a leader or a manager? Which would you rather be? "

Managers are tactical, hands-on personalities. There's no argument that managers can achieve results, however, the results are almost short-term. People will do what they are told for many reasons, such as fear of losing their job, lack of education or experience making him/her unwilling to argue (even if they feel the manager is wrong) or apathy towards the company and its goals.

Leaders provide guidance and motivate and inspire people to take actions. In this way, they achieve long-term results through a productive and happy workforce. There are many strategies used by leaders to achieve these results. The behaviour that has the most powerful impact on employees, customers and vendors is leading by example.

Leaders Walk the Talk

It has been said that leaders who lead by example walk the talk, but what does this mean ? Consider this, Paul Fireman, the former Chairman of Reebok International, made a promise that Reebok would overtake its main competitor Nike, in two years. To fulfil this promise, he did not threaten or bribe the people who worked for him. He motivated his employees by showing them that he was willing to take risks, encouraging them to take risks as well.

He told them that he would do whatever it took to reach this goal. He then followed-through on that promise by spending the money to build an innovative product-development programme and hiring the world's top sports figures as spokespeople. Fireman talked and walked the new Reebok vision 24 hours a day.

"You need to build an enrolment," Fireman said. "I don't think you can dictate that to people. I don't think you can tell people to go, do this. You've got to make them want to ride along. It's a leader's job to foster those feelings. We are in this together. We are part of a team."

Leaders who lead by example are courageous. One can recognise courageous leaders by looking for the following characteristics and behaviours:

- Leaders provide information, encourage their employees to make decisions that they support and do not take credit for the employees' successful ideas
- They are continually coaching, providing honest and direct feedback and supporting their employees. Under these circumstances, employees will build skills and rely on their leader
- They empower employees and provide opportunities for greater responsibility
- They recognise employees' problem-solving actions and encourage risk-taking, rewarding the employees for their efforts as well as results
- They face conflict and confrontation on tough issues and fight the right battles for employees, customers and the origination
- Lastly, they do what they say they will do

Leadership

Learning to be a leader who leads by example is not an easy task, especially with the distractions and stress of the business environment today. Try following quick activities to identify the characteristics of a person who leads by example:

- Identify at least one person who was or is a role model for you as a leader. This person may have been a teacher, your parents, a religious figure, an athlete, or a boss
- 2. Make a list of the things that they did or said that inspired your loyalty and motivated you to succeed
- 3. What behaviours or characteristics do you need to change to be more like the role model who influenced you ?

Leaders who lead by example are mentors, willing to step back themselves to promote the growth and development of others. These leaders get to know their employees and build relationships that last a lifetime. They learn employees' names, know about their families, what motivates and inspires them.

Most importantly, they practice the behaviours that motivate and inspire others. These leaders demonstrate strong ethics and moral behaviour in their business and personal life.

In short, leaders who lead by example are the leaders who are competent and drive business results for the organisation while building relationships with employees, customers and vendors.

These are the most effective people in an organisation. Unfortunately, these are also the most difficult people to find. When you find one, you must do whatever it takes to keep him/her in the organisation, for he/she will take your business to new heights.

KBL - STRIVING FOR CORPORATE EXCELLENCE

- Ravi Sinha, Vice President & Head, Corporate Human Resource and Communications



Kirloskar Brothers Limited (KBL) is an organisation that believes in contributing to nation building. Incorporated in the year 1920, it has developed a wide range of pumps and has been leader in the Indian pump industry. Today it provides pumping solutions to power, water, irrigation, building & construction, oil & gas, defence and industry sectors.

As a leading organisation, KBL continually strives to achieve outstanding levels of performance that meet or exceed the expectations of all its stakeholders.

KBL is focused on its commitment towards protection of the environment. For more than 20 years, the Kirloskar Group of Companies has worked on energy conservation initiatives. With 38% of energy coming from wind energy, KBL ranks as one of the top 12 industrial companies in the world using renewable energy as per a global survey. A pioneer in developing the highest energy efficiency 5 star rated pumps and providing energy conservation solutions to industries, KBL is living its value of commitment towards environment.

Aiming to be the preferred choice for employees, KBL has developed human resource policies which promote employee growth by providing a motivational work environment. The employee engagement survey results have ranked KBL as ' Best Employer ' with 74% engagement level for two consecutive years.

KBL subscribes to all the key elements of human rights. It believes in non-discrimination, prevention of child labour, diversity and women empowerment, promoting the same values in the supply chain. The 100% women workforce at Kaniyur plant is an example of promoting women empowerment.

KBL believes in the highest level of transparency and ethical business practices. The employees are trained in the Code of Ethics and a mechanism has been established to monitor ethical performance of the company. KBL voluntarily publishes its sustainability report which discloses its economic, environmental and social performance. Society related initiatives of KBL are aligned with the 'Millennium Development Goals ' by the United Nations and KBL has focused on school education, maternal health and prevention of serious diseases. Sustainable development is considered inseparable from Corporate Social Responsibility (CSR) at KBL.

KEPL - Turning Global

- Kaustubh Dharmadhikari, International Marketing, KEPL



KEPL has been a trusted manufacturer of critical application API pumps in the Indian market for the last 25 years. Considered as one of the most reliable API pump manufacturers due to their robust designs, KEPL has had a strong presence in India, from oil & gas to refineries, from petrochemical to fertilizer industries and from chemical plants and power plants to water treatments. KEPL has a basket of products for a variety of critical applications. KEPL has supplied more than 7500 pumps and steam turbines to oil and gas, power and desalination projects including critical applications with operating temperatures ranging from -104° C up to 425° C, suction pressures up to 80 bars and high viscosity fluid contents up to 800 CST .

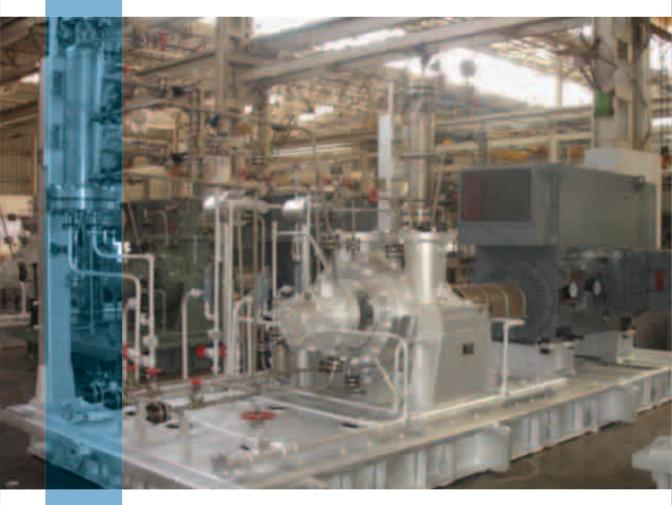
With immense, meaningful experience at hand, KEPL began to market itself internationally in April 2012. With strong support from Kirloskar international regional offices, KEPL set out to establish a global presence. To start offering our range of API pumps in this market, we had to get approval from global oil & gas giants, end-users and EPCs.

We set a target to achieve all major and important certifications and approvals, from all over the globe. In a very short period of time, KEPL has achieved global approvals from Saudi Arabian Oil Company (Aramco), Abu Dhabi Oil Refining Company (TAKREER), Saudi Basic Industries Corporation (Sabic), Saudi Arabian Mining Company (Ma'aden), The Ministry of Oil and Gas (Sultanate of Oman), Oman Oil Refineries and Petroleum Industries Company (ORPIC), Abu Dhabi Gas Industries Limited (GASCO), Abu Dhabi Gas Liquefaction Company (ADGAS), and Ruwais Fertilizer Industries (FERTIL) to name a few. KEPL also has a number of approvals from all major EPCs all over the world including Samsung Engineering Company Limited – South Korea, Cinda Engineering & Constructions Private Limited, Technip International and Metso. KEPL also signed a 'Supplier of Choice ' Agreement with SNC-Lavalin.

