KBL IN NUCLEAR INSTALLATION -
NO 'small matter'
Quick Inspiration

Your imagination is your preview of life's coming attractions.
- Albert Einstein
Going Nuclear

Indian Nuclear Power Program of Department of Atomic Energy (DAE) has seen many ups and downs and Indian industries have been with it through thick and thin. Having braved the nuclear apartheid of four decades on the international scene, DAE’s policy has always been of self-reliance and encouragement to indigenous development. It has therefore, always extended a helping hand for uplifting Industry. Kirloskar Brothers Limited, the largest pump makers and exporters in India is associated with this program for over forty years.

The last forty years have seen KBL develop new, critical designs and invest in new pumping technologies – in machines, new heat treatment facilities, new manufacturing and testing facilities to meet the challenges of nuclear applications. Our non-destructive testing facility with equipment for radiography, ultrasonic and magnetic particle test was set up during the execution of the first order of sea water circulating pumps for MAPP. Our foundry equipment was also upgraded and techniques improved to acquire the capability of manufacturing castings in CU-Ni Resist, SG-Ni Resist, various grades of stainless steels meeting stringent requirements of dye penetration, ultrasonic, magnetic particle and radiography.

Products and Technologies

Traversing the arduous path together with various wings of Department of Atomic Energy, KBL has a lot to be proud of.

- The first lot of 14 Sea Water Circulating Pumps. In addition to developing our casting, machining and testing abilities, we also developed our design ability and instilled confidence in ourselves, which has gone a long way in our becoming the country's largest manufacturer and supplier of CW pumps for all the types of power plants.
- The order of CW and miscellaneous pumps from Narora Atomic Power Project (NAPP) gave us an opportunity to develop in-house ability to carry out Seismic Analysis to check the soundness of the design under seismic conditions
- Further orders for CW and miscellaneous pumps for R-5 BARC, Rajasthan Atomic Power Project and Kakrapar Atomic Power Project, Kaiga, RAPP 3 and 4, KAPP 3 and 4 and TAPP 3 and 4 enabled us to develop techniques like those required for producing radiographic quality castings in a variety of materials and forgings. We also developed the downstream processes for these castings and forgings like heat treatment, upgradation by TIG welding, machining, surface treatments and various types of corrosion and wear resistant coatings.

- We not only met the technical and technological mandatory parameters for nuclear application, but on our own, we brought new technologies and also influenced the design concepts of pumping systems in Nuclear Power Plants. Induction of the concept of Concrete Volute Pumps is an example. NPCIL appreciated the technical and technological
superiority as well as the advantages of the concrete volute pump concept and implemented it in T APP 3 and 4. We were the first in India to come out with condensate extraction pumps with double suction impeller at first stage for extra low NPSHR in Tarapur.

- We have successfully developed indigenously the canned motor pumps for handling liquid ammonia at - 32 degrees Centigrade in ammonia towers for heavy water production for Heavy Water Board (HWB). We are the first and the only Indian supplier of large capacity 200 kW canned motor pumps for moderator circulation duties in Pressurized Heavy Water Reactors at Rajasthan, Kaiga and Tarapur.

- These seal-less, canned motor pumps, assuring freedom from leakage of radio active heavy water and its fumes, have proved themselves, highly reliable and operator, maintenance and environmentally friendly, so much so that replacement of existing double mechanical seal, coupled pumps by them, in existing Reactors was a natural corollary. It is such a success story that each Reactor Operating team is keen for this retrofitting and upgradation of their plant. Narora 1 is the first to go for it and succeed with six 130 kW canned motor pumps replacing 132 kW double mechanical seal pumps.

- A variable speed, high pressure high temperature process pump of 65 mm delivery size was specially developed for BARC and successfully commissioned for their experimental test rig to simulate the conditions in the reactor including LOCA - Loss of Coolant Accident.

- We also associated ourselves in nuclear program for equipments other than those required for pumping. We took up and successfully completed the job of manufacturing five Fuelling Machine Heads. This called for developing machining, surface treatments and measuring ability required for components having very high finish and accuracy. A clean room of nuclear class A was developed for assembly of these components.

- At times when import of components and sub- assemblies of original equipments procured from overseas manufacturers was not possible due to nuclear apartheid, we undertook development of two rotor assemblies for boiler feed pumps having thirteen numbers of seven vane impellers. Special techniques for quality assurance and performance assurance were developed to complete this job.

- Our involvement with IGCAR for development of hydraulic model for primary and secondary sodium pumps for their fast breeder reactor development program has been very close. The facilities in hydraulic research centre at our Kirloskarvadi works were upgraded and enhanced for testing of full sized sodium pumps on water. Since sodium pumps require reliability of a very high order, the absence of cavitation damage to pump and downstream components was ensured by specially conceived visual cavitation studies and paint erosion tests. An attempt to predict the life of the component under cavitation erosion on the basis of visual cavitation studies was made for the first time in the country.

- Our association with NPCIL is so unique that we undertook and successfully completed development of radiographic quality class-II castings for casings of an earlier generation of moderator circulation pumps for our competitor upon request from NPCIL in the interest of a national cause.

- KBL has carried out special assignments such as reengineering some of the old pumps supplied by Bingham to upgrade efficiency and performance significantly.

- NPCIL has embarked on ambitious Nuclear Power Development Program based on indigenous PHWR (Pressurized Heavy Water Reactor) technology. Further, many Nuclear power projects are also on anvil along with international players like AREVA based on EPR (European Pressurized Reactor) technology, Westinghouse based on AP 1000 Reactor and with Russia on LWR (Light Water Reactor) technology. Total power generation from Nuclear power projects will be 10,000 MW during XIIth five year plan.

We are proud of our mutually satisfying relationship with DAE and NPCIL and our association with their nuclear power program.

- R K Srivastava
Inviting Innovation

Innovation is “The act of introducing something new – something newly introduced” says the American Heritage Dictionary. “A new idea, method or device” says The Merriam-Webster Online. In my opinion, innovation is an economic, technological and social disruption which has the power of changing everything. It is borne of a mindset that continuously challenges the status quo.

To begin with, of course we need creativity; it is a function of the nature within us; call it native intelligence, intuition or the subconscious mind. It is dreaming up a new invention; while innovation is making it real, in ones own unique way.

Henry Ford created the assembly line for car production. The Japanese perfected this concept by introducing their own unique innovations and changes and improvements. A lot of people are creative but they are not innovative enough to make their creations practical. Innovation makes creativity practical and efficient. Creativity is essential for innovation since a product must exist at least in a concept stage before it is ready for innovation. We cannot innovate anything that does not exist.

So how does one become creative? The question reminds me of a quote I read by a CEO – “I would rather prefer to work with lazy people than workaholic idiots.” Probably because they are inclined towards innovating a faster, easier and better way of doing something that is in the purview of their job description!

This is where I feel the role played by curiosity comes in – what some refer to as ‘the beginners mind.’ The wide open zest and spontaneity of the child reveal the beginner’s mind. Young children learn at a fantastic rate. Pushing this pace is an incessant driving beat of the simple question: Why? Why? Why? Often, their questioning outlasts our patience. Could it be because it threatens our deeply held assumption and pat answers? Necessity is the mother of invention, however when a child asks a difficult question, innovation becomes the necessity of mother.

Claim back that curiosity. Claim back the questioning of youth. Do not settle for answers you don’t understand or agree with. Make the effort to look anew at earlier circumstances. And while at it, make sure it doesn’t disrupt team work. To quote Ralph Waldo Emerson:

“Ideas must work through the brains and the arms of good and brave men, or they are no better than dreams.”

- Avinash Purandare
  Editor-In-Chief
Kirloskar Brothers Limited (KBL) is the flagship company of the (USD) $1.2 billion Kirloskar Group. KBL is globally known as a reliable, innovative and cost effective total fluid handling solutions provider. KBL is India’s largest manufacturer and exporter of centrifugal pumps for industry and largest infrastructure pumping project contractor in Asia.

KBL offers a range of products covering centrifugal pumps from 0.1 kW up to 26000 kW and valves up to the size of 4000 mm. KBL has received 3 US patents for innovative pumping solutions based on research at state of the art Hydraulic Research Center (Asia’s largest research lab).

KBL’s pumps and systems have been designed for the lowest life cycle cost i.e. highly energy efficient pumping system to save the running cost.
**Humanity stands on the threshold of an era of unprecedented opportunities.**

In the past decades, many innovative new technologies have become available and affordable that can transform our current economies based on polluting fossil fuels into sustainable nuclear energy economies. This transformation will provide thousands of new jobs. It will halt global warming. It will create a more fair and just world. It will clean our environment and make our lives healthier.

Nuclear power plants need less fuel than ones which burn fossil fuels. One ton of uranium produces more energy than is produced by several million tons of coal or several million barrels of oil.

Nuclear energy was first discovered accidentally by French physicist, Henri Becquerel in 1896, when he found that photographic plates stored in the dark near uranium were blackened like X-ray plates. An ideal case of Serendipity in action!

The cover shows two concrete volute pumps under construction – each of 49,000 cubic meter per hour capacity handling sea water for 500 MW prototype fast breeder reactors at BHAVINI, Kalpakkam in Tamil Nadu, India.

---

**What’s inside**

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNOW CAP</td>
<td>8-17</td>
</tr>
<tr>
<td>CONFLUENCE OF THOUGHTS</td>
<td>19-23</td>
</tr>
<tr>
<td>KBL TRIBUTARIES</td>
<td>24-25</td>
</tr>
<tr>
<td>BRIDGING OCEANS</td>
<td>27-28</td>
</tr>
<tr>
<td>KBL RIDING ON A HIGH TIDE</td>
<td>29-33</td>
</tr>
<tr>
<td>SPRING OF SUCCESS</td>
<td>34-40</td>
</tr>
<tr>
<td>CURRENTS</td>
<td>41-43</td>
</tr>
<tr>
<td>DEW DROPS</td>
<td>44-47</td>
</tr>
<tr>
<td>SHOW’ER</td>
<td>48-49</td>
</tr>
<tr>
<td>CREATING WAVES</td>
<td>51-52</td>
</tr>
<tr>
<td>DISTRIBUTION SECTOR SPLASH</td>
<td>53-55</td>
</tr>
<tr>
<td>KIRLOSKARVADI SPLASH</td>
<td>56</td>
</tr>
<tr>
<td>DEWAS AND SHIRWAL SPLASH</td>
<td>57-58</td>
</tr>
<tr>
<td>BOOK BROOK</td>
<td>59</td>
</tr>
<tr>
<td>RAINBOW</td>
<td>60-61</td>
</tr>
<tr>
<td>BACK WATERS</td>
<td>63-65</td>
</tr>
</tbody>
</table>
Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI) is a wholly owned enterprise of the Government of India, under the administrative control of the Department of Atomic Energy (DAE). It was incorporated on 22nd October, 2003, as a public limited company with the objective of constructing and commissioning the first 500 MWe Fast Breeder Reactor (FBR) at Kalpakkam in Tamilnadu as also to pursue construction, commissioning, operation and maintenance of subsequent Fast Breeder Reactors for generation of electricity.

BHAVINI is currently constructing a
500 MWe FBR at Kalpakkam, 70 Kms. away from Chennai at the cost of ₹3492 crores. This FBR is the forerunner of future Fast Breeder Power Reactors and is expected to provide energy security to the country. The FBR is being built with the design and technology developed at the Indira Gandhi Center for Atomic Research (IGCAR), also located at Kalpakkam.

Enter KBL

In view of KBL’s comprehensive abilities and reliability, KBL was entrusted the prestigious order for:
- Primary heat transfer pump
- Secondary heat transfer pump
- Sea water pump house
- Fire fighting package

KBL’s scope of supply includes design validation and verification for supply of primary and secondary sodium pumps. A state-of-the-art testing facility is set up by KBL for recommended and mandatory testing in general as well as endurance testing, along with a ‘nuclear clean hall’ for assembling such critical pumps.

The primary and secondary sodium pump packages include supply of three pumps of each type along with the spares and accessories. It also includes performance and endurance testing of each pump at our works. The order has been received on an Engineering, Procurement and Commissioning (EPC) basis for sea water pump house. All the civil and electromechanical work has been awarded to us.

The sea water pump house package includes erection and commissioning of sea water pump house and electro-chlorination plant package, supply and erection of two concrete volute pumps and two vertical turbine pumps including all civil and electromechanical packages.

Fire fighting package was awarded to us entirely, including supply, installation and commissioning of the pumps along with piping and related accessories.

To KBL goes the credit of being the only company in India, competent to have won the technically challenging and commercially highest value order from BHAVINI for this prestigious project.

Technical Details

We are indeed proud to be associated with this project, which is a forerunner towards the ultimate goal of a long-term nuclear power program, which is based on utilizing the vast indigenous thorium resources for electricity generation. India’s uranium resources can support the first stage program generating about 10,000 MWe based on Pressurized Heavy Water Reactors (PHWRs) using natural uranium as fuel and heavy water as moderator and coolant. The energy potential of natural uranium can be increased to about
3,00,000 MWe in the second stage through FBRs which utilizes plutonium obtained from the recycled spent fuel of the first stage along with thorium as blanket, to produce U-233. With the deployment of thorium at third stage using U-233 as fuel, the energy potential for electricity generation is substantial. Indigenous industrial infrastructure for reactor program is well developed within the Department of Atomic Energy. Indian industries have gained valuable experience and have reached a stage of maturity in manufacturing equipment and handling mega package contracts for these reactors.

BHAVINI is a second stage reactor in the nuclear program, where liquid sodium will be used as a moderator and coolant. KBL has developed these pumps which will be installed near the reactor, to handle liquid sodium.

This 500 MWe prototype FBR uses liquid metal sodium to extract heat from the reactor core in its primary and secondary heat transfer circuit. Two large capacity electro Primary Sodium Pumps (PSPs) are chosen from safety and economic consideration in the primary circuit. These pumps are vertical, free liquid surface pumps installed in the sodium pool of the main vessel of the reactor.

Contributions in Nuclear Power Plants in India

<table>
<thead>
<tr>
<th>BWR: Boiling Water Reactor</th>
<th>PHWR: Pressurised Heavy Water Reactor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plant</strong></td>
<td><strong>Unit</strong></td>
</tr>
<tr>
<td>TARAPUR ATOMIC POWER STATION (TAPS), Maharashtra</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>RAJASTHAN ATOMIC POWER STATION (RAPS), Rajasthan</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MADRAS ATOMIC POWER STATION (MAPS), Tamil Nadu</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>KAIGA GENERATING STATION, Karnataka</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NARORA ATOMIC POWER STATION (NAPS), Uttar Pradesh</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>KAKRAPAR ATOMIC POWER STATION (KAPS), Gujarat</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>
and supported from the reactor roof slab. Argon is used as a blanket gas at pressure slightly higher than the atmospheric over the free liquid sodium surface. Each pump is rated for 4.3 m$^3$/second at 75 meters head, driven by a variable speed drive motor through a long shaft providing adequate submergence to the pump. The available Net Pressure Suction Head (NPSH) in the reactor primary circuit is limited to 16.02 mlc, which is rather modest for a large capacity pump designed to yield high reliability and long service life.

