

LHP UPDATE

Newsletter

Issue 17 February 2015



Motors for Marine Applications

Smooth Sailing on High Seas



New motors for textile, steel, marine, compressors and hazardous areas applications

Lhp
MOTORS DRIVES
Driven by Commitment

supremo
IE MOTORS



The Mentor Speaks

Dear Friends,

I am happy to present you the 17th issue of LHP UPDATE at the beginning of the New Year.

2014 ended on a good note on account of several new developments at LHP. You will be glad to know that Team LHP has successfully developed, manufactured and commissioned motors for critical marine applications. With dedicated efforts for over one year, we have developed Shock Grade and Non-Shock Grade Motors suitable for use in ships and vessels. This was one of the most challenging projects for us and we are happy to see our motors on board some prestigious ships of critical importance.

I am proud to say that LHP is the first Indian company to introduce a complete range of IE3 motors. This is a completely indigenous development and further proof of our ability to respond to every challenge competently and confidently.

Robust, reliable and competitively priced LHP IE3 motors continue to dominate the market. The ever-increasing demand for IE3 and higher efficiency rating motors has given an impetus to our next level of developments in this area. A considerable part of our exports is to European countries. Since EU (European Union) has made the use of IE3 and higher efficiency grade motors mandatory

from 2015, all manufacturers will have to comply with the stringent norms laid down by EU. We have already been following these specifications and norms for all our export supplies. Simultaneously, our design team, with painstaking efforts, has completed the development of several new products for different industry verticals. Take a look at these new offerings in this issue.

Appreciation of our efforts from esteemed customers is always a source of inspiration for us. Recently, we received such accolades from two distinguished companies - Kirloskar Pneumatic Co. Ltd., Pune and BHEL, Hyderabad. I sincerely thank both of them on behalf of Team LHP.

I also thank all our customers and associates for encouraging and supporting us in our endeavour to develop new products, provide excellent service and ensure customer satisfaction.

My best wishes to all of you for the New Year.

Yours Sincerely,

Sharadkrishna Thakre,
Managing Director

Watch LHP motor working in JCB Excavator

LHP motors are an inseparable part of several equipments and plants, well-known for their quality and performance. One such renowned construction machinery brand is JCB to whom we have recently started supplying motors. JCB uses LHP motors in their excavators to ensure trouble-free performance. You can watch a video of one such Electric Hydraulic Excavator powered by LHP motor of 110 kW.

(Youtube link for JCB video :

https://www.youtube.com/results?search_query=JCB+JS+210+ELECTRIC+HYDRAULIC+EXCAVATOR+BY+Vishnath+ANAND)

Congratulations to the LHP team - especially Mr. C.B. Pathak, General Manager, Marketing at Bhilai - for developing and supplying this special motor to JCB!



LHP receives Best Supplier Award from Kirloskar Pneumatic Co. Ltd.



Mr. Sharadkrishna Thakre receiving the award at the hands of Mr. Mahesh Nandurkar

We have been consistently supplying motors to Kirloskar Pneumatic Co. Ltd., which are fitted in their compressors manufactured for various applications.

Recently, we have been honoured by them with the Best Supplier Award for the FY 2013-14 at a special function in Pune on 11th November, 2014. The award was conferred on LHP for outstanding performance in quality and delivery while conforming to the requirements of their Air Compressor Division.

LHP thanks Mr. Mahesh Nandurkar - Vice President & SBU Head (ACD) of KPCL for recognising our efforts. The Managing Director of LHP congratulates the LHP team for its hard work, devotion and willingness to go the extra mile to ensure the best service to customers.



BHEL nominates LHP as A1 Grade Supplier for Best Vendor Award

BHEL, Hyderabad is one of the valued customers of LHP for the last several years. Quality, timely deliveries and excellent after-sales service are the main reasons for our long-standing association. This has been vouched for by the management of BHEL time and again.

Recently, a team of BHEL engineers, under the guidance of the Deputy General Manager-Purchase, systematically evaluated the overall performance of

their vendors for the FY 2013-14. This performance rating was based on the criteria such as quality (60% weightage), timely deliveries (30% weightage) and service (10% weightage). In this evaluation, LHP stood at 95% performance level and was adjudged an A1 supplier. This rating is meticulously calculated according to every Purchase Order and then averaged out for the entire year.

Shock Grade and Non-Shock Grade Motors for Marine Applications

Developing customised motors for most critical and challenging applications always fascinates us. By way of accepting and successfully meeting such challenges, we not only expand our product basket, but also remain at the forefront of technology. As a result of this approach, we have been able to develop highly reliable motors for various marine applications. This development was a challenge for our design as well as manufacturing capabilities. Motors for marine applications necessitate designs which can withstand shocks of various intensities. Also, all the components should have high resistance to corrosion, so that they can last longer in a humid and corrosive atmosphere. Reliable performance of such motors is extremely important since they are used in various types of ships and vessels including warships. Being away from the mainland for months together, failure of even a single motor is intolerable. Our motors went through all such

rigorous tests to prove their reliability and dependability.