With these approvals, KEPL bagged orders from Saudi Aramco – Luberef Refinery Expansion project through Samsung Engineering, Korea, Bolivia Fertilizers from Samsung Engineering, Korea, Nizhnekamskneftekhim Modernisation Project through Linde Engineering Dresden GmbH, Alcor Antwerp - Belgium project from Air Liquide, France, IFCO – USA project through Udhe, Germany, Petroleum Regeneration & Recycling Facility, Dubai from Pyramid Engineering & Constructions and many more.

Prestigious order for Petronas Melaka Lube Oil Unit in Malaysia

- Shrikant Deshpande, International Marketing, KEPL



In the year 2006, KEPL acquired the knowledge that Engineering Contractor Lurgi - Larsen & Toubro were executing an order from Petronas for their lube oil plant in Indonesia under M/s. Foster Wheeler as PMC. Even though the KEPL name was not listed in the approved vendor list of the project specifications, the organisation decided to venture out and secure this order. The pumps involved were 19 API between bearing BB2 type pumps for very critical applications.

One of the applications was extremely difficult to quote as pumps were required to handle hydrocarbons at a design temperature of 450° C and the process licensor required pumps in Austenitic Stainless Steel wetted parts. Normally, pumps handling hydrocarbons above 250° C are 12% Carbon Steel material as it has higher strength as well as a limited coefficient of expansion as compared to Carbon Steel or Stainless Steel material. Austenitic Stainless Steel pumps handling high temperature hydrocarbons above 200° C usually face operational and maintenance problems as the material creeps during operation.

The basic challenges in bagging this order were:

- 1. KEPL name was not included in the approved vendor list of the project specifications
- KEPL did not have the design and manufacturing experience for Austenitic Stainless Steel construction pump for high temperature applications
- In principle, Engineering Contractor was not ready to place order of the package of BB2 without Austenitic Stainless Steel construction pump for high temperature application

The above challenges were addressed very efficiently and effectively by KEPL's Marketing and Engineering team. A joint visit by representatives from Petronas Malaysia and Engineering Contractor was arranged to KEPL works to demonstrate the manufacturing capacities and capabilities of KEPL. The team was immensely satisfied and the order was given to KEPL. The challenge of developing a suitable pump in Stainless Steel which can handle hydrocarbon at a high temperature of 450° C without posing operational and maintenance problems was addressed by using advanced techniques like Finite Element Analysis (FEA) of casing and adopting a typical part fitting construction to avoid the ill effect of creeping of the material, which could pose significant maintenance problems. All pumps were supplied as per schedule and service assistance was provided to overcome any issues during commissioning of the pumps.

JEWELS in the CROWN

JOURNEY OF POWER SECTOR IN THE INTERNATIONAL MARKET

- Srinavas Rao, Power Sector, Pune



"Kirloskar Brothers Limited (KBL) team delivered the project three months ahead of schedule and was hugely appreciated by ENELVEN and MAN Ferrostal for support and performance of pumps. Since then, KBL has enjoyed success after success in the international market and has become a global supplier for power plants. " Energia Electrica de Venezuela (ENELVEN) is a state owned electricity company of Venezuela. It chose to expand 320 MW open cycle power plant to 500 MW Combined Cycle Power Plant (CCPP) without using a litre of extra fuel, while plant was fully operational. This was a first of its kind to be converted from open cycle to combined cycle in Venezuela.

KBL is proud to be associated with this expansion project. Two sets of circulating water (CW) pumps were supplied by KBL through MAN Ferrostal GmbH, (formerly known as DSD-Germany) an EPC contractor appointed for the project. This project is located at Maracaibo in Venezuela. Vertical Turbine Pump (BHMa120) rated 27,750 m³/hr discharge at 14.25 m head for brackish water, with a drive motor rating of 1700 KW, 4.16KV, 60 Hz, were supplied by KBL, ahead of schedule. Since these pumps had to be tested at KBL at the rated capacity using the 4.16 KV, 60 Hz job motor, KBL enhanced its testing facility at its Kirloskarvadi plant, bringing it to the level of being a unique pump testing facility with the capability to test any combination of electric supply voltage and frequency in the world.

The project garnered KBL a lot of appreciation from ENELVEN & MAN Ferrostal for the support and performance of pumps. Incidentally, this was KBL's first CW pumps installation for a power plant in the international market. Since then, KBL chalked out a fabulous journey in the international market and supplied pumps for many power plants globally, i.e., USA, South America, Thailand, Middle East, CIS countries, through renowned EPC contractors like Bechtel - USA, Tecnimont - Italy, Doosan -South Korea, Alstom - Switzerland, EIS - Venezuela, to name a few.

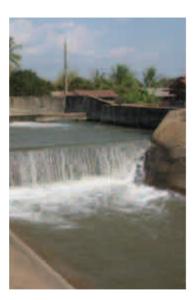
Witnessing the success of Unit I expansion, when ENELVEN chose to expand Termozulia Unit III to CCPP, KBL was an obvious choice for three sets of circulating water (CW) pumps and two sets of auxiliary circulating water (ACW) pumps. These pumps are self water lubricated bowl pull out design, Vertical Turbine pump (BHQ95D) for CW (24,860 m³/hr @ 21.9 m head, 2050 KW motor) and Vertical Turbine pump (BHR50) for ACW (1150 m³/hr @31.7 m, 140 KW motor). KBL received this order from CORPOELEC, a subsidiary of ENELVEN, in the month of February 2013, through SPP Inc., a KBL owned company in USA. The pumps for Termozulia III were shipped in a record time, in the month of November 2013; three months ahead of schedule, ensuring a delightful experience for the customer. With KBL team's ability, facilities and manufacturing expertise, coupled with a competitive attitude ready to face any challenges, the team lead by Mr. Ganesh Kulkarni as Project Manager supported by Mr. Niranjan Khade for CW pumps and Mr. Yogesh Gajare for ACW pumps, with Mr. Srinivas Rao as Project Controller.

REPAIR & REFURBISHMENT

Setting up 10 large pump sets in Champasak Province, Laos

- Vinodh Chinnappan, Product Support & Service, Kirloskar Brothers (Thailand) Limited







Kirloskar large Split Case Pumps (20UPH3) were supplied to Laos during the year 2000. At the time, these pumps were lying idle due to lack of maintenance. Furthermore, the requirement of water for irrigation in the Champasak Province has been growing due to the onset of the dry season. After a feasibility study on the repair/refurbishment of these pumps was conducted, the Ministry of Agriculture and Forestry in Laos PDR agreed to implement the project through a Line of Credit under the Government of India.

An initial proposal was made for 18 pumps. Due to budget constraints, it was jointly agreed to commence repair work on ten pumps at five sites, i.e., two pumps per site. Needless to say, Kirloskar Brothers Limited (KBL) successfully executed the project much to the satisfaction of the customer. The project undertook the repair and refurbishment of ten pump sets along with pipe line, pontoon and electrical installation transformer to control panel in five villages and two districts at Champasak Province. KBL's scope of supply was essentially overhauling spares for pumps, ten set pin-bush couplings, 2000 m cable and ten rubber flexible hoses with attachments.

After final inspection, the project has been handed over to the Project Owner - Ministry of Agriculture and Forestry, Laos PDR. The objective of this project was to undertake and enhance economic development of farmers in five villages in the Champasak Province of Laos PDR. This upliftment will be beneficial to villages and enable them to produce more rice during the dry season. This not only strengthens the local economy but improves the level of growth of Laos PDR's economy. The project has benefitted more than 1500 hectares of agricultural land in the Champasak Province, Laos PDR.