**Nuclear Savvy**

**KBL**

A leading manufacturer and exporter of pumps, valves and pumping systems from India, Kirloskar Brothers Limited, is also a leading player in the various industrial sectors other than nuclear industry – power, lift irrigation, urban water supply, oil and gas as well as sewage. Its capacity to meet the core sector’s total fluid handling requirements is reflected in the fact that it offers a wide range of pumps and valves including special pumps for a variety of applications.

Kirloskar Brothers Limited has the advantage of a rich designing, engineering, manufacturing and technology base and can adapt quickly to changing market needs. Its competitive edge – skilled engineering manpower, technological strengths and infrastructure, has earned KBL an enviable position of being an internationally acclaimed pump manufacturer.

The research and engineering division, established to incorporate the latest technology in accelerated high performance product development, has achieved breakthroughs by using computational techniques such as solid modeling software, structural analysis and computational dynamics software.

KBL also has a Hydraulic Research Center at Kirloskarvadi works which is one of the biggest and the best hydraulic test laboratories in Asia. The testing facilities designed with technical assistance from British Hydromechanics Research Association (BHRA), United Kingdom. KBL has an unique testing facility for pump sets at both frequencies – 50 Hz as well as 60 Hz.

KBL is the first pump manufacturing company in India to acquire ISO 9001 certificate accredited by BVQI. Today, it holds ISO 9001 certification for EPC projects, ISO 14001 as well as ISO 18001 for OHSAS certification for Environment Management System.

An undisputed leader in supply of various moderator circulating pumps at a number of nuclear stations, ranging from lower kW to 220 kW, KBL has executed all sites successfully.

We take pride in the fact, that we are approved by all leading global EPC contractors in the power sector – Bechtel (USA), Alstom Turbo System (Switzerland), Doosan Heavy Industries (South Korea), Siemens Power Gen (Germany) and more. Currently we are supplying main CW pumps for various thermal power projects in USA, UK, Europe, Middle East and Far East countries.

KBL is confident of designing and developing critical nuclear pumps by applying its in-house technical skills and expertise to offer advanced products at the most competitive price rate, which can meet diverse needs of customers across the world.

**KBL strengths in nuclear power market**

**Track Record**: KBL is associated with the nuclear power program in India since its inception and working with giants like NPCIL, BARC, HWB, IGCAR and BHAVINI amongst others in the field.

**Presence**: All nuclear power plants in India have Kirloskar products working for the following applications:

- Circulating and cooling water
- Condensate extraction pumps
- Primary heat transfer pumps for fast breeder reactor – sodium pump
- Primary moderator circulation pumps and secondary cycle pumps – canned motor pumps
- Active and non-active process water pumps
- Auxiliary boiler feed water pumps
- Re-heater and separator drain pump

**Competence**: KBL possesses expertise and requisite infrastructure to meet stringent quality and safety norms for nuclear application.

**Technology**: KBL has developed indigenous technology for critical applications such as canned motor pump and sodium pump for nuclear power plants.

**Developmental initiatives**

- Development, manufacturing and supply of five fuelling machine heads.
• Development, manufacturing and supply of rotating assembly for two Bingham make pumps, six stuffing boxes for critical application to RAPS, Kota.

• Development of pumps for critical application – high pressure (100 Bar) and high temperature liquids (350° Celsius).

• Development and supply of canned motor pumps – 220 kW (27 numbers.), 130 kW (12 numbers), 15 kW, 7.5 kW, 3.7 kW, 2.2 kW (60 numbers).

• Development, manufacturing and supply of twelve enclosed impellers, eight stator and rotor cans and two rotors for 100 kW canned motor pumps to Bhaba Atomic Research Center.

Advantage ‘KBL’

KBL bid for these orders not just for commercial consideration but also to initiate the interest in the second stage nuclear program of Government of India. KBL is the only company to supply nuclear reactor pumps (primary sodium pump and secondary sodium pump) entirely developed indigenously. It has taken substantial efforts to design and develop the prototype sodium pump for IGCAR (Indira Gandhi Center for Atomic Research).

KBL is the world’s largest manufacturer of concrete volute pumps. More than 166 CV pumps are working for various projects.

With excellent technical background and a viable techno-commercial bid to boot, it was KBL all the way for BHAVINI and nuclear power projects.

Special assignments by KBL for Nuclear Power Plants in India

- Fuelling Machine (FM) heads manufactured and supplied from Kirloskarvadi. This project involved high level precision work.

- Non destructive reverse engineering of critical components such as rotating assembly and stuffing box for critical application of pumps.

- Developed pumps for the critical application of high pressure (100 Bar) and high temperature (350 degrees Celsius) liquid.
“We are aiming to be a global leader for the emerging nuclear energy market”

- Ravindra P. Ulangwar

KBL has played a very important role in the development of nuclear power projects in India and remain an integral part of the entire nuclear power generation program of Government of India since its inception. KBL has been partnering with various agencies like BARC, BHAVINI, IGCAR, HWB, NPCIL and DAE to develop various products for such critical applications based on indigenous technology.

Today KBL's products are working in all the 16 Nuclear Reactors which are under operation. KBL’s products and systems are also being installed in all the new reactors which are under construction in the country. It is a matter of pride that KBL is the largest contractor for equipment package for World’s first 500 MW prototype fast breeder reactor (PFBR) being constructed by BHAVINI at Kalpakkam in the state of Tamil Nadu.

KBL is amongst the few pump companies in the world who has developed Special Pumps for critical applications such as Primary and Secondary heat transfer pumps for handling liquid sodium for PFBR, 200 kW canned motor pumps for moderator circulation for PHWRs (Pressurized Heavy Water Reactor) applications, Concrete Volute pumps for sea water condenser cooling systems for various nuclear projects.

In this journey, KBL has acquired in-depth knowledge, rich experience and built expertise required to meet stringent quality and safety standards of nuclear industry. KBL has developed cutting edge technology and created state-of-the-art manufacturing and testing facilities. KBL is fully geared up to handle any challenging assignment for pumps and pumping systems for nuclear power industry at global level.

Today, nuclear energy is one of the fastest growing market in the world. Many exciting opportunities are opening up in this sector after India signed the nuclear treaty with USA, France and Russia. KBL is in the process of developing new products required for primary circuit and is also in the process of acquiring ASME N-Stamp for its product range. We are aggressively focusing on international market for nuclear projects and has been already approved by world leaders like AREVA- France, ALSTOM-France, BECHTEL-USA, EDF-France, PARSON Power-USA, SHAW Group-USA, Westinghouse-USA.

An amazing amount of effort has gone into creating what KBL is today in nuclear energy business. Congratulations to the team that worked in perfect tandem and built a credible and strong brand image in the process.

A lot has been done; and a lot is being done to see how we can leverage our strengths to become a truly global leader in nuclear energy market.

Canned motor pumps for primary moderator circulation at 2 x 500 MW Tarapur Atomic Power Project Unit 3 and 4 of NPCIL
In Conversation With
Dr. Prabhat Kumar, Project Director and Distinguished Scientist, BHAVINI

As told to Pallavi Kharade, Managing Editor, Cascade

As in-charge of BHAVINI, I am a distinguished scientist of the Department of Atomic Energy on deputation for this unique Prototype Fast Breeder Reactor (PFBR) project, meant to bring energy security to the country.

India has done remarkably well in the nuclear power program despite the fact that post Pokharan explosion, the West held back its support to India, vis-a-vis technology and raw material. That was way back in 1974 – the year I joined the department.

My seniors were practically obsessed with developing the technology within the country from that moment in history. Their efforts to mobilize resources and support from Indian industry came to fruition. Taking it as a matter of challenge, major industrial players worked tirelessly to upgrade their technology; conformed to global quality norms and stood tall in the global market with 95% dependance of indigenous sources – an internationally unparalleled feat! We manage our own physics, chemistry, metallurgy. We manage our own material, our own design, construction, commissioning, quality assurance, operation and maintenance.

Today, India is the cynosure of the whole world. All countries are observing our progress with bated breath. We have achieved mastery over pressure water reactor technology and are world leaders in small reactors. The country is no longer dependent on other nations in the world. We have a full-fledged research and development setup.

The first reactor which was made indigenously, is operating satisfactorily as per expectations. Within a year and half it is expected to contribute substantially towards alleviating the poor energy availability that will propel India into another league altogether.

The name Kirloskar is familiar to me from the time I was just a boy. I am familiar with the leadership team and entrepreneurs who founded the company that is creating history today – not just in India but the world over. As far as the nuclear program is concerned, their participation – particularly where pump development is concerned is worthy of great recognition. I have seen their performance in development of the ‘Sodium Pump’ – a rather difficult to master technology which they have mastered. They have also developed the sea water pump house, fire fighting systems and other such challenging tasks successfully.

KBL has contributed significantly by indigenising technology and products. It has undertaken critical machining and fabrication jobs successfully as well. They have risen to the call of the nuclear power program on every single
occasion. Today, the nuclear power program of the Government of India has assumed immense dimensions to meet the increasing needs of the power starved industry. More and more professionals are finding their way into this industry. We need to wrap up our work in shorter time frames. This requires us to develop better, more efficient tools to improve machining capability in terms of quality and speed; superior gadgets, superior inspection tools and better documentation. KBL is one such corporate entity that is doing well on this count; but much more needs to be done. Should KBL decide to participate in this program in a big way it will expand the horizon of opportunities to a large extent. The world has recognized India as a nuclear power and opportunities in this field are growing fast – in the national and international market. I recommend KBL to consider growing beyond manufacturing and supply of pumps.

Plans to set up seven more reactors of 500 MWe each are on the anvil, followed by a series of 1000 MWe reactors – all based on very high-end technology, using advanced material and conforming to stringent quality parameters. The current reactor we are working on is unique in that it is based on technology which produces more fuel than the amount it consumes. The fuel we use is ‘Protonium Oxide’. When we use it with plated uranium oxide, the uranium converts to protonium – the fuel being used. Another unique feature is that we are using sodium as a coolant which is known to be a very difficult and different material. It melts at high temperatures and passes through the fuel and takes off the heat and transfers it to water to produce steam which is used to generate electricity.

The fabrication technology, welding and inspection – everything has been developed anew. The equipment is monolithic in proportion. The thin walled vessels have never been made in the past, especially at such great accuracy. The reactor is so large, that transporting it is next to impossible. Indeed, it is a feat in design and construction; that too, first time right!

The team working on the project – from IGCAR designers to our contractors and scientific institutes, has worked in a synchronized way. Each member of the team ‘owns’ the project and is committed to the successful commissioning of the plant.

I am very satisfied with the way things are shaping up. There is no quality issue; and I am confident that there will never be in the future as well. My team after all is dedicated to the concept of doing things first time right. Their work does not call for rectification nor rework; and that’s no mean achievement considering the complexity of the job at hand. I take pride in the fact that we have till date, surpassed established world class standards – indigenously. All this, without the slightest delay in the schedule. I am fortunate to have had the opportunity to work with this wonderful team. The members are young – average age, just about 29 years – and raring to go.

Major partners who have worked with us on this project are many – IGCAR (R & D), Bhabha Automatic Research Center (fuel), ECI (Instrumentation), KBL (pumps, sea water pump house and fire fighting system), Kirloskar Oil Engines Limited (diesel generator sets), L & T (manufacturing of critical equipment like fuel transfer machine), Gammon India (civil construction), Walchandnagar Industries (heat exchanger), Mishra Dhatu Nigam and SAIL (material of construction), amongst many others. It is the joint effort of all these organizations that has positioned India in a leadership position in this field.

Actually, we had short-listed KBLs name long back for their development of sodium pumps in collaboration with IGCAR. Being competitive in their pricing as well, helped them clinch the deal which includes civil, mechanical, electrical instrumentation, as well as commissioning work.

I consider myself fortunate to have had the opportunity to interact with people at KBL, right from those at the helm to workers on the shop floor; and I have seen the same values being reflected in them, irrespective of their job description. I am confident that we are working with the right organization. Together we will work towards making the task less complex and better than the best!
We reproduce the letter we received from Didier Cordero, Vice President EDF as a response

La Défense, May 26, 2010

Dear Mr. Srivastava,

First of all, we would like to thank you and your colleagues very much for your friendly welcome and support during our visit in your company.

As per our discussions, we encourage you to develop partnerships with some experienced companies in the European nuclear markets. EDF chairs an association of suppliers that are looking for partnership opportunities, called PFCE. Its web site is [http://www.pfce.com/en/english/member.htm](http://www.pfce.com/en/english/member.htm). You can also find a list of suppliers in the directory of the French nuclear industry at [http://www.giin.fr/annuaire-uk.php](http://www.giin.fr/annuaire-uk.php).

We remind you the European markets publications: [http://ted.europa.eu](http://ted.europa.eu), where we issue our notices of invitation to tenders and EDF supplier's web site: [http://portail-achats.edf.com](http://portail-achats.edf.com), where we might suggest you to register on the following classification at least:

- API030011029131175 - Relief and safety valves (Soupapes et vannes de sécurité)
- API030011029131315 - Industrial control valves (Vannes industrielles de régulation)
- API0400061291220AA - Pumps for fluids except IPS pumps (Pompes pour fluide sauf pompes IPS)
- API0400061291220BB - IPS fluid pump (Pompe IPS pour fluide)
- API0400061291122AA - Hydraulic turbine (Turbine hydraulique)
- API0400001291122BB - Hydraulic turbine wheels (Roues de turbine hydraulique)
- API0400001311031BB - Production generating sets (Groupes électrogènes de production)

You may find also some information on EPR design and equipment at [http://www.epr-reactor.co.uk](http://www.epr-reactor.co.uk) and some materials presented during our forum with potential suppliers for UK EPR at [http://newnuclearopportunities.edfenergy.com/news.html](http://newnuclearopportunities.edfenergy.com/news.html).
Although our visit was not a formal audit, as discussed, we share with you our first impressions. Among the points that were remarkable in our view:

- Large business scope, covering pumps (Centrifugal Pumps), valves and hydraulic turbines, etc.
- Strong nuclear power plants reference in India for pumps, both Boiler Water Reactor and Pressurized Heavy Water Reactor.
- Vast exportation experience in the international market, including Europe.
- Facilities with pump testing loop.
- Qualified supplier of several foreign companies like Alstom, Siemens and Doosan. Some potential co operations with Areva, Westinghouse and GE are undergoing or under consideration.
- Seismic, vibration test and analysis are performed by KBL itself.
- With own foundry to provide casting pieces.