With this successful development of motors for marine applications, we are proud to be registered with prestigious shipyards in India for meeting their requirements.

Goa Shipyard Limited (GSL): GSL is a leading ISO: 9001-2008 certified shipyard on the west coast of India. For over four decades, GSL has designed and commissioned a wide range of sophisticated vessels for varied applications in the Defence and commercial sector with special expertise in building modern patrol vessels.

Garden Reach Shipbuilders & Engineers Ltd. (GRSE Ltd.) GRSE is a premier shipbuilding company in



Smooth Sailing

Registered with GSL and GRSE

Already on board some large and prestigious ships working for the nation

India under the administrative control of the Ministry of Defence. Since 1960, GRSE has built 91 warships and plays a very important role in the defence preparedness of the country. It has risen to the challenge of building warships indigenously. It is the recipient of the Raksha Mantri Award for Excellence for the Best Performing Shipyard.

These achievements are an affirmation of the design capability, high quality standards and best manufacturing practices being followed at LHP. The supply of marine application motors calls for special fabrication, adherence to very high quality standards of raw material, precision in machining, robust construction and stringent testing at our in-house testing lab. These motors also undergo rigorous testing at

the designated Government Testing Laboratories and are validated as per the standard norms. LHP also manufactures Shock Grade Motors which can withstand shocks of various intensities which arise during sailing due to seabed oscillation, atmospheric and ocean waves and tides of various intensities.

LHP motors are already on board some large and prestigious vessels working for the nation. We are confident of performing a greater role in the near future and being an important part of the assets of national importance.



g on High Seas

Crossing barriers Creating landmarks

In an attempt to meet new requirements, the R&D team of LHP has successfully developed several new products.



Steel

Induction motor 450 frame for conveyor application for furnaces in steel plant

- Cross-cooling arrangement
- Copper brake rotor
- Stator and rotor have ventilated ducts
- Largest motor in LHP Series
- Temperature rise of the winding gets reduced

Dual speed crane duty motor for steel plant application in 7.5 HP/4 HP

- Designed for 4 pole as well as low rpm i.e. 16 pole/32 pole
- Both side shaft extension

Marine

Dual speed, flame-proof, brake motor 30 HP/frame size LF-250 for marine applications

- Dual speed design in higher HP
- Robust construction with higher size Brake 31
- Can withstand vibrations on board

Special purpose

Special induction motor as an import substitute

A special motor has been developed as an import substitute with critical tolerances on dimensions like shaft run out of 5 micron. It has been designed to meet requirements of low vibration, low noise, higher torque and less starting current.

Textile

High frequency (90Hz) induction motor with cooling arrangement for textile machines

- Very compact
- Runs at high speed
- Water cooling arrangement
- Circular fins motor body
- Insulated end cover at non-drive end
- Increased motor life and reliability

Flame-proof

Single phase motor - 1.5 HP in frame LF-90

- As per revised standards of IS/IEC/600079-1
- Tested in various labs for approval by Govt. of India
- Approved by Petroleum and Explosives Safety Organisation

Triple speed motor of 30 HP/60 HP

- Most suited for naval applications
- Three separate windings in single motor

Compressor

Compact motor with more service factors in 75 HP/200L frame for compressors

- Highly compact
- Delivers more power and output in given small size
- Ideal for compressor applications
- Widely used in tank mounted compressor units

Inspiring young engineering students

Fabtech Engineering College at Sangola is a premium institute for engineering education in Solapur and adjoining districts. Recently they have established a Technical Campus which was inaugurated by our Managing Director - Mr. Sharadkrishna Thakre on 10th October, 2014. In his inaugural speech, Mr. Thakre highlighted the changing industry expectations and challenges before today's engineers. He shared his views on how to tackle such challenges, think differently, innovate and be a successful engineer or entrepreneur. He also inaugurated the Robo-Race and an exhibition organised by students of the institute. Mr. Bhausabi Rupner, Chairman of the Society was also present on the occasion.