Toyo-Thai Award Contract to supply of SS904L pump-sets with Country of Origin (CoO) as EU

- B.Tamilselvan, Marketing, KBTL, Bangkok



Kirloskar Brothers (Thailand) Limited (KBTL) and Kirloskar Brothers Europe BV (KBE) have jointly decided to try one such a requirement from Petro Vietnam Technical Services Company (PTSC) for Bio-ethanol plant in Vietnam and supplied the pumps with country of origin as Europe. This was first Kirloskar pump supplied with CoO as Europe. Project owners in Vietnam have the specific requirements that critical equipment is required with country of origin as EU or G7.

Based on the previous supply of EU origin pumps to PTSC, KBTL received the order from Toyo-Thai for supply of 17 pump sets of which 8 pump-sets are in SS904L material of construction with country of origin as EU for DAP2 Vietnam project.

Project owner of this project is DAP2 Vinachem JSC which is one of the subsidiaries of Vinachem, the largest government owned Fertilizer and Chemical Company in Vietnam. EPC for this project is TOYO-THAI Corporation Public Limited Company, a leading Thai-Japanese Joint Venture Company in Thailand. Project consultant is SNS-Lavlin, Belgium.

This is the first SS904L pump order for KBL. SS904L material is one of the high grade steel alloys with low carbon contents. To get good quality castings of low carbon steel alloys grade material has many challenges. Only few foundries can produce such low carbon steel alloy castings. Castings for this project were manufactured at Kirloskarvadi. SS904L is used for critical applications in Fertilizer plants.

The order was taken to supply complete pump set with EU origin. Pumps were assembled in Netherlands, motors were procured from FLEM (Italy), accessories from Hungary and all the pump sets were packaged in Kirloskar Netherlands. The pump sets were tested at SPP, UK facility and after successful testing, they were shipped out from Netherlands to Vietnam.

KBTL faced many challenges to get acceptance for Kirloskar brand for supply of SS904L pumps. KBTL worked through the EPC contractor in Thailand and the owner in Vietnam to get acceptance for Kirloskar Brand.

Kirloskar has followed all the requirements of EU to get EU origin certificate. Kirloskar pumps can be offered with option of country of Origin as India and Europe. The pump-sets have reached site and are at commissioning stage.

This is one of the prestigious installations for Kirloskar pumps in Fertilizer Industry and proves KBL's capability to manufacture special steel alloy pumps. Furthermore, this is a good reference for Kirloskar pumps with EU origin.

Technological break-through in developing KBL's **Metallic Volute Pump** for Kaleshwaram Project

(Understanding the application and then deciding the product)



erection & commissioning



Name of the Project: Kaleshwaram Lift Irrigation Scheme (LIS)
Client: I & CADD, Govt. of Andhra Pradesh
Brief scope of KBL Work: Supply of 3 Metallic Volute Pump (MVP 1200/180 - 2 No.s, MVP 650/95 - 1 No.), 4 Vertical Turbine Pumps and 7 motors, supervision during

Ultimately, understanding the application before deciding the product not only helps the customer but also the manufacturer in order to improve the results.

The journey started when Andhra Pradesh Power Generation Corporation (APGENCO) - consultant to I & CADD kept on hold the testing of 8.5 MW synchronous motor till KBL completed the testing of pump model with Data Acquisition System (DAS).

The client's interest was to improve KBL's testing system with DAS facility in order to upgrade the KBL's testing facility to international standards.

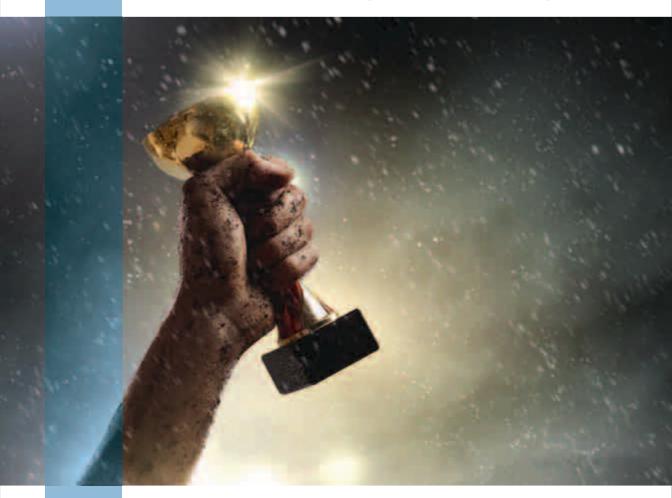
We used to test the pumps as well as models of pumps with conventional method in which there are always chances of variation in results, whereas DAS reduces the errors, improves accurate results up to 3 digits, reduces data entry, storage and retrieval costs.

The DAS system included some high tech instruments and systems like the torque-tube, PLC and SCADA systems, some of which had to be imported from the United States of America. The set up of the whole system was established within a record time of 12 days at the hydraulic research centre, Kirloskarvadi. As soon as the internal trials of the DAS system were successful, the client was called for an inspection which included top officials from APGENCO & ICAD. Testing was successful with the client's gratification. Immediately the motors were given a green signal after inspection and ultimately dispatched. It is believed that a milestone like this has been achieved by KBL. It has been a very enriching experience for the team that has made this task possible within a very short time.

With the help of DAS we can show the results to client at his location.

KEPL BAGS GOLD TROPHY

KEPL was awarded Gold trophy by Poona Divisional Productivity Council (PDPC) at the 7th Productivity Improvement Case-Study Competition



Headquartered in Pune, KEPL, a sister concern of Kirloskar Brothers Limited (KBL), was awarded with a Gold and a Silver trophy for two different case studies presented at the 7th Productivity Improvement Case-Study Competition 2013, conducted by the Poona Divisional Productivity Council (PDPC). Organisations are constantly seeking innovative ways to meet the productivity improvement challenges of a globally competent marketplace. Through this competition, PDPC provides a platform for companies to identify and reward the best practices implemented by them towards productivity improvement. Organisations contested in three broad categories; Management, Associate and Special Awards. The Management and Associate categories were further classified into General Engineering, Automobile and SSI. Twelve case studies were presented in the 'Management - General Engineering Category ' in which KEPL won the Gold trophy for its presentation on ' Improvement in Casting Quality through Method Study at Vendor's End (Foundry)' and a Silver trophy for presenting on 'Productivity Improvement through Process Change'.

Mr. Sunil S. Katare, Plant Head, Kirloskarvadi, said, "We are extremely pleased by the recognition bestowed by PDPC for KEPL's productivity improvement efforts. Productivity and quality enhancement are constant endeavours at KEPL and we take great pride in our dedicated team that works towards its implementation." KEPL also recently received the Gold trophy by Quality Circle Forum of India (QCFI), Pune Chapter for their case study on 'Quality Improvements and Enhancement of Work Processes And Productivity'. Under the mentorship of Mr. J. K. Sawant, Head of Production and Mr. N. G. Kokil, Head of Industrial Engineering at KEPL, and the team leadership of Mr. S. P. Pargaonkar and Mr. S. A. Bothe, KEPL contested and won the significant Gold and Silver trophies from PDPC.

KBL Awarded at Africa - India Partnership Summit

All-Women Coimbatore plant bags 'Best Organisation for Women Talent Development '



We firmly believe in inclusiveness and equal opportunities for all. Thus, it gives us immense pride to announce that Kirloskar Brothers Limited (KBL) has been conferred with the 'Best Organisation for Women Talent Development' Award for its Coimbatore plant, by the 3rd Africa Women Leadership Awards held in Mauritius. The awards were organised by the Africa India Partnership Summit to identify and celebrate outstanding leadership and achievements demonstrated by women various private and public sectors.

KBL is the only engineering company in India which operates with 100% female associates in the manufacturing process.