Unfortunately, the schedule has not allowed us to visit your factory this time and to provide you some consideration to improve your position, according to our practice and experience.

We hope that this first contact with the EDF procurement division can lead to a successful cooperation.

Yours sincerely,

Didier CORDERO
Procurement Division,
Vice-President

C/c: Mr. Ravi ULANGWAR, Associate Vice President (Power sector)
Mr. Ravindra PANDE, Vice president & Sector Head (Power)
Kirloskar Brothers Limited works on a simple bottom-line. How have we made a difference in people’s lives? Be it the parched lands of Africa or the paddy fields of South East Asia, Kirloskar heralds a remarkable transformation.

In Africa, Kirloskar pumping solutions installed at various water supply schemes bring water from the riverbed right into the backyards of water-starved farmers. Be it Asia’s largest Hydraulic Research Centre or India’s largest and most comprehensive pump manufacturing set-up, with Kirloskar comes Prosperity.

Prosperity that transcends boundaries and quenches the thirst of millions. Empowering the people of Africa for a successful tomorrow.
The last issue of Cascade saw this column being introduced, with people at the helm of their departments sharing their thoughts with us. This time, Cascade approached Narendra Wagh, Vice President, KBL, to share his views with our readers on ‘Innovation at KBL’. Without much ado then, it is over to Narendra Wagh ....

How important is innovation to our 100 year old enterprise?

Today’s global village is rife with change taking place faster and faster. Therefore the concept of ‘experience’ has lost much of its relevance – it is almost redundant. Changing needs call for changing solutions which in turn call for innovation. What was once the ‘best’ need not continue to rule the roost, especially in the face of rapidly changing technology which mercilessly renders products obsolete.

Of course this does not mean that a century of experience is completely worth trash. The generic knowledge, skill sets, expertise and the treasury of data is invaluable. Just like the arms of a clock point in different directions with time, but stay centered at its heart, so does knowledge power innovation. Indeed, experience paves the way to success.

Technological innovation today is efficiency driven – we want things to be faster (than the rate of obsolescence at the very least). It is result driven – we want the best of quality. It is necessity driven – we want to conform to basic mandatory standards like health, safety and emission amongst others. It is cost driven – the market always asks for cheaper and better products (better in terms of fuel efficiency, shorter pay back or in meeting some unique constraints which the customer has, such as space or time)

We have to take stock of our resources, (which are ample but need to be utilized keeping in mind the ‘opportunity cost’ of investment) and prioritize our expenditure accordingly. By resources I mean ‘Time’, ‘Money’ and ‘Effort’ invested in realization of a deserving goal.
Recognizing this need, the ‘iMission’ initiative was launched at the Kirloskar group level. It is a forum for powering and sharing innovation. Where recognition and rewards await the authors of various inventions they script and successfully implement; and resources are not wasted by group companies in reinventing the wheel! Here I would like to specify, that innovation is not always mind blowing – which has never been thought of, ever. It could be upgradation of a product or tweaking of a process to get improved results. All KBL manufacturing plants have been prolific in coming up with various innovations based on customer feedback about our products and services. These have yielded benefits like ease of operation, low running cost, minimal maintenance (reduction in downtime), greater safety, environment friendliness and such others.

What are your views on KBLs road map for innovation?

At KBL, we are working on enhancing technology which is relevant to the market demand and which meets our customer’s needs and wants. Corporate Research and Engineering Department (CRED), was established to spearhead this very function exclusively.

We have categorized our members into sectors on the basis of market pace and customer face; for instance, Distribution, Irrigation, Industrial and Power to name a few. With a team of experts in the field which serves the sector to which they belong, customer orientation comes as a natural corollary. The sector specific, dedicated manpower has played a significant role in earning customer delight and increased business.

Market surveys are conducted at regular intervals to gauge customer satisfaction and identify customer expectations. The results lead to initiatives in marketing and manufacturing orientation of the company.

The psychological atmosphere at KBL is conducive to original thinking and encourages contribution of creative ideas from all its members – irrespective of their designations. We recognize that good ideas are not the monopoly of a select few. Tools like kaizen and six sigma keep the fire of innovation well stoked. KBL is also open to partnering with external entities to achieve this.

What automation do you see evolving in the pump industry? How can you combine electronic and mechanical engineering towards this end?

Pump industry is opening up to process automation – our own HYPN systems are an indication of this. We need to promote this through awareness generation about how automation can make operations safer, easier to operate and monitor as well as faster – for example, SCADA.

We can target our resources to establish KBL as an intelligent solutions provider by using latest technologies. The market for this is huge and largely untapped. We will be selective about our area of operation, prove our mettle and only then roll out to other areas.

KBL has founded a new company – Kirloskar Systec Limited, for this purpose. It will be responsible for creating value added solutions to satisfy customer requirements and provide technology intelligent solutions.

Innovation is basically a result of human thought. However it requires to be nurtured in a conducive and contributive workplace atmosphere. What initiatives do we take to encourage it?

iMission, as I mentioned earlier was established to focus on innovation as a full fledged activity. It encourages people to have a closer view of our products and compare them to what competitive brands are offering to the market, identify products with high demand and work on product upgradations.

It also identifies potential talent in the company – people who are inclined to innovative work and those who have staying power through trials and tribulations. They are then put on a fast tracker program which yields many innovations, while satisfying their creative appetite.

We have adopted TRIZ a new tool developed by CII and Leed Innovation Training Program to charge our batteries and work more intensely in a structured way to develop a culture for innovation.

How do we calculate the risks involved in implementing innovative ideas?

Right now, we are focusing on improving known areas of activity. This upgradation of existing products and processes does not demand any extra allocation of resources nor poses much risk.
Venturing into unchartered waters however is another ball game altogether. Here the Management Committee steps in for risk assessment before giving a nod to go ahead with implementation. For example sodium pump technology which is being perfected by KBL with expert advice.

What happens to those ideas which, with slight modification might prove to be brilliant? Is there any institutionalized process to tap ideas from people on different rungs in the organization?

The communication process at KBL is simple and transparent. This ensures no ideas get buried in their nascent stage just because they sound impractical or impossible.

Reward and recognition for good ideas is given in an open forum. This encourages not just the winner; it also motivates others to follow suit.

It is believed (and wrongly so) that creativity can be expressed only through arts and art forms. Can you cite any examples of innovative ideas in the factory?

Sure. I would like to cite two such ideas developed that have seen light of day – KBLs ‘High Speed Thru Bore Pump’ and ‘Innovation in our KPDS 50/26’.

Under i-Mission concept i-HT series was developed last year based on user needs and desires obtained after interacting with them of different sectors. Along with user needs and desires various innovative features are incorporated in this series to bring the product with unique features satisfying our user needs.

It includes total 26 single stage models and 5 two stage models covering the wide range of flow and discharge. It covers flow up to 1200 m³/hr and head up to 260 meters.

These pumps are operated at 2900 rpm and because of their higher speed these pumps are compact in size as compared to conventional split-case pumps driven with six pole motors. Being compact in size not only is weight of the pump reduced, it also saves few sq. meter space of pump house. Being lower in delivery size, initial installation and piping cost will be reduced.

The hydraulic matching of the pump impeller and casing was achieved by utilizing Computational Fluid Dynamics (CFD). Basic 14 single stage models with different 26 impellers and five two stage models result in a product offering superior performance, better efficiency and lower NPSHR even at high speed, resulting in lower energy cost.

i-HT series has become very popular in short time not only because of its compactness and energy efficient features but also because of various innovative features implemented based on the user feedbacks like simplicity in wearing ring fitment, Easy bearing removal, Mistake-proof assembly of two stage impeller, innovative sleeve and nut arrangement, etc.
i-HT series Innovative Features

**Simplicity in wearing ring fitment:**

- Easy assembly and dismantling due to visualization.
- Skill required for fitment of casing ring eliminated.
- Reduction in assembly time.

**Easy bearing removal:**

- No need to remove the upper half casing.
- No need to take rotating unit out.
- Use the puller to remove housing.
- Use the puller and remove bearing.

**Mistake-proof assembly of two stage impeller**

- First stage and second stage impeller bore fitment dimensions differ.
- Mistake of interchangeability is totally eliminated in assembly.
- No skill or hydraulic expertise required at assembly due to Pokayoke.

**Assembly time drastically reduced due to innovative sleeve and nut arrangement**

- Worn out sleeve can be replaced without disturbing the impeller assembly.
- No need of special skill for assembly since impeller remains intact in its position.
- No need to refer drawings or assembly dimensions for centering the impeller.
In conclusion...

Innovation is a way of life at KBL. The attempt is always to boost our work culture – becoming highly flexible and innovative, keeping pace with the change assailing the industry worldwide.
Vijay Engineering – The Saga of Success

It was in 1950 that Vijay Engineering began its association with KBL; at the helm was Sharad Kumar Shah. It was just a couple of years back, that there was a change in the guard with his son, Shashank Shah taking over. This second generation dealership began with marketing of KE series of agricultural pumps manufactured by KBL and imported motors.

What follows is an introduction to this award winning dealer, as told by Shashank Shah to Pallavi Kharade, Managing editor, Cascade.

Major Milestones

A decade later – that is, by 1960, we began marketing the whole range of industrial pumps, specially catering to requirements of Government enterprises and the industrial sector. By the eighties, we expanded our horizon to include sales through original equipment manufacturers and consultants as well.

1983 saw us working in close coordination with KBL to bag a turnkey contract from Jammu and Kashmir irrigation department at ₹ 4.5 crores. That was a milestone achievement for Vijay Engineering.

Fiscal 1995 – ‘96 saw Vijay Engineering emerge the ‘Best Dealer’ in the country for the Industrial Pumps Division, KBL – a distinction it won for the next six consecutive years.

In 2005, KBL had organized a program for the country’s 10 top dealers for all segments. As a dealer occupying the second ranking slot, we too were invited to attend. Since my father was unwell I attended in his stead. I was honored to be a part of this august gathering.

1981–’82 is marked by a major achievement – we won the order from MSEB for miscellaneous water pumps to be supplied to Chandrapur Thermal Power Plant. The order was worth ₹ 2.5 crores and was bagged in the face of cut-throat competition.

Proud Moments

* From a ₹ 30 lac turnover dealership in 1980 to a ₹ 20 crores one, it was one arduous journey – strewn with challenges we have met and treasured each moment in the process.
* We have had the opportunity to represent KBL in varied sectors for pumps manufactured in Kirloskarvadi and Dewas plants.
* 1993 saw us bag the dealership for Dewas range of pumps. Within 5 years we were amongst the first three in ranking – a meteoric yet sustained rise in deed!

On Values and Ethics

We put in long hours of smart work between 1950 to 1980 to enjoy the leading position in the market it occupies today. Work focused on identifying and addressing problem areas and those with room for improvement. This fuelled growth in the market where competition was surpassed with the spirit of excellence. This was the time when the legendary S L Kirloskar was on the forefront; inspiring all around him on a one to one relationship – a tradition followed by the next generation to perfection.

Today, the competition is severe and KBL has successfully met it head on with Sanjay Kirloskar in the lead.

Spearheading the organization through a mine field of challenges, are young professionals on board Team KBL. The emphasis is as much on systems, as it is on pumps. With Alok Sanjay Kirloskar joining forces at KBL, generation of ideas and innovation is taking excellence to another, higher level.

I have never seen an organization as trustworthy and fair in its practices. Little wonder then dealers associated with KBL for the last 100 years are still going strong.

Management at KBL

Change at KBL is steady and well thought out, taking the ever changing market requirements and expectations in consideration. It is this adaptation to change and receiving it with positive response that has helped the company retain its leading edge despite increasing competition.

Values are not just a part of rhetoric but actually practiced by all at KBL across the company. These have percolated from the top to the grass roots and adhered to. This is apparent in the behavior and approach of each member in a volatile and competitive marketplace, be it global or domestic, even the largest and most influential organizations must depend on the strength of their supply chain strategies. KBL acknowledges the important role played by its dealers representing the face of KBL in the market.

KBL has always looked for long term relationships with its dealer partners. We introduce you to two such dealers through ‘KBL TRIBUTARIES’ a new column in Cascade. featuring from this issue onwards.
of the organization. The vision mission statements at KBL have made the transition from adorning the wall, into the hearts and minds of each member of KBL.

Market Offerings

KBL’s products have always been strong on quality, since inception. The trust KBL brand enjoys in the industry is unparalleled and has imparted KBL the status of preferred supplier in the market. For instance, Brand KBL has been entrusted with orders from BHAVINI and Bechtel in the face of global competition.

The quality of service is good too – at KBL we recognize it’s importance as it can make or break a brand. This is reflected in the fact that we have a separate cell devoted to offering the best services to our clients.

This cell also extends its services for training dealers and customers, to ensure that our products deliver on the promised performance.

Stature in Market

KBL’s vast range of products makes it a difficult competitor to contend with. In fact they rule the roost in all market segments.

As a matter of policy, KBL regularly interacts with and involves dealers in the process of product development. It recognizes that dealers are a treasury of knowledge so far as market requirements go.

KBL also conducts meetings, conferences and seminars as a forum for exchange of knowledge and market data. A council of dealers formed comprising select dealers from specific regions. Members meet for fruitful discussions on what the market really requires.

Cascade thanks Shashank Shah for his market insights from a dealers point of view which KBL will definitely consider in its marketing strategies.

Cascade Jul.–Sept.–2010

Business Practices

Trustworthiness, excellence in work and fair practices for us are sacred business mantras, as they are for KBL – they are above compromise.

There is total transparency in dealing with KBL, any business issue that crops up is discussed and resolved. An open door policy is actually in practice at KBL– no one is inaccessible, right up to the topmost rung.

We are confident about the quality of KBL’s products we are selling. The company’s insistence on excellence that has made it the vendor of choice in the market. This has fuelled its growth, and as a corollary, we have grown too!

KBLs Range of Products

KBL has the widest range of pumps in India, catering to different needs of the market. It has been and always will be a brand leader – a trusted name – both on the national and international fronts.

W R Talwalkar Strikes Root

Shekhar Talwalkar Takes a Tour down memory lane

It was in 1928, that our association with KBL began, when my grandfather bought the first iron plough made by KBL for his farm at Ashta, in Sangli district, near Kirloskarvadi. Those were the days when superstitions determined the life style people lived by... and using an iron plough was a strict taboo. The reason – it was likened with piercing the heart of mother earth. The decision was rather revolutionary!