Use LHP IE3 motors. Save millions*

Payback comparison of LHP IE3 motors with IE1 & IE2 motors

Faster Payback Using Energy Efficient Motor					
Sr.	Description	IE 1	IE 2	IE 1	IE 3
1	Motor output (kW)	1.5		1.5	
2	Number of poles	4		4	
3	Market cost of motor (₹)	4636.5	5263.5	4636.5	6072
4	Extra cost paid (one time investment)	627		1435.5	
5	Operating hours per day	24		24	
6	Working days per annum	300		300	
7	Operating hours per annum	7200		7200	
8	Energy cost per kWh (₹)	6		6	
9	Efficiency in %	77.2	82.8	77.2	85.3
10	Difference in efficiency of IE1 & IE2	5.60%		8.10%	
11	Power consumption per annum (kWh)	13990	13043	13990	12661
12	Energy bill per annum (₹)	83938	78261	83938	75967
13	Saving in energy bill (₹/year)	5677		7971	
14	Payback period (extra cost) in months	1.3		2.2	
15	Payback period (for replacing the existing low efficiency motor) in months	11		9	
16	Payback period (for replacing the existing low efficiency motor while taking into account DISPOSAL cost of old motor which is 40% of existing low efficiency motor) in months	7		6	
18	Cost of energy consumed over 20 years of service life	1678756	1565217	1678756	1519343
19	Cost of energy consumed over 20 years service life (considering 5% inflation per year)	2769948	2582609	2769948	2506917
20	Savings (₹)	113539		159413	
21	Saving after considering inflated rate of electricity (₹)	187339		263031	

- The cost of IE1/IE2 motor (1.5 kW output) is ₹ 15,950/- whereas the cost of LHP Energy Efficient Motor IE3 (1.5 kW output) is ₹ 18,400/-.
- Thus, an additional investment of ₹ 2,450/- will ensure payback in 6 months as compared to 7 months in case of IE1/IE2 motors.
- Additionally, after 20 years this will result in an energy saving of ₹ 2.6 lakhs as compared to ₹ 1.8 lakhs in case of IE1/IE2 motors (after considering inflated rates of electricity).

Needless to say, it is a prudent decision to invest in LHP IE3 Energy Efficient Motors.

*Depends on number and ratings of motors.



'Be future-ready'

Said Mr. Thakre at Vendor Meet of Vinodrai Engineers Pvt. Ltd.

Vinodrai Engineers Pvt. Ltd. at Jalna (Maharashtra) is a regular customer of LHP. Vinodrai is a leading manufacturer and exporter of rotational moulding machines, exporting to more than 50 countries across the world. Vinodrai has standardised the use of LHP motors for all its machines.

Recently, they organised a Personal Effectiveness Programme for their vendors. Our Managing Director, Mr. Sharadkrishna Thakre inaugurated and chaired this programme as the Chief Guest.

In the inaugural speech, Mr. Thakre emphasised the importance and need for competitiveness in supply,

timely deliveries, prompt responses and efficient after-sales service to remain competitive in the era of globalisation. While suggesting ways to achieve this, he highlighted the importance of exercising value engineering, reducing wastage, enhancing productivity, establishing quality systems and having a methodical approach to every activity in the organisation. After the inaugural address, he shared his ideas and experiences with leading industrialists in Jalna in an informal discussion.

Mr. Sunil Raithatha, Managing Director of Vinodrai categorically mentioned the excellent quality and service of LHP which have remained unchanged for the last 15 years.



'The secret in education lies in respecting the student'

Ralph Waldo Emerson

American essayist, lecturer and poet (1803-1882)

The leadership at LHP fully understands the significance of good education and how it changes the lives of people. We also encourage young, talented people in our hometown to join us to unleash their potential to the fullest. We respect their abilities and encourage them to excel.

At the same time, we understand that at a young age, no deserving child should be deprived of education for the sake of funds. In an effort to address this issue, for the last 25 years, we have been awarding scholarships to our

employees' children who prove their merit in annual school examinations. Being entitled for the LHP Scholarship has become a symbol of pride among the young children of Solapur.

This year, in all 122 students received scholarships and we are happy that the number is growing every year. These children were felicitated at a special function and the scholarships were awarded in the presence of Mr. Lakshman Rao, Managing Director, Technodyne, Secunderabad, who was the Chief Guest.

Who's who?



Rajesh Patil

Name of team member	: Rajesh Sangram Patil
Age	: 40 years
Family status (Married to)	: Manjusha
Names of children	: Rishikesh and Omkesh (sons)
Qualifications / experience	: B.Sc., DBM / 17 years
Date of joining LHP	: 01.01.1997
Responsibility shouldered in LHP	: Manager Finance (Finance & Banking activities, Credit Management & Investments)
Special achievements	: Maintaining of Accounts for 17 years at LHP
Hobby	: Watching comedy shows & reading books
Favourite snack	: Bisi Bele Bhat & Basundi
Favourite celebrity	: Smita Patil
Favourite holiday destination	: Hyderabad
Strength	: Time-bound execution
Weakness	: Over perfection
Message to colleagues	: Always update knowledge and respect the work we do. Work is worship.

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Corporate office & manufacturing plant



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