The Women Leadership Award is recognition to the efforts made by KBL's all-women Coimbatore plant that was established in 2011. The plant which is equipped with state of art facility, manufactures different models of domestic pumps. It has 62 women between the age group of 19 to 30 employed on the shop floor. KBL provides an intense industrial training of two months to all the women recruited at the plant. The award ceremony was attended by several leaders and decision makers, bureaucrats from various participating countries and numerous senior professionals across industries. Dr. R.V. Rajkumar, Divisional Head of KBL's Coimbatore plant said, "The Women Leadership Award highlights the achievements and capabilities of our female employees to perform any task with complete diligence, and we are very proud of our workforce at the Coimbatore facility. This platform provides inspiration to young women by urging them to assume leadership positions and to compete in the corporate and labour market. " In 2011, the workers at the plant took 60 seconds to assemble a pump. The female associates have significantly reduced this time to 20 seconds in April 2013, which has tripled the plant's production to 34,000 pumps per line per month. Around 5 lac high quality pumps are manufactured in this facility per year with an extremely negligible rejection rate of less than 0.005%.

The India-Africa Forum Summit is the official platform for the African-Indian relations. It was first held from April 4 to 8, 2008 in New Delhi, India. The Summit is intended to reinforce the multi-dimensional relations existing between Africa and India, and share benefit from the rich historical background as well as natural resources of both. The objective behind the awards is to showcase the best women employing organisations, talent and women professionals from different parts of GCC and Asia. The Jury constitutes of professionals from different parts of the world. These professionals are notable experts from the industrial fraternity as well as experts from local and international blue-chip organisations.

Breakthrough in the state of Haryana for Irrigation sector

Irrigation Sector bagged the order for the supply of Six BHM-25 Mix Flow Vertical Turbine pumps

- Shahaji Pathare, Irrigation Sector, Pune



Irrigation Sector participated in a tender floated by Haryana Irrigation Department for the supply of six Mix Flow Vertical Turbine Pumps. This was the first participation of Irrigation sector in Haryana.

Upon their visit to Kirloskarvadi, the team from the Haryana Irrigation Department along with CEIL representatives duly inspected the pumps. The pumps were subsequently commissioned and erected in April 2013 by M/s. Sahil Engineering Works, who is working exclusively for Kirloskar Brothers Limited (KBL) in Haryana as a leading contractor for the project. These pumps are used for dewatering the excess water from the farmer's field so as to make the field suitable for cultivation. The pumps are in operation since April 2013 without any problem.

Mr. J. R. Sapre, Director, KBL visited Ritauli Pump House on March 12, 2014. Mr. Prabha Shankar, SE and other officials of Haryana Irrigation Department were present during this visit.



KBL to provide energy audits and system analysis value-addition to Egypt's irrigation and agriculture sectors

Inaugurates a UL certified centre in Cairo under its subsidiary SPP Pumps MENA LLC



For over 50 years, Kirloskar Brothers Limited (KBL) has had a strong presence in Egypt, working as a provider of international standard fluid management solutions. Recently, we have taken our engineering capabilities and expertise to the shores of the storied river Nile, where we set up two major pumping stations.

KBL envisages great potential in the region and has chalked out a blueprint to leverage the business further. As part of this plan, the company has set up a mammoth 10,000 sq. m facility in Cairo under its subsidiary SPP Pumps MENA LLC. Through this facility, KBL aims to provide value added services such as energy audits, system analysis, vibration analysis, on site testing, cost effective refurbishment solutions, maintenance contracts etc. Additionally, assembly and packing of specialised products such as FM/UL fire-fighting pumping units, pump sets for HVAC, process pumps too would be available.

On the occasion, Mr. Sanjay Kirloskar, Chairman and Managing Director, KBL said, "Kirloskars have a historic association with Egypt and we are happy to have deepened this association through the new SPP Pumps facility in the region. The new facility will further enhance the joint efforts of KBL to bring appropriate and adaptable solutions to improve the irrigation programme in Egypt." Says Mr. Alok Kirloskar, Managing Director, SPP Pumps, "Having made our mark in Egypt, setting up a value-added engineering centre was the natural step forward for brand Kirloskar. This facility is the first establishment in Egypt to receive UL certification for assembly, testing and packaging of fire-fighting pumping units conforming to NFPA 20 / FM/UL requirement. We expect to at least double our business in the coming years in Egypt."

On this occasion, Dr. Mostafa Abu Zeid, Chairman MED, Ministry of Irrigation Government of Egypt said, "Our government has been associated with Kirloskar Brothers for various irrigation projects through the Mechanical & Electrical Department (MED). We are proud to take this association further and use KBL's expertise to develop engineering capabilities that will help agriculture in the region. "Mr. Navdeep Suri, Indian Ambassador to Egypt said, "KBL has played a pivotal role in irrigation and water pumping stations for last five decades in Egypt. This new state-of-the-art centre will help in developing the skill sets of the Egyptian engineers in the field of irrigation. "

Additionally, UL certification is the single most accepted certification mark in the industry today. The facility has been accredited with ISO certificate for the quality management system conforming to ISO 9001: 2008 standards by BRE Global Limited.

Ten Participants from KBL complete Mirchi Corporate Run in Chennai

- Balachandran Nair, KBL Chennai



At Kirloskar Brothers Limited (KBL) an essential part of our ethos is providing employees with enriching experiences that motivate them, give them holistic development, and help them perform better as a team.

The Mirchi Corporate Run 2014, organised by Radio Mirchi and VS Hospitals to promote the importance of health and fitness, presented such an opportunity. It was also a charitable event, the proceedings of which went to Project Crayon, an NGO working for the upbringing of underprivileged girl children.

Organisations were free to send multiple entries for the 10.75 km run. In addition to the spirit of competition, runners were allowed to showcase company branding, so as to demonstrate the represented organisation's commitment to health and well-being.

KBL sent a total of ten runners, including Mr. Mithun Kumar, a seasoned marathon runner. His presence would undoubtedly improve team morale and its overall final position.

The race took place at six a.m on February 23, 2014. More than a thousand runners were participating and the race was flagged off by Mr. Saidai Duraisamy, Mayor, Chennai. Among the corporates taking part were Infosys Limited, ICICI Bank, Wipro Limited, Renault, Nissan, ATS Elgi, Kaar, Amazon, Kirloskar Brothers Limited and others.

KBL was represented by runners Aswin, Balachandran Nair, Kannan Rao, Kannan M, Purushothaman, Mithun Kumar, Rajesh Raj, Senthilkumar M, Sreeram J and Viswanathan Gopinathan. All ten were successful in completing the race and were duly awarded finisher medals and certificates. Mr. Mithun Kumar clocked in at 59 minutes to achieve a superb 15th position.

All ten have done KBL proud and had this to say after the race: "When we planned for this programme, other than Mithun Kumar, none of us had the confidence that we would complete the run. However, all of us successfully completed the run and got the finishers medals and certificates. This event has been an eye opener to us all towards being health conscious and we decided to continue early morning walks and runs to keep healthy and to participate in such events in the future." Three cheers to them and we wish them luck in all future such endeavours.

Partnering Vietnam for Concrete Volute Pumps

- B.Tamilselvan, Marketing, KBTL, Bangkok



During the meeting between Vice Minister, MARD and Kirloskar Brothers Limited (KBL) team led by Mr. J.R.Sapre, Director, KBL at Hanoi on December 7, 2012, KBL capabilities were presented to the dignitaries. The Vice Minister has shown interest to install concrete volute pumps for drainage application at Mekong Delta and Red River Delta in Vietnam during rainy season to drain water from field and use the lands for agriculture. KBL has expressed their interest to conduct a seminar on Concrete Volute Pumps (CVP) to the technical departments of MARD and Province.

KBL conducted a technical seminar to MARD at Hanoi on May 25, 2013 which was chaired by Vice Minister of MARD. More than 30 senior delegates from MARD and provinces have attended the seminar. Vice Minister expressed their interest to install the first CVP in Vietnam and would identify the suitable project to install CVP.

After the seminar, many provinces have shown their interest to install CVP and MARD has selected one location for pilot project. MARD and Province needed additional support from us to prepare technical feasibility for the CVP station and requested us to conduct a specific seminar on the pilot project pump station identified. This seminar was focused on the selection of sites for CVP, designing of pump stations and economic analysis on using CVP.