Later, when my eldest uncle – W R Talwalkar settled down in Mumbai and went into business, some of his friends suggested that he visit Laxmanrao at Kirloskarvadi. He decided to follow their advice. On meeting, Laxmanrao asked him whether he was related to Ramkrishna Talwalkar from Ashta. My father informed that he was his son. Pat came the reply “and you are my agent”. Laxmanrao promptly appointed my uncle as his agent and W R Talwalkar was in business!

Later, when KBLs sister concerns – KOEL and Kirloskar Electrics were founded, they appointed us as their dealers from day one. In fact, my grandfather was one of the founder members of KOEL – an honor indeed.

Major Milestones

1928 : We started with selling iron furniture manufactured by KBL. It commanded popular demand in Mumbai. Soon other products – hand driven and power driven pumps – began featuring on the product portfolio.

1962 : KBL offered a part of Gujarat territory to us on the condition that we set up a new company to manage it. Thus was formed W.R.T. Engineering Private Limited, to handle the franchise. The company is operating in Surat and Vadodara.

1969 : W R Talwalkar Sales and Services – Nagpur was set up on similar lines.

1980 : The eighties decade saw us winning prestigious orders from refineries – Indian Oil Corporation and Hindustan Petroleum for cast steel valves.

1999 : Inauguration of our service center at Panvel

I Appreciate

While people across KBL are thoroughly professional, they also have a personal touch. They have been with me through tragedies that befell our family.

“I find ‘Cascade’ interesting” said Shekhar Talwalkar before signing off!
Genie is out to look for a piece of our heritage!

In the centenary year of our 1st Manufacturing Plant - Kirloskarvadi, which is also the 2nd oldest industrial township of India, we are looking for our Oldest Operational Industrial Pumps.

Being a traditional partner of your plant, KBL has thought of reviving its oldest operational pump for you... free of cost. You are granted this unique opportunity if oldest Kirloskar industrial pump is operational in your plant, because KBL wants it back.

The two oldest operational Kirloskar industrial pumps will get free replacement with brand-new equivalent or better pumps. Incase you have one, please log on to www.kbl.co.in and submit your entry on or before 31st December 2010. Or, you can mail us your contact information on 2solidpumps@kbl.co.in to change the history of your pump.

Contest includes benefit such as 20% discount on spares and AMC, free of cost service training and participation memento or certificate for Kirloskar industrial pump users as per contest rules and terms posted on KBL website. Participation results may be intimated by 31st March 2011.
Kirloskar Brothers Limited recently installed six sets of circulating water pumps with motors (BHM 130) for 2 x 800 MW Prairie State Energy Campus, Marissa, IL, USA for Bechtel Power Corporation. This project is one of the largest capacity thermal power plant being installed in USA.

Says George Foshee, Mechanical Superintendent – Bechtel Construction Company, in his letter, "Kirloskar Brothers Limited has successfully completed designing, engineering, manufacturing and supply with supervision for installation of six circulating water pumps and motor sets for our Prairie State Energy Campus project site (800 MW x 2 units)....

“We specifically appreciate B R Koni, site engineer (KBL) for the perfect technical support provided by him for installation of six circulating water pump sets for both units.” This project is successfully completed by K Srinivas Rao in his capacity as project manager.

Cascade is proud to share this client appreciation with its readers and aspires to bring you many such accolades.
The India-South Africa business partnership turned a new leaf with unveiling of ‘The India Show’ in Johannesburg, by President of South Africa, H.E. Jacob Zuma at MTN Expo Center. The Indian Minister of Commerce and Industry, Anand Sharma, senior ministers of South Africa and business leaders from both countries were present.

The four day mega-event, organized by the Government of India in association with the High Commission and the Confederation of Indian Industry (CII), is a major drive to push trade and business ties in the African continent. The event is showcasing the best of ‘Brand India’ through a high end technology exhibition and a series of high-profile business meets, during 29th August to 1st September, 2010. ‘The India Show’ is also complemented by third annual ‘Doing Business with India’ conference which was held on 31st August, 2010. The session was addressed by prominent experts like Hari Sankaran – Managing Director, IL & FS; Werner van Oudenhove – Head of Infrastructure Finance, Rand Merchant Bank; Reg Max – Associate Director, Corporate Finance, PricewaterhouseCoopers; Robert Appelbaum – Director, Edward Nathan Sonnenbergs and Sanjay Kirloskar, Chairman and Managing Director, Kirloskar Brothers Limited, amongst others.

India – Turkey Bonding

Federation of Indian Chamber of Commerce & Industry (FICCI), Foreign Economic Relation Board, Turkey (Deik) and Apex Chambers of Commerce from CIS countries jointly organized two days trilateral India- Turkey-CIS Business forum at Istanbul, Turkey from 24th August to 25th August, 2010.

KBL in association with KBE recently bagged the prestigious order for CW Pump package from Calik Enerji – a Turkish EPC contractor for 408 MW NOVOI combined cycle power project being installed in Uzbekistan. KBL already has the approval of various leading Turkish EPC contractors Like GAMA Power & ENKA and have already supplied pumps for various power projects. Turkey and CIS countries offer huge potential not only for the power sector but other sectors like irrigation, water and waste water, oil and gas, mining and marine sectors. KBL along with KBE and local partners is now focusing aggressively to explore this business opportunity.

Ravindra Prabhakar Ulangwar, Associate Vice President (Power Sector) with KBLs local representative in Turkey, Kaan Tuncok, Managing Director – Solaris Engineering and Consulting, Ankara, attended this event. The forum was an ideal platform to network with senior leaders from Government and Business world from India, Turkey and various CIS countries.
Enthusiastic About Energy Efficiency

The CII – L M Thapar Center for Competitiveness organized a seminar – ‘Energy Management - Road to Energy Efficiency’ at Rudrapur, on 23rd July, 2010. Gajanan Sahasrabudhe, Energy Audits and Valves Business, KBL, was invited to share his expertise with participants in the seminar. Much impressed, the delegates sought him after the session with enquiries for conducting pumping energy audits.

During discussions, he highlighted the fact, that every installation has energy saving potential. He cited cases about how proper analysis and implementation of audit recommendations has achieved energy savings up to 30% on an average, offering an attractive payback. He briefed the delegates about KBLs energy efficient series of pumps which helps customers get sustainable performance over a longer period of time.

The seminar was sponsored jointly by KBL and Schneider Electric. The event also saw Kirloskar Corrocoat making an impressive presentation.

Perfect Project Completion

Kirloskar Brothers Limited has completed the construction of the 8.5 MLD capacity sewage treatment plant based on modified activated sludge process with extended aeration. The order was for designing, construction, testing, commissioning and electro-mechanical work on a turnkey basis. The contract also includes operation and maintenance of the plant for five years. The plant, located near Sayaji Garden, Vadodara, has a sewage flow of 8.5 MLD on an average, with a peak flow of 21.55 MLD. It was commissioned on 15th August, 2010.
A Job Well Done

The Ratnagiri Gas and Power Private Limited (RGPPL), Dabhol, recently entrusted Kirloskar Brothers Limited the task of overhauling a vertical turbine pump – type BHQ 95D - CW - 2A for cooling water circulation application, handling sea water. The pump had been manufactured and supplied by us earlier.

The overhauling job commenced on 15th April, 2010, under the supervision of Ajit Patil, from Projects – KBL. The job worth ₹ 10 Lacs was successfully completed and handed over to the customer in a month. Before undertaking the overhauling job, a safety awareness program was conducted for all the concerned engineers, supervisors and workers by Mr. Vidhate, Safety Engineer, RGPPL.

Dismantling began on 19th April, 2010, which brought the areas needing rectification to light:

- Pump shafts were sent to Kirloskarvadi for run out checking and plasma coated shrink fitted shaft sleeve fitment. All the shaft run out was checked and found well within permissible limits.

Pump reassembly began on 8th May, 2010. A step by step account of the overhauling process:

- Pump bowl was reassembled with new impeller and guide piece.
- Bowl assembly was completed and float was checked; it admeasured 18 mm.
- Due to non-availability of plasma coated shaft sleeves, the intermediate shaft was replaced by another one, which was available with RGPPL.
- Pump taper column pipe and spider were fitted.
- Complete bowl assembly was lifted and put into sump, holding the bowl assembly with an ‘T’ channel.
- Pump foundation level was checked and found satisfactory.
- Pump trial was conducted on 10th June, 2010 and maximum vibration velocity was recorded.
- The pump trial was conducted for 105 minutes and is now working satisfactorily.
- KBL suggested that RGPPL should try to reduce ‘motor no load vibrations’, which will help enhance pump life.

So ended the critical project of pump overhauling, making it as good as new! Congratulations, Team KBL!!
Thus Spoke The Media

“Kirloskar Brothers Limited has resolved to bring in a revolutionary pump powered by solar energy in the Indian agri sector. The necessity driven innovation will rejuvenate the Indian agri scenario currently plagued by power cuts.

“Currently, the necessary control panels are imported, which cost higher, thus keeping solar pumps out of reach of an average farmer. However, if the Government subsidizes 90% of the pump cost as in other agriculture based economies, it would jettison the sector forward on the path of progress.”

(Culled and translated from the original in Marathi)

The ‘Kisaan’ Connection

A full length statue of Nana Patil, Founder of ‘Pratisarkar’ (parallel Government) during the freedom struggle, erected at village Moraale, district Sangli, was ceremonially unveiled at a function held on 18th June, 2010.

It was an ideal location and occasion for KBL to communicate with the large, captive rural audience. The opportunity was promptly tapped by B S Sawashe, consultant, KBL – Pune. He addressed the audience, briefing them about KBL’s solar pumps for agriculture as well as the proposed Government subsidy for the same.
KBL Riding On A High Tide

Save Energy, Save The Earth

KBL participated in a seminar on Energy Conservation, organized by Indian Chemical Council on 30th July, 2010 at Hotel Surya Palace, Vadodara. More than sixty zealous participants from the chemical industries in and around Gujarat attended.

Presentations were made by various experts in the field – like energy audit and energy efficient cooling towers. Shirish Joshi from KBL made a presentation on ‘Energy Conservation in Pumping Systems’. The presentation was well received, which is evident from the tremendous interaction that followed after the talk, with the audience. Shirish focused mainly on LLC pumps, corrocoating and iCP pumps. The highlight of the event was when a delegate from Reliance Industries Limited categorically vouched that corrocoating is really very effective for boosting corrosion resistance, energy efficiency and sustainability of efficiency during pump life.

A Corporate Patriot

Kirloskar Brothers Limited (KBL) has emerged as one of the highest corporate tax payers in the Pune Region. KBL is proud to thus contribute to the ‘Nation Building’ activity. KBL has been adjudged as one of the honest and ethical tax payer with straight forward financial administration, by the Department of Income Tax.

A true corporate patriot, KBL is proud of its transparent transactions – a culture ingrained by our founder and nurtured by the following generations.

A certificate to this effect, signed by Manjiri Kacker, Chief Commissioner of Income Tax (CCA), Pune, was conferred to KBL. The distinction was received by Sanjay Kirloskar, Chairman and Managing Director on behalf of the company.

This is a matter of pride and accomplishment for all of us who are a part of this patriotic fraternity.

Jai Hind!
KBL Branding at The Boat Race

The Nehru Trophy Boat Race on Punnamda Lake, near Alappuzha in Kerala, is an event held on the second Saturday of August, every year. Competition is fierce and matches the popularity of the event. The participant’s passion for the sport and the audience in high spirits, transform the otherwise tranquil lake front into a miasma of cheering, booing, excited audience of over two lakh people. There is a fair sprinkling of foreign tourists as well.

For the people of each village in Kuttanad, a victory at this race is much coveted – something they celebrate for months to come. The major attraction of the boat race is the competition of ‘Chundanvallams’ or snake boats. These snake boats measuring over hundred feet in length, with a raised prow, are a sight to behold – gliding gracefully on the clear waters of the lake. Known earlier as the ‘Prime Minister’s Trophy’ boat race it is now known as ‘Nehru Trophy Boat Race’ and popularly referred to as Kuttanad’s Olympics on water.

Preparations for the big event begin several weeks in advance. The snake boat is smeared with sardine oil for smooth passage through water. The best oarsmen are selected and under the supervision of senior oarsmen, practice sessions begin. Around 150 oarsmen, who represent the village, take a vow to observe strict discipline and strictly regimented schedules. Each ward in the village and at times financially prosperous people take turns to serve nutritious meals to the athletes. On the days of practice, mass feasts on the river banks are organized.

This year too KBL made its presence felt during the event. We hired a house boat and covered it with flex boards advertising KBL products. Moving about the lake throughout the day, brand KBL certainly got high visibility. Credit is due to P K Jayapramod, KBL – Kochi, who coordinated the eye catching house boat display. Staff members of Kochi regional office also participated.

For Increased Customer Delight

9th August, 2010. Kirloskar Brothers Limited announced the incorporation of ‘Kirloskar Systech Limited’ as its wholly owned subsidiary.

The newly formed company will primarily focus on system engineering, designing and support services, providing reliable, innovative and cost effective water handling solutions. The company has its sight trained on hydel power plants, water supply, irrigation, manufacturing industries, defence and marine applications – in fact, on all KBL business centers. It will also promote selective external business and will be an independent profit center. This strategic move will enhance our speed of response as well as effectiveness in serving our customers.

At the helm as Chief Executive, is Y S Rana, who will be overall in-charge of business operations. With all existing employees of System Engineering Cell moving to this new company, Team Kirloskar Systech aspires take the company to newer heights!
Training program for middle management at IIM (Ahmedabad)

Members of Kirloskar Brothers Limited – Vikas Agarwal, Sudheer Mohan T V, G P Nagi Reddy, Bharat Kumbhar, Kantilal Shah, Milind Pise and Vinayak Damle attended a middle management 3-tier training program at the Indian Institute of Management, Ahmedabad. Scheduled from 27th June to 24th July 2010, the training was conducted by professors from the institute itself. Case studies were primarily used as a teaching tool for imparting training.

Day one saw the inauguration of the program by Prof. S K Barua, Director, IIM Ahmedabad. A brief session followed during which the ninety five participants drawn from forty four organizations of global repute introduced themselves. Prof. M R Dixit shed light on the method of teaching which would be followed and the institute’s expectations from the participants.

The class was divided into two groups which were further split into twelve study groups. Each group studied the next day’s case study and course material the day before. The schedules were rigorous with classes from 8.45 a.m. to 5.20 p.m. There was no option for the trainees than to burn midnight oil if they were to complete the work assigned, on time.

The course covered topics like – strategic management, marketing, accountancy, finance, HR and economics. Some of the outstanding classes conducted were by Prof. Revindra H. Dholakia (economics), M R Dixit (strategy), Prof. Shailesh Gandhi (accountancy), Prof. Goutam Dutta (project management), V Venkata Rao (information systems), Prof. Asha Kaul (communication) and Prof. Biju Varkkey (performance and competency management).