During the presentation the Vice Minister advised provincial team and MARD team to arrange site visit along with KBL team and we gave our conclusion that the site is suitable for CVP installation. KBL is assisting to prepare technical proposal for the first CVP in Vietnam.

After the seminar conducted by KBL, many provinces have taken initiative to implement CVP instead of Vertical Turbine Pump (VTP). Few CVP project proposals have been submitted to MARD and are seeking financial assistance.

Our channel partner in **The Kingdom of Bhutan**

- Soumitra Karjee, Distribution Sector, KBL East Zone



" It was my long desire to provide good and reliable pumps to the people of my country along with a good service back up keeping their needs in mind and I chose Kirloskar Brothers, given their reputation and standing. I am proud to be associated with the Kirloskar Brand ".



M/s. Sonam Chhimi & Kesang Marketing and Sales (M/S S C & K Marketing and Sales), located in Thimphu, was appointed as the Distributor for Bhutan in 2012. It is headed by Mr. Yonten Tshering who is assisted by his daughter, Ms. Kesang Ongmo, and a team of eight professionals looking after sales and service. They have a service centre in the heart of Thimphu which is renowned for providing service to all the consumers of pumps in Thimphu and from far off places in Bhutan. They are also into the business of dealing with international brands of repute in kitchen hardware as an exclusive franchisee for Bhutan apart from designing and installation of modular kitchens. Mr. Tshering was a senior Bureaucrat in the Royal Government of Bhutan and had headed various departments like Tourism and Media, apart from managing a few Government owned corporations. He was also the Chairman of Bhutan Board Products Ltd. from 2006 to 2008.

On January 25, 2014, Mr. Soumitra Karjee and Mr. Kuntal Mani, officers from Distribution Sector in Kirloskar Brothers Limited (KBL) East Zone conducted a Retailer Meet at Thimpu with M/s. S C & K Marketing and Sales.

They started the presentation with these Bhutanese words - "Na garalu jomba legso" - meaning - " a warm welcome to all of you."

The participants who had arrived from different parts of Bhutan like Paro, Thimphu and Punakha were presented with the KBL Corporate Profile and information on products and services.

The session with all the participants was lively with a lot of interaction. The retailers were particularly pleased that Kirloskar Pumps and Services are now available within their reach with KBL spreading its footprints in Bhutan.

The business too is poised to grow multifold over last year.

FROM THE LAND OF **THE SAGARMATHA**

- Soumitra Karjee, Distribution Sector, KBL East Zone



New Shrestha Machinery Concern was appointed as the dealer for Kathmandu in Nepal in 2012. It is led by Mr. Kiran Shrestha, who is assisted by his 22 year old son - Diptanshu Shrestha. He has completed his B.B.A. and is presently being groomed by Mr. Shrestha to take over the reins in the future.

The dealership organisation has a team of 15 professionals looking after sales and service. They also have a service centre in the heart of Kathmandu which is renowned for providing service to all the consumers of pumps. They are also associated with some of the pump companies of Europe for the last 24 years.

New Shrestha Machinery Concern is well known across Nepal for offering appropriate pumping solutions to the customer.

Mr. Shrestha believes that knowing the customer needs properly before providing the product goes a long way in cementing relations with the customer. He confesses that this is the secret of his success in his journey of fostering customer relationships over the last two decades.

Since his appointment in 2012 as the dealer, the business for KBL has grown by more than four times and as far as Mr. Shrestha is concerned, this is only the beginning and there are a lot of significant milestones to be crossed in the years to come.

" It is my great privilege to be associated with
' Kirloskar ' brand and our interest will be to make Kirloskar pumps
the most faithful to the customers in Nepal ".

- Mr. Kiran Shrestha

Innovation Day Celebrated at KBL



Kirloskar Brothers Limited (KBL) celebrated the birth anniversary of Shri Shantanurao Kirloskar by declaring it as a special day. 28 May will henceforth be known as 'Innovation Day', a tribute to his outstanding leadership and creative ideas that led the organisation.

The event was graced by Dr. Kakodkar, chair professor and member of the Department of Atomic Energy at Homi Bhaba. Mr. Avinash Purandare, Vice President, Corporate Information Centre, delivered the keynote address.

In his address, Mr. Purandare spoke of how the spirit of innovation, the 'DNA of Innovation', as he put it, has always existed as a key part of KBL strategy right from its inception. However, the formalisation and recognition of innovation within the organisational structure needed better management so as to boost a culture of innovation and build an ecosystem that nurtures ideas.

" If you look at history, innovation doesn't come just from giving people incentives; it comes from creating environments where their ideas can connect" - Steven Johnson

> This resulted in the formation of an apex committee, the Innovation Council. The formation of this council will greatly help KBL be the change and set trends. Following Mr. Purandare's address, Mr. Aniket Kulkarni, Head - Corporate Strategy and Business Development, took the stage to explain the progress KBL has made in terms of innovation.

Mr. Kulkarni started his talk by briefing on the broad range of products that KBL offers, and how KBL delivers efficient, optimised solutions and not just products. He spoke of the need for strategy to be driven by innovation.

The organisation began this process in the year 2008-2009 by becoming market focused and created sectors such as irrigation, power and water. This would help KBL become more intimately involved in the markets it operated in, develop better relationships with customers and help drive innovation.

Mr. Kulkarni described how in an organisation, it is the ecosystem which drives ideas instead of rewards and recognitions. He said, " Innovation can take place anywhere, in a factory, in a foundry environment, in a corporate office, in a remote regional office, anywhere you can imagine."

EVENTS

On the occasion of Innovation Day, the Innovation Council organised a quiz competition for all it's employees.



Winners of the quiz receiving the awards at the hands of Mr. Avinash Purandare, Vice President, Corporate Information Centre



Felicitation of Dr. Kakodkar at the hands of Mr. Jayant Sapre, Executive Director, KBL





Winners of the quiz receiving the awards at the hands of Mr. Ravi Sinha, Vice-President & Head - Corporate Human Resource Management & Communications

5

Regarding Idea Life Cycle, he said that protocol should consist of two important measures. One, that an innovative idea is formally recognised, channelled and converted. Two, even if an idea is not feasible, it should be properly recognised and recorded.

Different locations have been given their own regional innovation committee, whose goals are to foster innovation at a local level. Mr. Kulkarni recognised that many of the innovative ideas in the organisation come from newer recruits and junior employees, and these councils will help with the identification and recognition of such ideas. Functional coordinators will be appointed so as to mentor and nurture new employees.

He spoke on i-mission, a KBL initiative which focuses on continuous user interaction to understand their present and future needs, helping drive innovation. Six patents have been filed through this platform so far.

Another platform that he touched on is the Design Thinking, which is heavily centred on business processes and models. Again, the user is at the core of strategy.

KBL is working closely with the Nuclear Industry in India as the nation gears up for Nuclear Energy to greatly contribute to the country's power resources.

He then highlighted how sustainability, energy efficiency and promoting green solutions were hallmarks of KBL. KBL designs its pumps with the concept of longest life cycle, ensuring lowest total cost of ownership. Using innovations in mechanical design, KBL is able to deliver pumps that are 4-5% more energy efficient than traditional pumps in the market.

Regarding product innovation, he enlightened the audience as to how fire protection is an important industry globally and how it is growing in India.

Fire protection work on pumps that supply water, and pumps for larger or taller buildings which need to be at different levels to ensure flow. KBL has designed highly innovative pumps for this purpose.

These pumps have multiple outlets and are installed in such a manner that saves space. With space being a precious resource, especially in metro cities, KBL has added value to our product by helping our customer save space, and therefore, money.

Kirloskar Brothers, first Indian company to develop sodium pumps for nuclear reactors

Kitheshare Biocheses Life (KBL) has been used in a party Endlant company to develop critical application accitizin pumpa for fast breeder machen reatives. Dr. Pentitait Kinnar, Chureman & Managing Director, BHAVINI pr-



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Laudhi Centre for Atomic Research (IGCAR).

The three PSPs manufactured in Kirloskarvadi weigh 13% tons and will handle 5.16 takh litres of liquid sodium per minute when installed at Prototype Fast Breeder Reactor (PFBR). At 590 RPM (rotations per minute), these pumps will handle liquid sodium at 400°C to 550°C.

Dr. Prabhat Kumar, Chairman & Managing Director, BHAVINI said, "With this flag off, the PFBR is one step closer to realization and our aim of kick starting power production from Prototype Fast Breeder Reactor (PFBR). PFBR is the forerunner of the future fast breeder reactors. It is not only a prototype 500 MWe reactor, but a commercial venture too."

Rayindra Ulangwar, Associate Vice President & Hoad Power Sector, KBL, sud, "The PFBR setup has two types of acdium pumps. In the primary circuit, primary sodiium pump will transport the reactor core heat to the secendary circuit, secondary acdium pumps, installed outide the reactor vessel, feed the liquid sodium back to reutor port after taking away the heat through a heat exchanger to light water, so as to convert it in to steam."

કિલોંસ્કર બ્રધર્સે ટાટા પાવર સાથે હાથ મિલાવ્યાઃ મુંદ્રા ખાતેના ૪૦૦૦ મેગાવોટના યુએમપીપી માટે વિશ્વનો સૌથી મોટા વોટર પમ્પીંગ સિસ્ટમ પ્રસ્થાપિત કરાશે

દિશાંસિક પ્રથમાં લીમેરિક (1)નીએલ) એ ભારતને તેટુર અંપણે તેવી સિકીય લેળતાં છે. સામની પ્લાગલ કરશુંક વેગેયલ્લેન્દ્ર કંપનીએ સ્ટાર પાળા આવે કામ વિસ્તારમાં છે અને સ્ટાર પ્રાપ્યત્વે વુંદ્રા અસ્ટા વેઈસ પ્રાપ્ય બાલ્ટ (અનેમળી મીં! માટે વેટક પ્રખીત સિન્ટ્સ પ્રગ્યાપિક સ્ટાર દિલીસ્ટ બ્રાપ્યનેલ ૧૯ સોટી: જેન્દ્રુક પર વેટ સે વિનિટે અસ્ટાર સ્ટી પ્રાપ્ય નરફ સ્ટાર

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किलोस्कर ब्रदर्सच्या लोएस्ट लाईफ-सायकल कॉस्ट पंपला एक्सेक्स (एसीआरईएक्स) २०१४ मध्ये उत्कष्टतेचा पुरस्कार मिळाला

एलएनसीऊश पंपाली ऊर्जी कार्यक्षमतेच्या श्रेणीमध्वे सन्मान प्राप्त

पूर्ण - एव जग्रसण्य कर्मुइड मने वर्षद कंपनी किलॉस्का बतेसं विमिर्दे (के बीएन) जा एकरेक्स (एसीआराईएक्स) २०१४ मध्ये क्लुप्टलेवा दुरस्कार (कर्वात जात एकरेका हा एअर केडिजॉन्स, रेक्रिक्सन एकरेका हा एअर केडिजॉन्स, रेक्रिक्सन व विचिरं म सचित मोटा जातसर्द्राय रविव्यम्पील मचति मोटा जातसर्द्राय शो आहे. केवीएलच्या मोएस्ट साईफ-सावकल कास्ट (एनएकसीज) पंपना मंबी विल्लोमध्ये आयोजित करण्यात जातेल्या प्लंबस आर्डियुमध्ये २०१३ वर्षीये संबंत ऊर्जा कार्यक्षम उत्पादन माणून सन्मानिक करण्यात आले

या त्यांगस्य २०० पेशा जास्त प्रवर्शक कंपन्वांगी जास्त उत्तावाने राजनाम मेतन्म, जामध्ये नुम् जनोडवा पेथी- जमें की नावित्यता, इनडीअर एआ क्योंगिटी, उन्हों क्यांद्राम्पन आणि हरित व स्थापील्डपूर्णना वांग्याचे कुष्कार इराज करण्यात्र आला

મુંદ્રાનાં ટાટાના પાવર પ્લાન્ટમાં કિલોસ્કર દ્વારા વિશ્વની સૌથી મોટી વોટર પશ્વિંગ સીસ્ટમ

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CII West office-bearers

Ahmedabad, March I.E.

Chetan Tamboli, Steelcast Ltd's Chairman, and Sanjay Kirloskar, CMD of Kirloskar Brothers Ltd. have been elected Chairman and Deputy Chairman respectively of Confederation of Indian Industries. Western Region. They were elected at the first meeting of the CII Western Regional Council 2014-15, held in Mumbal last week, according to a press release here. our

तंबोली CII प. अंचल के अध्यक्ष, किर्लोस्कर उपाध्यक्ष बने



मुंबई, व्या.प्र. उद्योगपति चेतन तसोली को भारतीय उद्योग परिसध (सोआईआई) जी परिचम अंचल का अध्यक्ष चुना गया है, तसोली इंजीनियरिंग कपनी स्टीलकास्ट लिमिटेड के अच्यब है, अभी तक वे प्



अभित के उपाव्यक्ष में, संस्था की प्रबंधन कमेटी के बर्ष 2014-15 के लिए तुए निर्वाचन में महाराष्ट्र के उद्योगपति संजय किलोस्कर को उपाय्यक्ष बनाया गया है, वे किलोस्कर बदर्स लिमिटेड के जान्यवा पूर्व प्रबंध निदेशक है.

KBL's solution for the 4,000 MW UMPP



Kirloskar Brothers [KBL] has installed the world's largest water pumping system for Tata Power's Mundra ultra modern power plant (UMPP). A mammoth 10.5 million litres of wateris circulated with the help of its 10 sets of concrete volute pumps every minute. The Coastal Gujarat Power, Tata Power's subsidiary, which. implemented the 4,000 MW UMPP requires an enormous amount of water to condense heat generated in power production. The company created a circulating water system wherein sea water from the Arabian Sea is used as a heat sink to condense steam in the condenser. Cold water from the sea is pumped through the condenser going back to sea through an outfall structure. All of 10.5 million litres in 60 seconds!

કિર્લોસ્કર બ્રઘર્સે ટાટા પાવર સાથે હાથ બિલાવ્યાઃ મુંદ્રા ખાતેના ૪૦૦૦ મેગાવોટના યુએમપીપી માટે વિશ્વનો સૌથી મોટો વોટર પર્મ્પીંગ સિસ્ટમ પ્રસ્થાપિત કરાશ

ોગ્લોસ્ટર બાધમાં ગીગીરેટ (દેબીએલ)એ ભારતને સારત અપલ ગોરી

કિલોસ્કર બાધર્સે ટાટાપાવર સાથે મુન્દ્રામાં વોટર પર્ગ્યીંગ સિસ્ટમ કાર્યરત થશે

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ર્શિયદ્ધ મળવી છે. શેરમની સ્વીગલ્ડ કાલું-ક ગળેમજંગર કેપનીએ કારક પાલ્ક માથે સાથ ચિતામ્ય છે અને સાંદક પાલ્કમથ યુંદાં સ્વરણોટેલ પાલ લાખ્ય (પુરુષમગીપી) માટે પોલ્ટ પાલીક હિસ્ટક પ્રત્યોપિત કરો.

કિલ્લોન્સ્ટ પ્રાથમિત ૧ લહેકીટ લેડપુટ પંપ સંદ દર મિનિટ નથય છો જાય તેરણ દેવ સંદ દર મિનિટ નથય છો જાય તેરણ દેવ પંચ સ્ટ્રાં સ્ટ્રાંગ થાયર. દિસીટ ડ (સીઝપીએ લોકે એ ટલકા પાયરની સંબલીદીયરી કે બની છે તેલું જીવન બળાવંટ પૂંડા તુમ્બાલીપી પાટે બંદાયત પંચાવેટ પૂંડા તુમ્બાલીપી પાટે બંદાયત પંચાવેટ પૂંડા તુમ્બાલીપી પાટે બંદાયત પંચાવેટ અંદ પડે છે. વિદ્યત્વીના ઉત્પાદન પાટે આ પછી ચડ્કરી છે.