IIM organized guest lectures as well – by Sudip Banerjee, CEO, L&T Infotech on ‘Leadership’ and by Nupur Choudhury of GE India on ‘Pricing’.

Visits to Akshardham and a heritage village were organized on Sundays. The visit concluded with a traditional Gujarathi cuisine served for dinner at the heritage village.

The course came to a close on 24th July, 2010, with presentations made by the participants in two groups. Both groups tackled a common case study selected from among those that were discussed during the four weeks.

Certificates were distributed on 27th July, 2010. We are sure that the learning will earn KBL a lot of KASH (Knowledge, Attitude, Skill sets, Habits), even as we start applying all that we have learned. Benefits for individual participants too were immense.
‘TechnoTalk’ At ASME Conference

R K Srivastava – Director, J T Kshirsagar – Vice President and Amit Walavekar, both from Corporate Research and Engineering Division, presented a technical paper titled ‘Transient Thermal Analysis of Centrifugal Pump’ at the ASME (American Society of Mechanical Engineers) Conference held from 1st to 5th August, 2010, at Montreal, Canada.

The paper presents an approach to handle the complex situation of steady and transient thermal condition of pumps. Thermal analysis is carried out to evaluate temperature distribution of pump geometry. Stress analysis is carried out for steady state and transient operating conditions. Results are evaluated as per ASME Section III, subsection NB.

The trio representing KBL made their presence felt at this prestigious forum. During the course of the conference they came across new advances in pump technology too.

Two young members of KBL have just proven that it is not difficult to get back to academics after a gap of a few years. Both decided to pursue the PGDBM course from Indsearch, Pune. Congratulations !!

- Santoshsingh Pujari, CGMS, passed the Post Graduate Diploma in Business Management, in the examination held in April, 2010, with an ‘Outstanding’ (O) grade and scoring a CGPA of 5.96 out of 6. He did this as a student of Indsearch, Pune.

- Pallavi Kharade, CGMS, completed the Post Graduate Diploma in Business Management, in the examination held in April, 2010, with an ‘Outstanding’ (O) grade and scoring a CGPA of 5.83 out of 6 after a gap of fifteen years and balancing work and family life for two consecutive years.

Both of them are now pursuing Master in Business Studies, a one year course with specialisation in marketing.
Back To School

Freshly out of Tepper School of Business, Carnegie Mellon University, Pittsburgh, Vijay Uplechwar, Vasant Godbole, Anoop Tandon and Suman Chakraborty had a lot to share about their experiences during the learning program on ‘Global Leadership’ they attended. They preface the information they shared with Cascade, declaring, “We have not become experts by attending this course. Many of the thoughts expressed are radical, though relevant. They may have to be adapted instead of being adopted.” Cascade brings you gleanings from what the quartet had to say...

About Tepper School Of Business
A pioneer in the field of Management Science and Analytical Decision Making, the school figures consistently in the top-tier business school ranking. Its alumni list boasts of as many as seven Nobel Prize Winners in Economics. It is recognized for research and teaching in the areas of –
* Organizational Behavior
* Finance
* Economics

* Operations
* Computational Marketing
* Operations Research

The Program
Our team of four went through a program on ‘Global Leadership’, to develop deeper understanding, hone their skills and work effectively with people from other nationalities and companies. The program provides inputs that are important for working in multi-cultured and global environment successfully. There were twenty-nine participants in this batch, representing seven countries, spanning three continents. Specifically, they were drawn from Germany, Republic of Korea, USA, Spain, Japan and Thailand and of course, from India.

Learning was through active experimentation and reflection, rather than only theoretical approach. Students were encouraged to work beyond their experiences and comfort zones. Learning from each other and developing beneficial networks for the future was emphasized.

METHODOLOGY OF THE PROGRAM

together we learn, work, contribute & achieve more...

Experience of working with other corporate and national cultures and using an established way of getting things done together

Faculty inputs

Peer to peer coaching

Skills and abilities
Experience of own corporate and national cultures
A desire to learn

Lectures
Workshops
Team working
Projects
Social events

Leadership projects, working with different types of business

Expectations that one is able to think and act differently when one returns to work

Taking this learning and applying it to own work situation

Exploring “Leadership” in different ways
Some pointers we probably need to work on

**In Communication**
- Be polite: ensure mutual respect
- Practice active listening
- Encourage and give others the opportunity to have their say
- Speak one at a time; give a signal to intervene
- Avoid starting with a negative statement
- Avoid contradicting each other
- State one plus point before expressing disagreement
- Take a break in case of conflicts and deadlock

**In Behavior**
- Follow ethics and etiquette always
- Avoid mobile calls or responding to e-mails when your attention is sought
- Be prepared before a meeting
- Be focused and be an active member of the team
- Build on each other’s ideas
- Avoid cross talk (parallel meeting)
- Appreciate good ideas of others
- Celebrate success
- Be fun to be with
- Make your partner look good

**In Approach**
- Be simple and visible
- Focus on actionable ideas
- Reach a consensus on short term initiatives

To put it in brief, we recognized that the essence of leadership is that – Each one of us can be a leader. One leader creates another and another, ad infinitum, just as the flame of one candle lights another, until the once impenetrable darkness has turned to brilliant light.

On what our candidates learned

“I learned to work in a multinational and multicultural team setting, pronouncing my point of view, while accepting other people’s views. I learned about paradigm shifting concepts like ‘Opportunity Share’ (instead of market share), ‘Next Practice’ (instead of best practice), ‘Servant Leadership’ (instead of conventional leadership), ‘Barriers to Imitation’ (instead of barriers to entry) and ‘Consumer Experience’ (instead of product features).

“I learned about business practices of some leading organizations like BMW, Tata Steel, Boeing and Reliance Media, amongst others.

“I was impressed with the knowledge and humility of the faculty and have made up my mind to sculpt myself on these role models.

“I came back with an urge to contribute towards making KBL a world class company. I realized that, given the resources and core competencies we have, we can make it to the top in world ranking – if only we leverage these and practise synergy.” – Suman Chakraborty

“I would like to cite what I learned at the training program thus –

**On leadership**
- An effective leader enjoys support and trust of the team members and encourages honest feedback. He receives feedback with humility and gives it with respect.
- The willingness to learn and adopt ‘Guest point of view’ and ‘Host point of view’ that prepares leaders to meet future challenges.
- The success of a leader depends upon his personal capabilities to embrace seemingly extraordinary values in service of greater, long term goals.

**On change process**

“Try to imbibe behavior and attitude that I feel most uncomfortable with and seek feedback from members of the team for improvement.” – Anoop Tandon
“The program was well structured and covered all the key issues that leaders need to face. It went beyond my expectations. There was good mix of practical and theory sessions covering international business. The course content incorporated thought-provoking lectures, case studies, experiential small group workshops, individual and team coaching, learning stewardship and innovative project work with real life business partners to provide a transformational learning experience.

“It has given new ways of thinking about leadership, global market, strategy and value creation. It gave participants an insight for managing business, managing ourselves and managing as well as leading others. Now I feel more comfortable while dealing with global customers and working in a multi-cultural environment. I am able to manage my work in a more structured manner and get time for personal development. When we are growing and getting established in other countries, my experience will be of help to the organization while taking business decisions, approaches and adopting various strategies, examining and understanding more about the changing global business environment and its effects on the organization. I can manage and reconcile conflicts more effectively along with dilemma reconciliation to arrive at the ideal decision faster. Now I can contribute more towards achieving organization goals by leveraging core competencies and pulling horizontal resources across the company.”

Vijay Uplenchwar

“The structure of the program was good with the topics sequentially organized. It began with individual behavior and its impact on team building, communicating, leadership, organization culture and multicultural management. Later, the spotlight moved towards developing soft skills and management topics like global market, corporate performance, work strategies for star performance, managing conflicts and market leadership. One particular program practice I appreciated was the daily morning review on the previous day’s class room session. There was sharing in a small group of four to five members with each group sharing what they learned, with whole class. I was impressed with the new ways of thinking about leadership, global market, strategy and value creation. Working in a multicultural team on a project for a company in an entirely different business was really interesting. I am looking forward to implement various strategies, processes and high quality thinking at work. With the company expanding through mergers and acquisitions and business focus shifting time and again, the learning from this program will be really useful.”

Vasant Godbole
Have you noticed some old looking, quaint yet rugged operational Kirloskar pump in your plant?.....Remember it had worked wonders for your business back then......And that pump is still working. KBL has always enjoyed being a traditional partner of your plant.

Probably a new pump might have replaced the earlier one’s key position in your plant as perhaps that old pump would be struggling hard to meet your expectations to deliver the same old joy! Have you ever thought of reviving that pump? How about revisiting its memories? What if you’re granted an opportunity to live yesterday today, in a new way?

To find a piece of our identity, we’ve taken it upon ourselves to track the Oldest Operational Kirloskar Industrial Pumps*. In short, to find a few pearls from our own ocean.

In case you have the treasured one, please log on to www.kbl.co.in and submit the information in desired form. Else, you can send the information on 2solidpumps@kbl.co.in for a chance to change the history of your pump.

*Two oldest operational Kirloskar industrial pumps will get free replacement.
Contest includes other participation benefits also.
On The Path Of Excellence

A group of highly charged, performance oriented young KBL professionals attended a three day workshop for Assessor Training. Conducted from 10th to 12th August, 2010, by Sanjeev Dutta, the training was tailored for CII-EXIM Bank Award for Business Excellence.

The objectives of the course were to enable participants to learn the Excellence Model and apply in performing the following roles better:

- The Assessor
- The Facilitator
- The Manager

To enable those attending the program to assess applications for The CII-Exim Bank Award for Excellence, individually and in teams in a consistent manner by establishing a common understanding of:

- Model criteria
- Scoring process
- Consensus process
- Site visit process
- Feedback report

---

Assessors in the making, with faculty

---

Enablers leading to Results

<table>
<thead>
<tr>
<th>Enablers</th>
<th>500 points (50%)</th>
<th>Results</th>
<th>500 points (50%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>People (10%)</td>
<td>People Results (10%)</td>
<td>Key Results (15%)</td>
</tr>
<tr>
<td></td>
<td>Strategy (10%)</td>
<td>Customer Results (15%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partnerships and Resources (10%)</td>
<td>Society Results (10%)</td>
<td></td>
</tr>
<tr>
<td>Inter-connected as all are dependable</td>
<td>Processess, Products and Services (10%)</td>
<td>Learning, Creativity and Innovation</td>
<td>(Keep on improving after learning)</td>
</tr>
</tbody>
</table>
...And God said, Let There Be Light

22nd August, 2009. Electrification for Mainsa and Birhampur villages, Orissa, was inaugurated by Energy Minister, Sabyasachi Atanu Nayak. He appreciated KBLs role in this critical project through NHPC.

Mainsa and Birhampur are located on lake Chilika – about four to five km inside water from the South coast. The dream of villagers to have electricity a switch away, had remained just that – a dream. KBL is proud and happy to be a part of the team that made this dream a reality. Within a year of accepting the project the villages lit up, much to the joy of residents.

It took special design and development efforts and transporting all the required material to the island by boats. Thus it was, that the two villages saw electricity light up their lives after sixty four long years of independence. Mr. Khatua, Chief Engineer, NHPC, congratulated KBL for this historical achievement.

This demanding project was executed under the able guidance of M R Pattewar, irrigation sector and Milind Patil, water resource management. The execution team with Subrat Padhi, irrigation sector at the helm, was assisted by Dinesh Vetal, project management and Vivek Gupta site in-charge, with his team of engineers.

Electrification of the two villages was carried out under the aegis of ‘Rajiv Gandhi Grammeen Vidyutikaran Yojana.’

Prevention Is Better Than Cure

As a preventive measure and to control the epidemic of Swine Flu, we organized a vaccination camp on 11th August, 2010, for our employees and their family members at our Occupational Health Centre at ‘Yamuna’ and at Joshi Hospital. In all, 286 employees and their family members took benefit of the same. We wish all our employees and their family members a healthy life!
Team Building At CGMS

On the 6th of August, 2010, members of Corporate Global Marketing and Strategy (CGMS) headed out to Girivan, Mulshi, Pune. The stay was overnight and packed with activities – fun-filled, yet driving some important lesson home – through sharing and growing towards achieving organizational goals.

The participants were raring to go as they were assured there won’t be any lectures to attend. Nature was at its best – dressed in verdant green, the chirping of birds and rolling mist. CHRM&C simply outdid our expectations from the program which was organized exclusively for CGMS. The group of colleagues who attended the programs, came back as friends – a bond they will always treasure in their minds and hearts.

As Steven Covey puts it, “Synergy comes naturally from the quality of the relationship, the friendship, trust and love that unites people.”

In a rapidly changing world filled with complex environmental issues, a border-less global economy, and ever increasing competition, the importance of team building takes on a sharp edge. It is this awareness that motivated this outdoor initiative.

A similar experiential program – ‘Fun At Work’ was organized at Dewas on 28th June, 2010 by an external agency.

Spreading The Word

Sanjeev Sondhi, Distribution Sector, KBL gave a presentation to members of Ashok Leyland and Alwar Chambers of Commerce at Alwar, on the following subjects:

- Energy efficient pumps
- Energy efficient EEC and SP – C Pumps
- Energy audits
Imbibing Values at the ‘Initiatives of Change’ Center

Formerly known as Moral Re-Armament, ‘Initiatives of Change’ encourages people to identify the unique contribution they can make in transforming the world – starting with themselves. It encourages people to heed the voice of their conscience and respond to it.

‘Initiatives of Change’ believes that:

• Change begins with oneself.
• Unless individuals change, situations cannot change.
• Honest introspection leading to initiative is a starting point of change.
• Each one of us can make a difference to the world around.

The course helps people to think innovatively and take ethical decisions. This enables sustainable business growth of organizations as well as growth of the nation.

KBL is closely associated with MRA for more than 40 years. Laxmanrao Kirloskar had visited the center and was greatly impressed with its work. He had donated two diesel generating sets to the center to ensure continuous power supply. After forty years of working well, Vijay Kirloskar recently donated two new energy efficient diesel generator sets to the center.

KBL supports ‘Initiatives of Change’ and regularly sends employees to attend the ‘Heart of Effective Leadership’ program it conducts. In fact, from 23rd to 26th of June, 2010, KBL sent eleven employees from different locations to attend the program at the center at the Asia Plateau, Panchgani.

Ingenuity Incarnate

SAP - QM team achievements for large pumps

Our plant at Kirloskarvadi has the distinction of having everything – right from pattern making to product painting – all under one roof.

The major task was integration of manufacturing and quality processes. SAP - QM was used as a tool to achieve the desired result. The project was inaugurated by Prakash Pudale, of large pumps.