ીગલો કરા ગાંધમાં લીચાં છુ. અ એસો સીએટ પ્રાપ્ય કેસીડેન્ટ (પાપ્ય 1523) થી ગવિન્ટ ઉભ્યાસ અપાળપું છે : વિશ્વની સૌથી થોટી સરફ્યુલેટીંગ ગાંડવ 1 દિવ સિવર બાદનોય એન્ટનીવરીંગ પાટ સરવામાં સચાય છે. મુંદર ખાવે પુર્વે થયીથી બાદનનું સૌથી થોટું અને સૌથી સાથેલમ એવું કોલરસ આપારિત થયંક પાંચ આવેલમ એવું કોલરસ આપારિત થયંક પાંચ આવેલા છે. જે સુપર કરી લગ્ના વર્ગ્ય ટેક મોદ્યાળમાં ઉપયોગ કર્યોન લોગ્ટન્સ સીનાઈસ નેસ એમીશન ઉત્પક્ષ કરો.



Int UK-Incided APP Parmaps antennia sur atomide ets stronger pressure on the spear chevade, according to runtaging treater alam here instan Talking about the protection acquiration made 114 Pane-Readingrowtored COMPLETE INSTOL Kathrakar Brottpess 2.04 (km)/ 10 years ago, he says "The internation way to expand the product eitherings agrees continuity. Dolay, the P68-mullion str caters to bighters indeed tries like oil and gas, water

and mode enstel freatment; power germannik, construction mittes and large indextrial plants," for the pair decade of togethinment the continue lianters sales in the US shooting up by 280 per court would did brid gas fits outs multiplying more than its fold. The company line great 4.1.5 stailloon or interative tax. "And we continue with state without to most 20 perturbed with profits could of 15 cur creat? Rassakas adds. Thus 138-year-oill MP operates out

of two sites, with an office in inadice and the monthly fattening initility in allineestendine Unichted. This have also not control of the truit, an will an inversion firstly ittes or Dates, France, South-Altered, Stregtigners and the LSS. the US operation. Its most informent plant, star lituaparticular Manual recording This will easily sittly producthen cape, it's by \$10 per smith contributing 5-40 million to sparts dependence or the same thus went

Kirloskar Brothers' Lowest Life-cycle Cost Pump Receives Award of Excellence at ACREX 2014



Pane : Kuloska Hodisu Liment (KML), a lost og grund fluid manage med ostrugere lat men confinered auto the Av and of Excellance at ACRA's 2014 die targest interaccent short in forth, sins out AV Constitutioning Raftgarration and Building Services KBL 's award allo-speic Cont ILLCTM

Energy Efficient product of 2012 at the ACREX Amount, beth in New Doffs.

Over 300 exhibition and unionically including and its for competition that recognized the for an our instance categorize such as innovation, indeer Al-Quality, insergy Philosency and Green & SurfaceMe. Will 5 115 Thil Party is a space of an innovances product development at the 100 years and Kirlinskarson furthing Faculty such as accounting and annual registron force Press, can annual while registron force Press, can annual while registron force Press, can and annual registron force Press, and annual sectors additional ansatz and an effect for additional ansatz and an effect for any sector production of the effect of the registration of the effect of the investigation and therefore informers the reveal production of an experiment. KB1, remession and an experiment.

EDL r sumstances and energy consent 12/2764 forces have in development impact of a learning and conserving margin as one method in relax mindisa, perioric annual conservo, and relaxe curbos for primi-

Valients access such as Agriculture, Impatton, Warm, and Prevar, laws aupearfully deployed the LLCTM Pump to eptimize productivity, conserve energy and todinse the overall cost of the properbility public and Prevate secure compsion. Like the Delhi Jul Board, MTPC Somewalt beyencide Limited ary some of these key circuits is india for LLCTM more of products.

XBL is precising the new of LLC pumps in the new Matto rail Projects and the Airpost Projects as part of the techooling up-position for energy storagand space saving. This product can be workly called as a "Moury Genzaler" as the storage psychola period of LLCDM Pumps is only 12-16 matths.

Other recognition energies by the LLCIM Pumps are CD Incovative impty neight product award as the 14th National world for excellence in Energy Management 2013 and analysis of the year award organized by Pump Inducing awards (2007) in U.C.



तळवली ते गांधारी रस्त्याच्या दुरुस्तीचे क

। विवेशी । गांधास-सल्पाण विज ते आमणे, मुठवळ, देवरुंग, सातद, प्राणगत, तळवली-पडवा पेटोल पंप या रारत्याची दावन्था जाल्याने नजीन रस्ता तथार करण्याल बाख, असी मामगी आमने बाखतील समाजसेवक गुरुनाथ बाला यांनी मुख्यमंत्री पृथ्वीराज जाण यांच्याकडे लेखी निवेदनाहारे केली होती. ल्याची दखल चेत सार्वजनिक बांधकाम वातचाने या रख्यासाठी साइंसात कोटी रूपये मंजुर केले असून, त्याचे काम बेत्या २० दिवसीत सुरू होणार आहे, मात्र रसवाची दयनीय अवस्था झाल्याने रस्ता दुरुस्तीसाठी ठाणे मांधकाम विभागाचे कार्यकारी अभिगंता सलीम शेख बाँनी तत्काळ १० लाख रुपये खर्चाच्या तरवुदीस मंजुरी दिली असून, या रस्त्यावरील खड्डे दुरुस्तीचे काम सुरू केले अले. त्यामुळे शा परिस्तातील चाळीस गावांगील नागरिक च वाहनमालकांचा प्रथास लकर होगार आहे.

पडवा नळवली ते गांधारी-कल्याण हिजगर्यतच्या सुमारे १०,४०० किलोमीटर लोकीच्या रात्यालगत असणाऱ्या वासेस,

आतकोली, पिसे, किरवली, आमणेणडा, डताड, मांदकर, सांग, लोगाड, जागवळ, खांडवळ, कुकसे, उसरोली या गावसिड ४० गायातील गोकरी करणारे नीकरवार वर्ग, राष्ट्रा, कॉलेजवन्द्रे जापारे विद्यार्थी आणि वेथील भाजीपाला व्यापार करणारे स्थानिक गेतकरी सांची दररोज ये-जा असणान्या गांधारी-कल्पाण दिज ते तछवली-पडधा पेटोल पंप या मार्गावरील रस्त्वाची दरवस्था ग्राल्याने वा रस्त्यावर अपचाताचे प्रमाणही मोठधा ध्रमाणायर बादले होते त्यामुळे रस्त्वाचे बांधकाम लचकर काण्यान वावे, अशी मागणी आमने मावातील गुरुनाथ बाशी यांनी मुख्यमंत्री पृथ्वीराज चकाण चौच्याकडे लाजून धरूम त्यामाती ने सतत प्रयत्नप्रील होते. मुख्यमंत्री पृथ्वीराज चव्हाण यांच्या आदेशाचे या रस्त्याच्या ८ कियी रस्त्यासाठी क कोटी ६० साख रुपये मंजुरही करण्यात आलेले आहेत. त्यापुळे बेथील नागरिकांना मोला दिलासा मिळाला आहे.