The objectives were to achieve:

• Quality process standardization and optimization
• Integration of established quality processes monitored daily for consistent results
• Implementation of ‘Quality Gate System’

The innovative team of SAP-QM project

Vinayak Damle
Prashant Kolhatkar
J D Mujawar
Avinash Patil
Chintamani Pujari
Bharat Remje

The real time availability of information for analysis and improvement

Implementation methodology:

I Project preparation
II Business blueprint
III Realization
IV Final preparation
V Go live

Quality specifications covered:

* Quality plan for each product type
* Quality plan for each component
* Inspection method for each component
* Check lists for each component
* Visual inspection and painting quality specifications
* Raw material quality specifications

Quality specifications are linked to QMS for continued implementation.
45th Annual General Meeting Convened
Shareholders to get 100% dividend!

14th July, 2010, saw the 45th annual general meeting of The Kolhapur Steel Limited being held. This was the third meeting since Kirloskar Brothers Limited acquired the unit. Having operated as a loss making venture for long, it crossed over from 'red' to 'black' and declared a dividend of 100%. Enthusiastic shareholders were present in large numbers to celebrate the dramatic turnaround. The dividend declared also celebrated KBLs hundred years of Kirloskarvadi plant.

Sanjay Kirloskar, Chairman and Managing Director – KBL, R K Srivastava, A R Sathe and G P Kulkarni, both Directors – TKSL graced the occasion.

In his address, R K Srivastava traced the company’s journey on the path of progress. Fiscal 2009–’10 has registered a growth in sales, touching the ₹ 3,360 lacs mark. Last year this figure was ₹ 3,125 lacs. Profits have grown as well – from ₹ 512 lacs last year to ₹ 563 lacs this year. The net profit for the current year stands at ₹ 183 lacs.

TKSL has embraced the latest technology and upgraded its infrastructure, aspiring to emerge a supplier of choice in the steel foundry sector. The company aims to occupy the top slot as a pioneer in the steel industry by 2013 and is confident about attaining this objective.

Recently, TKSL was conferred the 'Best Supplier Award' for consistent performance vis-a-vis quality and delivery by BHEL, Hyderabad. The prestigious accomplishment was announced on this occasion. Questions from the shareholders were fielded by the Board of Directors to their satisfaction.

As is our annual practice, meritorious children of shareholders and employees were felicitated during the course of events. A R Sathe, Director, read out the Marathi version of the Chairman's speech.

Present on this occasion were D B Nimbalkar, Mentor TKSL, Ganesh Iyer, Chief Executive and Hemant Dhage, General Manager, TKSL.

TKSL Carries The Torch For Environment

'Environment' has become an issue of global concern and is discussed animatedly in different fora world-wide. 'Earth Day' is observed all over India to create public awareness about environment conservation. The Kirloskar Group, known for its corporate social responsibility initiatives, observes this day in twenty cities in Maharashtra and Madhya Pradesh where it has a significant presence.

This is the first time the event is being celebrated at Kolhapur. Vijay Varma, Managing Director, Kirloskar Proprietary, chaired the session. Representatives of TKSL and Kirloskar Oil Engines Limited attended the meeting. The event was scheduled from 2nd to 5th September, 2010 at Kolhapur.
Kirloskar Corrocoat Private Limited (KCPL) has bagged its first Engineering Procurement and Construction (EPC) order from Lanco Infratech Limited for their seawater intake pipelines. The project, won in the face of stiff international competition, will be executed on site – at the 2 x 607.5 MW power plant of Udipi Power Corporation.

Valued at ₹ 65 million, the project involves coating a pipeline, 1.2 meters in diameter and 5.7 kilometers long – both internally and externally. KCPL’s proven Polyglass 100 glass flake filled coating system will be used for this purpose.

KCPL’s trusted field execution expertise and infrastructure mobilizing skills helped us clinch this order. A track record of eighteen years in India and thirty years worldwide in seawater application further tilted the balance in our favor.

The project is to be executed in seventy days – irrespective of weather conditions. A challenge KCPL will certainly rise to.

---

‘Duck’ Sense

A duck never asks itself whether it’s a duck or not. It’s ‘duck’ness is ingrained in it’s DNA. It flies South in Autumn and North in the Spring, never questioning “Why?” It is a duck after all. Ducks, like geese, fly in formation, each duck taking it’s turn leading the flock in flight. When the lead duck gets tired, it fades from the front and is enveloped back into the fold of the flock and another bird takes the lead.

We have no clue if ducks love one another. What we do know is, they never question the importance of team working. They know that without teamwork, they will not arrive at their happy destination. In formation, ducks fly 71% farther than any single duck that flies on it’s own. Ducks are united by DNA and the common instinct to reach their breeding and feeding destinations faster, safer, and easier. Their lives are fully engaged in the venture – committed - synergized.

If your team is striving for synergy - you must connect emotionally.

Needless to say, a rapidly changing world filled with complex environmental issues, a border-less global economy, and ever increasing competition, the importance of team building takes on a sharp edge.
Greetings From Thailand!

• Songkran 2010 festival at KBTL

In Thailand, this is the most popular festival celebrated by throwing water at each other. People roam the streets equipped with water containers and water guns or post themselves on road sides with a garden hose drenching passers by. However, traditionally the festival is the time to visit and pay respect to elders, including family members, friends and neighbors.

Shreekanth, Country Head and Anirban, Associate Manager, in traditional Songkran Festival T Shirt. On the right, is Tamil, Manager – Sales and Service, Vietnam office, who joined us in Chachoensao, Thailand for the festival.

• KBTL Team Outing

Kirloskar Brothers Thailand Limited (KBTL) team went to Pattaya, on the East coast of the Gulf of Thailand, about 165 km Southeast of Bangkok. It was fun and relaxation all the way. The aim was to brush up internal communication and strengthen HR development. It was nice to spend time together as friends, not just colleagues.

Jokkares, Manager Operations, pouring water into Shreekanth’s hands as a mark of respect.

A team that plays together, stays together! Team KBTL at Pattaya.

• SAP Business 1 Goes Live!

The application integrates all core business functions across the entire company – including finance, sales, customer relationship management, inventory and operations. SAP – B1 is a single application designed for medium size organizations, eliminating the need for separate installations and complex integration of multiple modules.

Team KBTL with its implementation partner, Humanica.
Training session in progress.

Credit is due to KBL - CIC team for successfully implementing SAP B1 in all functions of the organization.

• KBTL Team Organizes Customer Visit
A four member team from Vanich Trading Company Limited, Thailand, visited KPCL’s factory at Saswad, The trip was to gauge the Kirloskar capabilities for manufacturing compressors.

• Welcome Aboard
Anirban Bose joined KBTL on 1st August, 2010 as Associate Manager – Pumps Business.

• Meet Your Thailand Colleagues

Jirawan Petchaut, Administration and HR, is with KBTL since 15th June 2009. A graduate from B.A.(Bus, En) she is interested in psychology, travelling, culture and socializing.

Jokkares Narudolprawat, Operations Manager, is with KBTL since 1st July, 2009. He has experience in the field of Supply Chain and Logistics.

Neth Xiang Yongxiang, Sales and Service Engineer, is with KBTL since 1st September, 2009.

Pompan Khajornmalee, Senior Sales Engineer – pump building and construction, is with KBTL since 1st October, 2009. He has six years of experience in Fire Pumps business.

• KBTL Networking
We have joined the following Engineering Associations:
* TRA – Thai Refrigeration Association
* The Building Safety Inspectors and Officers Association.
* TMEC – Thai Mechanical and Electrical Design and Consulting
* ASHRAE Thailand Chapter.
* TEMCA – Thai Electrical and Mechanical Contractors Association
* EIT – Engineering Institute of Thailand under the patronage of H M the King
Singapore International Water Week, 28th June to 2nd July, 2010

This mega event provides a global platform that brings policy makers, industry leaders, experts and practitioners together to address challenges, showcase technologies, discover opportunities and celebrate achievements in the water world.

Singapore International Water Week – 2010, focused on the need for efficiency and cost effective solutions to address water problems amidst a constantly changing environment. More than half of the earth’s population already lives in cities and the trend towards urbanization is accelerating. As urbanization continues to gain momentum, there is an urgency to address the water shortage issues before the situation deteriorates further and hampers economic growth.

KBL participated in a big way in this event, held at the Suntec Convention and Exhibition Centre, Singapore.

Some of the other participating corporates were Hyflux, ITT, PUB, SembCorp, Sembawang, Siemens, Mott MacDonald, Grundfos and Toroshima.

KBL’s objectives of participation –

- To identify emerging business opportunities in water and waste water as well as building and construction segment
- To interact with new and existing customers and build a good rapport with them
- To enhance the position of ‘Kirloskar’ as a global brand

Representing KBL were colleagues from India, Singapore and Thailand – Shreekanth Ramaswami, Chua Xing Da, Neth Xiang, Preeti Sapre and Neeraj Singh.

The KBL stall attracted over a hundred visitors from Malaysia, India, Singapore, Australia, Thailand, Indonesia and Europe.
Europe’s premier conference and exhibition dedicated to power generation, PowerGen attracts regional and international audience of qualified, influential decision-makers who have the authority to purchase or influence the purchase of world-class products and services. The event brings both leading product suppliers and leading technical and strategic decision-makers on one platform.

PowerGen serves the industry’s information and networking needs by offering delegates the largest and most comprehensive conference and exhibition for electricity sector and power technology. It is the largest ever dedicated trade show with over 500 companies displaying their state-of-the-art services and technologies and dedicated areas devoted to renewable energy.

KBL organized an ‘India Hour’ which attracted a lot of visitors since there were authentic Indian culinary delights being dished out! The footfall at our stall was approximately 120. Duro Felguro, Ansaldo Energia, METKA S.A., Mitsubishi Power Systems Europe Limited, Rolls Royce Plc, Foster Wheel Global Power Group, LINDE AG – Linde Engineering Division, IBERDROLA Ingenieria Construction, FERRO Montagetechnik GmbH, FATA EPC Division of FATA SpA, Worley Parsons, GEA Energietechnik, KSB and Siemens were the visitors to our stall among many others.

The team that scripted success of the event comprises — Avinash Purandare, Ashish Tiwari, Vinay Joshi, Bhavesh Kansara, Preeti Sapre, Varinder Dhoot, Frank Korf, Nikhil Dhole, Robert De Brouwer, Pushkar Kulkarni, Jeroen Bonnet, Peter De Haas, Rui Pinto Ribeiro, Roberto Patelli, Dennis Sanders and Stefan Hameeteman.
Kirloskar Brothers Limited (KBL) is the flagship company of the (USD) $ 1.2 billion Kirloskar Group. KBL is globally known as a reliable, innovative and cost effective total fluid handling solutions provider. Our core businesses are centrifugal pumps for Industry, Power, Irrigation, Water supply schemes, Defence and Marine, Building and Construction, Agricultural and Domestic applications, Valves, Hydro turbines and turnkey projects for Water Management.

KBL’s product range covers centrifugal pumps from 0.1 kW up to 26000 kW and Butterfly Valves up to the size of 4000 mm. KBL is India’s largest manufacturer and exporter of centrifugal pumps and also the largest infrastructure pumping project contractor in Asia.

To its credit KBL has created the world’s largest pumping scheme in the State of Gujarat, India (Sardar Sarovar Namada Nigam Scheme). KBL has also commissioned a water pumping scheme called The Devadula Scheme in Warangal, Andhra Pradesh with the world’s second highest head. Thus, bringing about a green revolution by supplying water to 4 drought prone socio-economically backward districts.
The second ‘In-house Communication Excellence Awards’ (ICE Awards) a Shailaja Nair Foundation initiative, was held on 24th June, 2010, at Bhaidas Hall, Vile Parle, Mumbai. The event saw participation from 380 corporates from across India. A team of expert jury members spent more than 45 days scrutinizing the entries before arriving at a fair conclusion.

‘Cascade’ won the Best In-house Journal (Gold), while ‘Hamara’ of Hindustan Unilever Limited and ‘Pegasus’ of the UB Group emerged the 1st and 2nd runners up respectively.

We owe our discerning readers a big ‘Thank you’ for keeping us on our toes, trying to keep pace with their expectations!

Talking about the achievement, Avinash Purandare, Editor-in-Chief said, “This is a very proud moment for us. The award gives us another reason to cheer during the ongoing centenary year celebrations. I appreciate the effort put in by the team and am sure they will keep up the good work.”

The Gold Award consists of a cash prize of ₹ 51,000, a crystal trophy and a certificate. Pallavi Kharade, Managing Editor - Cascade, received the award on behalf of Kirloskar Brothers Limited.
Applauding Academic Achievement

Meritorious students of employees

To recognize children of KBL employees children for outstanding achievement in academics and to motivate them, a felicitation program was organized at our Corporate Office – Yamuna, on 27th August, 2010.

Students who scored above 75% (year -2010) in SSC and HSC examinations were felicitated by Sanjay Kirloskar and R K Srivastava. This was much appreciated by all. Felicitation programs are being planned at our regional offices as well.

Achievers All!

<table>
<thead>
<tr>
<th>Name of the employee</th>
<th>Name of student</th>
<th>Standard</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>G P Kulkarni</td>
<td>Aboli Kulkarni</td>
<td>SSC</td>
<td>96.36%</td>
</tr>
<tr>
<td>Sujata Karandikar</td>
<td>Mrunmayee Karandikar</td>
<td>SSC</td>
<td>95.45%</td>
</tr>
<tr>
<td>Ravindra Pande</td>
<td>Anurag Pande</td>
<td>SSC</td>
<td>95.00%</td>
</tr>
<tr>
<td>Aparna Bidkar</td>
<td>Kunal Bidkar</td>
<td>SSC</td>
<td>90.36%</td>
</tr>
<tr>
<td>Milind Kulkarni</td>
<td>Manish Kulkarni</td>
<td>SSC</td>
<td>87.82%</td>
</tr>
<tr>
<td>Vinay Joshi</td>
<td>Aishwarya Joshi</td>
<td>SSC</td>
<td>85.00%</td>
</tr>
<tr>
<td>Sanjay Kachare</td>
<td>Neha Kachare</td>
<td>SSC</td>
<td>84.55%</td>
</tr>
<tr>
<td>S B Lokhande</td>
<td>Nivedita Lokhande</td>
<td>SSC</td>
<td>84.18%</td>
</tr>
<tr>
<td>Sayaji Shinde</td>
<td>Aditya Shinde</td>
<td>SSC</td>
<td>81.00%</td>
</tr>
<tr>
<td>Nishikant Ingle</td>
<td>Apoorv Ingle</td>
<td>HSC</td>
<td>89.00%</td>
</tr>
<tr>
<td>P S Vaishampayan</td>
<td>Mrunmayee Vaishampayan</td>
<td>HSC</td>
<td>86.17%</td>
</tr>
<tr>
<td>Rajkumar Patil</td>
<td>Ravikumar Patil</td>
<td>HSC</td>
<td>75.00%</td>
</tr>
</tbody>
</table>

- Ketaki, daughter of Sanjay Sawashe, Pattern Shop, Kirloskarvadi obtained 98.55% marks in SSC. She scored 148 marks out of 150 in Maths. Ketaki is a student of Kirloskar High School, Kirloskarvadi.