KBL installs world's largest water pumping system for Mundra UMPP Andreakon Broatherer Limited (ABL) has installed the world's largest water pumping visitin for fats Power's Mundus alterusegn peaket project (LIMPP) on a timukey basis. The system has the connecte in considere 10.5 million little of water with the help of 10 sets of concrete vidine pursues. KBI, has cerated an open loop type of clocalating water system wherein water from the Ambian Sea is used as heat sink to condense the town in the condenser. Cald water from the secto pumped by circulating water pumps to the contidenses and is then turned to the sea through an out fail smuch

औ. गुरुनाथ मारती बाशी (सामाजिक कार्यकर्ते)

किर्लोस्कर ब्रदर्स एनर्जी ऑडिटस व सिस्टिम ॲनालिसिस उपलब्ध करेल



पुणे (बि.प्र.) : ग्लोधल फ्लुइड मॅनेजमेंट सोल्युराना पुरवतादार असलेल्या फिलॉसकर ब्रदसने इजिजनमध्ये नाईल नदीच्या किनारी आपली इंजिनियॉग समता आणि विशेषत्वता उपलब्ध केली आहे. इतिप्तमध्ये ५० पेखा जसत वर्षांपासन मजबत उपस्थिती नोटविण्यात आगेल्या किलॉम्फर बदसेने हल्लीव नाईल नदीच्या किनाऱ्यावर दोन मोठे पंचित्र स्टेशन्स न्यापित केले आहेत, किलोस्कर इटसेला या संबाधध्ये क्रेच सामध्ये दिसून जाले आहे. हेचे कारण आहे की, कंपनीने आपला कारभार वाढविण्याकॉरता ब्ल्यू ब्रिंट तयार केले आहे. कंपनीने आपली सहयोगी एसपीपी एसईएनए एलएलसीच्या अंतर्गत आवरोमध्ये १०,००० चीरस मीठमध्ये भव्य वंत्रसच स्थापित केले आहे. या वंत्रसंचाड़ारे किलोस्कर ब्रदसं मूल्यवधित सेवा सादर करेल. न्यांप्रध्ये एनजी अहित्रम्, सिस्टिम अंतालिसिस, व्हायग्रेशन अंगलिसिस, अनिसाइंट तपासणी, मूल्य प्रभावी प्रिवर्विशमेंट उपाय, बेताटांवर देखरेख इत्यासीचा समावेश आहे.

किलोंस्कर ब्रदर्भच्या लोएस्ट लाईफ-सायकल कॉस्ट पंपला एक्रेक्स (एसीआरईएक्स) २०१४ मध्ये उत्कृष्टतेचा पुरस्कार मिळाला



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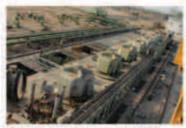
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KBL INSTALLS WORLD'S LARGEST WATER PUMPING SYSTEM



KBL's world's largest water pumping system for Tata Power's Mundra UMPR

Kirloskar Brothern Ltd. (KHL), the leading global fluid inanagement company has collaborated with Tata Power and installed the world's largest water primping system for Tata Power's Mundra ultra mindern power plant (UMPP). A mammoth 10.5 million litters of water is circulated with the help of KBLs 10 sets of concrete volummanness every minute. The Constal Column Power Ltd (CGPI), Tata Power's whollyowned substituty, which has implonemed the 4000 MW 1800 MW x 5 unito UMPP requires an encompose amount of water to condense the heat generated in the pro-

duction of power. On a turn-key basis, KBL created an open loop type of circulating water systerm for Talls Power's subsidiary, schorein ana water from the Arabian Sea is used as hour and this condense the steam in the condenser. Cold water from the sea is jumped by KBL's unique circulating water pusties through she condenser going back to sea through an outful strucstate. All of 10.5 million tires in-60 seconds! Ravindra Ulangwar, associate vice tiresident & local

power sector, KBL said. "The world's largest some pumping system is a sahave to Indian engineering. The Mundra-HMPP is India's liest and most everyy efficient 400 MW unit coal-based thermal power plant using supercritical technoticgy to create lower growthmise gas emission. Its main power generation equipment is sourced from Japan and Keren And thus came about the Indiantechnology to create a water pumping system that rules shandders with would leaders." The Mondea UMPP will meet tion per cent of India's power needs.

किर्लोस्कर की कारोबार बढाने की रणनीति

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SPP Pumps bags prestigious awards at the 2014 Pump Industry Awards



a minidiary of Enforme Fune SPP. Paran. Restores Limited (KBL) has been conferred as the Manufactures of the Year' for the three time to a core as the LUR of Parage Industry Awards (PLA) - 2018 Mr Ken 3PP Purps and Mt. James Lightly, 5PP were

united an the addelines of the cer-Cheefeed Grange Hotel in Engliseeth SPP Pungs Lid is a UK-based engineering and simularizing everyony that office exhable high progetty previous for diverse industries was tilled as the "Manufacturer of the Shar". unded while Mr. Jurne Lightly who has be associated with SPE Prings, for once 2 years was honored with Engineer of the Year 'award

taitin juined SPP on the company's graduate training software Pollowing processful completing of his training. the moved hit of state in the state and institutions dependtown: Throughout has even at SPP in hos worked on a contenty of presidents and products for all successive includinga project to develop the companies net facility. Jurain in now a chief text is againer and enouges do verting of largor thit and Gas party one.

Speebug at the stin. Mr. Aluk Kistowkar, Minnging Directors - GPP Pumps, said. "SPP Pumps have proved its manufairnning capabilities with tathley projects in harkcon attrict such as nit and gar production, water and muns and large industrial plants. We have nost many sounds in the past and this mongations forther validates and continents compationers would be delivering model know in constituting screw the globe.

The owards are given out annually to recognize even innia in the purpy and its allied industries. The 11th adtion of the 2014 awards categorite fromed on presenting moduce, services, companies and professionals. The motion under much expressi ware environed by a cal of preminent jury munibers is acknowledge presional endeaner, bechascal toporation, angineering advancement

"This year's PLA Avenues over was the best yet. If was a fabrilous adabit which was capped when we use the Munifictures of the Your Award. Is in a genus award or response as it is a tody more effort and reflaces on all employees. It also premoted out tonige with enstore and westlow" and Mr. Kee Wint, Operations Director SPP Pummin

RAMCHANDRA MAHIND AVP & HEAD, KONDHAPURI OPERATIONS KIRLOSKAR BROTHERS LTD (KBL)

He started his career as a Govt, apprentice trainee in October 1982 at KBI's Kirloskarwadi Plant and in due course, held the office of head, engineering, pumps division. In the year 2003, he took charge of the valve manufacturing unit of KBEs, Pune plant and totally turned around this unit by increasing the turnover six times within a span of six years. Projections are also planned to ensure CAGR of minimum 35%. A dynamic professional with over 31 years of rich experience in manufacturing, production, PPC: QA and various departments of the plant, his functional expertise is in handling the manufacturing and production operations with the key focus on bottom line profitability by ensuring optimal utilisation of resources. He holds the distinction of implementing various quality standards like 5S for improving the plant operations along with energy conservation for cost savings, lean manufacturing and its implementation.



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. 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, is 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 90% stakes in Braybar Pumps, South Africa. SPP MENA was established in Egypt in 2012. KBL has joint venture cooperation with Ebara, Japan since 1988. Kirloskar Corrocoat Private Limited is joint venture cooperation with Corrocoat, UK since 2006. KBL acquired The Kolhapur Steel Limited in 2007 and Hematic Motors in 2010.

KBL has eight manufacturing facilities in India at Kirloskarvadi, Dewas, Kondhapuri, Shirwal Ahmedabad, Coimbatore, 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, OHSAS 18001, ISO 14000 Environment Standard certified. They apply Total Quality Management tools using European Foundation for Quality Management (EFQM) model. The Kirloskarvadi plant of KBL is a state-of-the-art integrated manufacturing facility having Asia's largest hydraulic research centre with testing facility up to 5000 kW and 50,000 m³/ hour.

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).



KIRLOSKAR BROTHERS LIMITED

GLOBAL HEADQUARTERS :

"YAMUNA", Survey No. 98/(3-7), Baner, Pune 411 045, INDIA. Tel.: +91 20 2721 4444 Email : kblin@kbl.co.in Website : www.kirloskarpumps.com

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