- Abhijeet, son of Bhagwan Dattatreya Bagal, CIF, scored 96.97% marks in SSC examination. He scored hundred per cent marks in Maths ! A student of Alphonsa School, Miraj, Abhijeet ranked first in school.

- Aishwarya, daughter of Satish Chandra Abdeo, KBL – Nagpur, scored 94.36 % in SSC exams conducted by the Maharashtra Board in 2010. Aishwarya is a student of ‘Somalwar High School’ – Nagpur. She is also a member of the National Cadet Corps and has been certified as an ‘A’ grade cadet in the exam held a year ago.
Dealer Initiatives

• 13th May, 2010, saw our main dealer in the Southern region – Electrotec Engineers and Traders, conduct a ‘Plumber’s Meet’ at Chennai, largely on its own. Representing Kirloskar Brothers Limited at the meet were Mr. Venkatesh, Sales (Distribution – Domestic) and Mr. Sriram, Customer Service and Spares, both from regional office, Chennai; and Mr. Gopinath and Mr. Rajendran, both from district sales office. In attendance were seventy eight plumbers.

Mr. Venkatesh welcomed the participants and gave a brief introduction as to what the objectives of the dialogue were. He also touched upon the history of Kirloskar Brothers Limited, covering the entire range of KBL products; while Mr. Sriram updated the audience about basic technical details and how to select the best pump configuration to meet one’s needs optimally. He dwelled on market feedback vis-a-vis services and products offered by the company, selection and installation of booster pumps.

The interaction that followed gave us crucial feedback and pointed out areas where we can make our offers to the market even better. Most plumbers suggested that we introduce compressors of 1 HP to 2 HP capacities. Mr. Mukundan of Electrotec Engineers and Traders proposed the vote of thanks. All pump models were displayed at the venue.

In the feedback session, majority of the participants suggested modification in product packing; the sub-dealers specifically sought advertising support – particularly TV advertisements and wall paintings.

Mission Customer Care

Authorized Service Centers Hone Their Skills

Kirloskar Brothers Limited organized a meeting of all Authorized Service Centers (ASCs) in Karnataka at Hotel Citrine, Bengaluru on 14th June, 2010. Attending the meet were eighteen ASC delegates. Representing KBL were P M Lowalekar, C D Khandekar, Sudhir Mohan and Deepak Pise.

In his welcome address, Sudhir Mohan assured all ASCs of adequate support from regional offices. The proceedings were anchored well by Sampath Kumar, service engineer, Bengaluru.

In his address, P M Lowalekar lucidly shared customer service, spares and KBLs vision and mission with the delegates and their role in fulfilling it in the current environment. C D Khandekar and Sampath Kumar explained the new service policy and process. Later, the participants were taken through the basics of pump fundamentals and selection of pumps.

Deepak Pise anchored the proceedings and proposed the vote of thanks.

Two of our Bengaluru based dealers – Jayalaxmi Electrics and Power Electricals were awarded for complaint resolution within three days in more than 95% of the cases, much to the delight of customers.

Reaching Out Via Road Shows

KBL Kochi has started organizing Road Shows in Kerala from 15th August, 2010, with the help of our domestic district sales officers. Our debut show, which was held in Trivandrum revved up the awareness and popularity of KBL pumps amongst the target audience. The plan is to roll out this initiative to cover the whole state of Kerala in the next three months.
27th July, 2010 saw twin events –
• The flag-off ceremony of two vans, aptly called ‘Chetak’ (named after the noble steed of Rana Pratap – the Rajput King) for regional office – Jaipur; and ‘Pampa’ (named after the lake which finds mention in the Ramayana) for regional office – Kochi. We already have a van in Kolkata, while Lucknow is next in line.

The distribution sector uses these vans for branding and rural initiatives rather than for passenger commuting. It has a 32 inch LCD screen with USB port for showing KBL advertisements and audio visual presentations, an inverter with battery to run the LCD, a garden umbrella, a canopy, and a brochure stand.

The vehicle will be used for the following purposes:
* To increase KBLs reach in semi urban and rural areas
* To participate in village fairs, rural markets, road shows and village campaigns
* To park at market places during season for brand recall
* To distribute merchandising material in the spread market
* To collect enquiries from the market place
* To reduce cost of rural campaigns
* To act as a brand ambassador on road in urban areas

1

7th August, 2010, marked the beginning of new year in Kerala according to the Malayali almanac. It is this auspicious day that the ‘Karshaka Dinam’ festival is organized by the agriculture department at Kollam, Kerala every year. As a matter of practice, the department announces the ‘Best Farmer of Kerala’ award as a recognition to the winner and motivating the others to vie for it in the coming year. The 2009–’10 award was announced on this occasion.

Our distributor of domestic pumps for Kollam district, Lakshmi Electricals, presented a 1HP monobloc pump (GMC 128) as an award to the deserving winner as ‘Kerala’s Best Farmer’. The function was attended by the who’s who of the local community.
Enthusing Retailers

Come September, thirteen retailer meets will blink on the itinerary of KBL Kochi. The first in the series was conducted on 3rd September 2010, at Trivandrum for M & S Engineering Company. Forty-eight retailers attended the meet. All retailers expressed their delight with the ‘Bonanza Scheme’ and committed to increase their business record significantly in this financial year. Awards to the winners of last year’s ‘Bonanza Scheme’ were presented on this occasion. While the scheme for fiscal 2010–11 was introduced.

Boosting Market Channels

KBL – Kochi conducted a meeting of major domestic distributors and dealers in Kerala, at Hotel Nyle Plaza on 26th August, 2010. Participants had highly focused discussions on market relevant topics with much enthusiasm and spirit. Various issues like performance in Q1, expectations for subsequent quarters, retailer bonanza scheme and service were tackled as well. The newly appointed Carrying and Forwarding agent was introduced to the dealers on this occasion.

Marketing And Sales Promotion At Serampore, District Hooghly

KBLs distributor Sarkar District Heavy Electricals and Sales Officers together organized a road show and put up a stall during the ‘Mahesh Rath Yatra’ at Serampore, district Hooghly. Four more such shows are in the pipeline. The series of shows was scheduled from 8th to 11th September, 2010, at various places in West Bengal – Arambagh (district Hooghly), Bishnupur (district Bankura), Bankura town as well as Asansol and Durgapur (district Burdwan).

All India Carrying and Forwarding Meet

To improve carrying and forwarding operations and identify areas for development, an ‘All India Carrying and Forwarding Meet’ was organized at our head office, ‘Yamuna’, on 20th and 21st May, 2010. Twenty-one carrying and forwarding agents attended the conference along with forty-two key operating personnel from their godowns.

J R Sapre, Director, KBL, recommended that the C & F agents had better adapt themselves to changing demands in the global market, adopting newer, stringent norms to match dealer expectations. Specifically, he urged them to be well equipped with all web operations which are fast becoming mandatory. Sanjay Kirloskar, Chairman and Managing Director, KBL, greeted all C & F agents on their first visit to ‘Yamuna’ and highlighted the importance of coping with advance customer demand. KBL, he said, plans to put up two new plants to match increasing market demand and the agents need to rise to the occasion to meet additional demand in the near future.

"We are judged by our actions, while we judge ourselves by our intentions" observed Ravindra Murthy in his speech. He shared the results of Business Development Bureau survey made for C & F operations, reviewed each C & F agent’s performance in all areas and discussed their expectations from KBL and vis a versa.

Ravindra Vanarase, Distribution Sector, conducted a one day C & F portal training program for representatives of each godown.
The fresh batch of 2010 ‘Graduate Trainees’ and ‘Post Graduate Trainees’ went through an induction program, inaugurated on 2nd August, 2010. The event saw senior members of the Kirloskarvadi operations unit address the trainees.

Sessions included introduction to KBL, its Vision, Mission and Values. An ice breaking session was also on the agenda, which involved getting to know fellow trainees.

The festival was held from 26th to 29th August, 2010, at Sangli and Miraj, while it was organized at Kirloskarvadi from 30th August to 1st September, 2010.

Day 1: Kirloskarvadi. The festival began with the inauguration of ‘Sakal Reflections’ a photography exhibition. The opening film screened was ‘Truth about Tiger’ followed by ‘Nisargayan’ – a cultural program.

Day 2: Was slotted for a nature walk and a workshop for children. Select films that create an awareness about the pathetic state of our planet were screened. Also on cards was an audio visual presentation on saving the tiger to save mankind.

Day 3: Another nature walk and the children’s workshop were conducted. Films screened were as follows – Jaivik Kheti (organic farming), Do You? Victims of Garbage Dump, Nations Pride Endangered Stripe and Push to kill.

The concluding ceremony saw the presentation of ‘Vasundhara Sanman’ to Abhay Bhandari, while ‘Vasundhara Mitra’ award was given to Ajit Kumar Patil and Iqbal Ahmed Sattar.
**Gurukul – A place to learn**

The foundation stone of ‘Gurukul’ – a learning center based on the likes of Toyota was laid by J R Sapre, Director and S B Chandolikar, Technical Director, K Group on 30th June, 2010.

**Engineering Success**

Prakash Deo, Manufacturing Department, completed his diploma and graduation in engineering while continuing with the job.

**Senegal Delegates Visit**

Officials of the Government of Senegal, Babou Sarr – Director General and Ndiame Diop – Chief Engineer (Hydraulics), both members of the Ministry of Housing Construction, Planning and Hydraulics, visited KBL Dewas plant on 12th August, 2010. They observed the facilities available at plant and inspected the pumps supplied to them by KBL.

**Study Tour**

A group of eleven employees from Dewas and Shirval, visited Leo Pump Industry at Wenling, China, from 21st to 28th July, 2010.

The objective was to expose them to global culture, production systems, and standards in a rapid growing economy.

**Outbound Team Building Session**

An outbound team building program was organized at Mandu, Madhya Pradesh for high performance team building.

Twenty nine employees participated enthusiastically.

**Saying ‘No’ To Nicotene**

In line with the initiative towards a greener world, a drive for a tobacco and smoking-free plant has received enthusiastic response from self motivated employees. Reflecting Gandijii’s philosophy to ‘Be the change you wish to see in the world’ employees willingly embraced the cause.

- A Nasha Mukti (de-addiction) camp was organized at KBL Dewas on 14th July, 2010, in cooperation with the Birla Life Sciences Limited – run by the Yash Birla Group to motivate our employees to lead a healthy and tobacco-free lifestyle.
- At Shirval the ‘Tobacco-Free Plant’ drive was launched on 17th July, 2010.

Members resolved to disallow entry of any tobacco product inside the factory premises. A prominently displayed board at the main gate of the plant declares in Marathi ‘This Plant Is a Tobacco-Free Plant.’
‘Mahasamvad’ - A Dialogue

On 30th June, 2010, an open dialogue forum – the ‘Mahasamvad’ was organized with J R Sapre, Director, responding to queries and suggestions received from employees of Dewas plant. The initiative received an enthusiastic response. Many suggestions vis-a-vis quality, safety, training and some newer initiatives were received.

Health Is Wealth

The Executive Fitness Center was inaugurated by J R Sapre on 30th June, 2010. Executives are taking advantage of these facilities after working hours.

Going Green

Dedicated to conserving the environment, 1000 saplings were distributed to all employees. The drive was inaugurated with J R Sapre presenting a sapling to Aseem Srivastava, Vice President and Operations Head, KBL, Dewas.

Drops Of Life

A blood donation camp was organized at Joglekar Hospital on 3rd July, 2010, by Kirloskar Brothers Limited, Shirval. The camp was timed to coincide shortage of blood in July – August every year. Nitin Joshi, KBL, Shirval and Dr. Joglekar of Shree Seva Medical Foundation inaugurated the camp. Volunteers of our plant as well as other donors participated in this event. Around 52 bottles of blood were collected.
Who Is Reading What At KBL

This book made its entry into the readers’ world with style – in the Oprah Winfrey Show, with the most influential woman in America herself, saying it was the key to all her success!

The essence of *The Secret* is “the law of attraction.” According to Byrne and the twenty-nine co-contributors whom she quotes extensively, everything in the Universe (which is always capitalized and usually synonymous for “God”) vibrates on a particular frequency. When you think in harmony with the frequency of something, you attract it to you. If you think about wealth, you will receive wealth. If you think instead about your debt, you will receive more debt. You attract what you think about; your thoughts determine your destiny.

Byrne restates the law of attraction in various ways:

- Nothing [good or bad] can come into your experience unless you summon it through persistent thoughts.
- Your thoughts are the primary cause of everything.
- Your current reality or your current life is a result of what you have been thinking.

Byrne promises with ironclad certainty: “There isn’t a single thing that you cannot do with this knowledge... The Secret can give you whatever you want”

While I believe the book is worth reading once, I feel it is another version of our home-grown philosophy of being positive in thought, word and action – *Bura mat dekho; bura mat suno; bura mat socho.*

A video by the same title was released earlier in 2006.
Reviewed by Pallavi Kharade

If you will sustain the right thoughts, words, and feelings, you will receive whatever you want.

The law of attraction demands only this:

- Know what you want and ask the universe for it.
- Feel and behave as if the object of your desire is on its way.
- Be open to receiving it.

Byrne admits that People’s first thought, when they hear of the law, is to think of times where masses of people lost their lives. According to the law of attraction, these people were necessarily on the same frequency as the event that took their lives. ‘The Secret’ offers nothing to these people but the understanding that their suffering is somehow their own fault. When we look at ‘The Secret’ as the law that can bring you anything you want, it has a clear attraction; when we look at it from the perspective of one who has suffered, it is clearly flawed.

The law offers no higher power than yourself. This makes one wonder: what would the world look like if everyone followed ‘The Secret’ and devoted themselves primarily to their own interests, forsaking compassion and sacrifice and other negative elements of life?

The concept, insofar as it is described in this book, makes no allowance for what happens when desires clash. What happens when two people set their thoughts on the same thing? If the law of attraction is the highest law in the universe, it must be that there is nothing to govern such cases.

Finally, the law also works in ways that defy both common sense and human experience. For example, when considering weight loss Byrne makes the unbelievable claim that food can only make you fat if you think it can make you fat. If you determine that food is unable to make you gain weight, you can eat as much as you want and never gain weight or suffer any ill effects. When considering health she suggests that we can heal ourselves of any affliction simply through the power of our minds.

I also recall what my grandmother used to tell me – always think positively; because the ‘Vastu Purush’ (Guardian angel of your home) says ‘tathastu’ to all that we verbalize... and to all that we think. So keep a check on your thoughts and words. Train your mind to be positive.... always.
One day three old men with long, flowing beards were standing in front of a house. The lady inside was kind to poor and old people. She invited them to her house saying “All of you seem quite tired. Please come in and have some good, homely food.” They asked her whether her husband was present in the house. She told them that he had gone out for work and would return in the evening. On hearing this, the old men said that they would wait outside till he came home.

In the evening, her husband returned home from work. She told him about the three old men. He went in and told this to his wife. He suggested “Let us invite ‘Wealth’, His wife however thought inviting “Victory’ would be a better idea. Their 10 year old daughter was listening to this conversation. Holding the hands of both her parents, she said, “Let us invite ‘Love’ and let our house be filled with love.” The parents decided to accept their daughter's choice and invited ‘Love’ inside. As Love started walking slowly towards the house, the other two also joined him.

Perplexed, the house owner asked them why the other two were joining ‘Love’. The two men explained, “You have invited Love to your house and that is the reason we are joining him. If you had selected either of us – Wealth or Victory – only one of us would have visited your house.”

Moral of the story : Where there is Love, Wealth and Victory will always follow.

Sudheer Mohan T. V. RO, Bengaluru

Taking a break from their hectic work schedule, Kirloskarvadians organized a monsoon sojourn to soak in the pleasure of nature in its verdant green attire.

29th August, 2010, saw the group headed to Vaijnath Temple, Sundi Falls and Mahipalgad. Next on cards was Amboli falls and Nagarbhav. The highlight of the trip was Kavalesad point near Amboli. The group of revellers then visited Ramathirth, near Ajara. The trip was for only one day and we enjoyed trekking, water falls and climbing up the hill top forts. The group included Bharat Remje and Amar Savant (Quality Control), Gajanan Anandache, Nitin Mone, Vijay Suryavanshi and Durvadutt Kulkarni (PDD), Pravin Patil (Materials) and Sarfaraj Pathan (Planning).
**Breaking Through!**

**The Problem**

Old eagle Frankflies with drooped wings and withered might.

Even the gentle touch of zephyr resonates, sending ripples of pain throughout his body.

He vens direly for his once zaftig body now a bundle of old bones and feathers.

It is time to kowtow to the ruthless time for he is at the fag end of forty erstwhile years.

His claws no longer swiftly grip the fish from the pond, his failing eyesight cannot trace a frail snake or rat from a pinnacle.

His carefree sky-bound high-altitude endeavours are now limited to a low flight for survival.

Trapped in the squelching chains of old age, tired of being hungry and sick.

He decides he had enough of the ruthless mockery of life and accedes to dive to his own death to embrace his end.

**Survival of the fittest**

He plunges from a cliff, his wings folded disconsolate about his wunderkind achievements.

Just then he sees on the top of a tree his old friend Raphael, looking young and happy.

Relishing a fish fresh from a pond there he sits with all his youthful charm.

Out Frank stretches his wings and forces himself to fly to his youthful friend perhaps too older than him.

Asks he to the young looking eagle How do you look so strong and juvenile?

Smiled Raphael and said “my friend we are eagles after all we live our lives in the same patterns for years

Hunting and surviving - exhausting our resources and means and after completion of forty years, we get our youth back.”

You will have to toil hard, bear the pain for 90 long days - change everything that you are and out shall come a renewed you - young and smart!

**Ideas for Action: Breaking Through**

So Frank toiled hard for the next ninety days he went to a remote place far up in the hills.

He pulled out one claw a day and his feathers with his beak blood oozed out of his wounded body.

He then allowed his new toes and plumage to grow back then he hit his beak on the rocks.

Allowed it to break off and bore silently all its pain out grew a new beak in a matter of few days.

Now, Frank is no longer an old eagle who grew tired of his old body and was plunging to his death.

We are no eagles, we have no second lives yet like them, if we try really hard.

We can break out of our old bad habits - and be a new person it is not inscrutable – to work hard and breakfree from our comfort confines.

To bring in new patterns of positive behaviour and conquer our erroneous zones after all, it is all about making a decision and putting it into action.

On a didactic note, like Frank we can rejuvenate our existing lives we can shed our apprehensions, prejudices and offbeam demeanour.

We can kill our habits that seek no congruence with the good human beings that we are we can try to adjust and don a renewed “US” to survive.

The world doesn’t see us the way we are, it sees us the way it wants to so let go of your old behavioural patterns and embrace new progressive changes.

Always remember it is never too late and difficult - Nothing is ever impossible because, even impossible says **I M Possible**

- By Ketaki Joshi

CGMS
Reliable
More than 60% of power plants in India have Kirloskar circulating water pumps.

Innovative
Received 3 US Patents for innovative pumping solutions based on research at its in-house Hydraulic Research Centre (Asia’s largest research lab).

Cost effective
Kirloskar pumps and systems have been designed for the lowest life cycle cost i.e., higher energy efficient pumping systems to save on the running cost which contributes to more than two-third of the total cost of ownership.

Kirloskar Brothers Limited (KBL) is the flagship company of the Kirloskar Group. KBL is globally known as a reliable, innovative and cost effective total fluid handling solutions provider. Our core businesses are centrifugal pumps for Industry, Power, Irrigation, Water supply schemes, Defence and Marine, Building and Construction, Agricultural and Domestic applications, Valves, Hydro turbines and turnkey projects for Water Management.

KBL’s product range covers centrifugal pumps from 0.1 kW up to 26,000 kW and Butterfly Valves up to the size of 4,000 mm. KBL is India’s largest manufacturer and exporter of centrifugal pumps and also the largest infrastructure pumping project contractor in Asia.

To its credit, KBL has created the world’s largest pumping scheme (Sardar Sarovar Narmada Nigam Scheme) in the state of Gujarat, India. KBL has also commissioned a water pumping scheme called “The Devadula Scheme” in Warangal, Andhra Pradesh with the world’s second highest head.
LESSONS FROM JAPAN

Extracts from a speech delivered by S L Kirloskar at Gokhale Institute of Politics & Economics, Pune, on ‘What we can assimilate from the Japanese Struggle for Quality Assurance’, in 1983

What I am going to talk about today is not about my visit to Japan, or what I saw there, but how to get things done. What Japan has done is not something new. Actually, the man who is responsible for developing the whole movement of Quality in Japan, is an American by name Mr. Demming. The reason why he could not succeed in the United States and why he succeeded in propagating his thoughts in Japan make an interesting story. Mr. Demming started propagating his ideas in the United States in English. He could never impress his audience and the audience never took his views seriously, one possible additional reason being that he used to stutter heavily. In Japan, Mr. Demming put his thoughts on paper and naturally somebody else was translating them for him in Japanese. The consequence of this was that his ideas did catch in Japan.

The idea of quality is not something with which only the workers have to do. This is the fundamental point of the whole concept of Quality. The basic point is that it is something like an equilateral triangle. Of the total number of people in your organisation, no matter whether it is a small industry or a large industry, the 15 per cent of the Top Executives are the people who are mainly responsible for about 85 per cent of the Quality. Now you must first get this idea fully developed in your mind. It is the top people, the managers, executives, chairmen, managing directors-call them by any name-who constitute the top 15 per cent, who are responsible for producing quality in their organisation. It is this small group that has to do with 85 per cent of work in regard to quality. This is a very important point and I would like to underline that thing. The remaining 85 per cent of people or work force in the factory are concerned with only 15 per cent of work concerning quality on the shop-floor.

First and foremost, the very top people in an organisation must know what products and what quality they want to produce. If they do not know that, and if they just say to the workers “Oh, produce a quality article”, it will not achieve the desired result. And therefore the first and most essential part is that the top management or the top man must know what product he is making, for whom he is making, why he is making, where the product is going to be used and what are the expectations of his customers about the quality of his product. The top man must know what exactly he is doing and he must put down on paper what he wants or aims at. Unless this essential point is kept in mind, you cannot get quality.

Once this is defined, then the next line of executives will have the responsibility of looking into the matter further. There is the sales manager; there is the production manager; there is the finance manager. In a small establishment, there might be just one man doing all the three functions,- the top man might be doing all that. Thus the production manager must know what he wants to produce and he must see whether the machines in his establishment are capable of producing what he is asking for. Buying a machine first, and then trying to produce the quality product that is aimed at may not always be possible. Thus you have to start from this point, namely you have to decide first what you want to produce and the quality of your product and then see whether the machinery that you already have is capable of producing regularly that quality product and whether that quality is acceptable in the market. This is the concern of the market manager or sales manager. Thus you arrive at an acceptable operating level of
your establishment.

Having done that, you then proceed to lower level of workers in the establishment to see what these people are capable of producing, and if necessary, to train them to produce the desired product of quality.

The design must properly specify what quality you want.

Putting on a drawing paper some super-duper close tolerances does not produce quality. If I want to produce a bullock-cart, it would be wrong on my part to produce an axle of a bullock-cart to the same tolerances as in the case of a ball-bearing. It is too costly to produce and it is not necessary at all. It would mean just waste of money, of energy and of everything and you will not see any difference in the performance of the bullock-cart.

If however you are producing a pump or a machine which requires running pretty slowly, you need certain tolerances, plus or minus 2000 of an inch. My brain still works in inches and not in mm. That means your machinery may be able to produce ± 2000 shafts, holes, or whatever it is. But putting that machine to 1/10th of 1000 is again wrong. Because the machinery that you require will not produce 1/10 of 1000 repeatedly; you might just get 1 in 10 or 1 in 100 correctly. You must be absolutely sure about what service you want from your machine and what that machine is capable of.

This has got to be done first before you go to the next step or level. Suppose there is a machine which does not produce the product of the quality you have decided on; in that case the finance manager will have to see that he finds enough money to help you buy the needed machine. Only the appropriate machinery must be installed in your factory.

Having done this, you proceed to the workers’ level and say to them that this is the quality that you have decided upon and then the so-called Quality Circle starts coming into the picture. Unless you do this preliminary work properly, it is not possible to produce product of desired quality. For this you have to get all the workers into the Quality Circle.

You have always some problems. Some machine is not working properly and something is rejected for some other reason. For example, while transporting, something is dropped from a height on the ground or things are put one upon the other in such a manner that it dents and therefore it is rejected. You have therefore to pick up these smaller problems and the workers who are working around that should form a Quality Circle. You must enthrone them and make them see that it is in their interest and the interest of the company to ensure that there is as little percentage of rejection as possible.

This is the normal picture of the Quality Control.

However, this is not enough. Quality is not confined to the workshop. When you think of total quality and reliability, you have got to produce a total quality and that total does not mean totality of the machine. It concerns the total organisation. Quality must prevail everywhere. Total quality does not mean that only the workshop will or should aim at quality and not the Accounts Department or some other department. Accounts Department can produce any number of papers and files. The Accounts Department must also do and see that everything is done properly, that nothing extra is done or nothing less is done. This is again the responsibility of the top people who must think clearly and tell what they want from the Accounts Department. The same principle applies to every department in the establishment and this is what is known as Total Quality Control in an establishment.

In Japan, we could see the quality control right from the entrance to a factory. The gate was properly painted; the plants, trees and flowers were all properly trimmed and neat. When you enter, a smiling girl welcomes you. There is a receptionist and everything is clean and pleasant.
What I mean to say is that there is total quality control. Unless you start doing that, you cannot achieve the quality you need in your product.

Unfortunately in India we are very sluggish. We believe in sluggishness. We as a nation have developed a philosophy of sluggishness. If someone is not sluggish, he is made fun of. Our motto is, “High Thinking and Low Living”. I do not know why we should not have the motto of “High Thinking and High Living”. The two are not opposed to each other. High Thinking and High Living can go together.

What you learn from Japan is this that the quality has got to have the total backing - backing of the mind and of the behaviour of all people from top to bottom, the top people having special responsibility. They must dress well and behave well so that others are inspired to follow their pattern of living of quality. In India the picture is often different. The Boss tells the workers, “Oh, you are not producing a quality product. The workers do not know what quality means and do not know what they are expected to do. The Boss does not know what is quality either, and therefore he passes the buck on to his workers. And therefore to get quality you have got to start from yourself and only then it can percolate to lower levels. It is not an impossible thing. It is quite possible.

But to my mind, in India, we will have to wash our brains thoroughly to get this idea penetrate into people.

I recollect an incident that took place in Mr. Manubhai Shah’s time in Delhi. As the meeting was going on, a minister started saying that people are exporting goods which are of pretty bad quality and because they want to make money, they put in raw materials of inferior quality in export items. Bad quality products are exported because exporters in India want to make quick and huge profits. When my turn to speak came, I produced the thick agenda papers that had been given to us bound in a book form. I said: “Mr. Minister, you have produced this agenda book - by you I mean your department. When I turn the first page, I find there a big blot of ink. The second page is upside down. The third page has something printed on it which I cannot read. The fourth page is blank.” And then I said: “The politicians have no moral right to talk about Indian exporters exporting goods of bad quality because they want to make money.”

The basic problem is with everybody in India. Not only the worker, not only the clerk, but even top ministers are ready to accept sloppy and dirty work. The moment you start saying, “Oh, Ye Chalega”, you start slipping down from your quality. And therefore you have to see what I said some time back that you have to have the entire organisation that is geared to produce goods of quality. If you take defective raw materials and try to produce high quality goods out of them, or try to produce high quality goods by using wrong machines, you will spoil everything and you will never have desired quality.

And therefore you must have proper machines and raw materials to produce goods of quality. The entire process must be such that it will lead to desired quality. And thus it is total quality consciousness that must prevail in your organisation before you think of producing goods of quality. And this is what we have to learn from Japan.

And let me tell you one more thing. My experience of last 55 years in business tells me that Indian customers are ready to pay your price, provided you give them good quality products - quality that they will accept. They must feel convinced that the quality is there for which they have paid, and they will be happy. All our farmer-customers have been buying Kirloskar products only because we give them quality products for which they are ready to pay prices we quote. While we are happy to charge a high price, they are quite happy to pay it because they get a good product. You cannot get a good product at a low price.

Thank you.
For decades, Kirloskar Brothers Limited has been known for its path breaking contribution in the field of Technology and Engineering. We design, manufacture and supply a wide range of Pumps, Valves, Motors and Hydro Turbines for varied applications. We also execute projects on Turnkey basis and provide end-to-end solutions for our clients in India and across the globe.

Leaping beyond our conventional business territories, we have also proved our mettle in the highly challenging Nuclear Industry.

We have supplied Concrete Volute, Metallic Volute, Vertical Turbine and Canned Motor Pumps for various applications to nuclear power plants like NPCIL, Tarapore, Kaiga, Kota, Narora etc.