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Trends dominating the steel industry, making a steel plant productive, efficient and profitable



The steel industry is vital to growth of infrastructure — and with a strong growth forecast for the Indian manufacturing sector in the coming years, the industry too is expected to be on a strong growth trajectory. However, the steel industry operates in a very challenging environment with high input costs leading to marginalization of profits, which has made the sector very competitive. The steel industry is fundamental to every nation owing to the usage of steel in a plethora of industries ranging from infrastructure, transportation and construction to food processing, healthcare, et al. In the past few years,

the industry has evolved tremendously with advances across

technologies, input materials, levels of automation and quality of the end product and diversity of applications.

Since liberalization of the steel sector in 1991-92, the Indian steel industry has witnessed unprecedented growth from 22 million tonnes of production capacity to 122 million tonnes in 2015-16. In 2017, India emerged the world's third-largest steel producer. A cursory glance at the figures of India's crude steel output, which grew 10.7% year-on-year to 125.76 million tonnes in 2017, testifies to how the industry has been on a trajectory of



steadfast growth; it is set to be a major contributor to the country's manufacturing sector.

Substantial investments have been made within the steel sector owing to its symbiotic association with sectors such as mining and metallurgy. For instance, the Indian metallurgical industry attracted

Foreign Direct Investments (FDI) of US\$10.33 billion between April 2000 and March 2017.

The steel industry is, therefore, expected to continue with the present momentum of growth and contribute to the country's economic growth and development in line with the trends that have dominated the industry time and again.

Two such trends from a business and operating standpoint for the steel industry are, (1) **achieving excellence through operational optimization** and (2) **investment in R&D.**

Achieving excellence through operational optimization

There is continued pressure on steel prices due to capacity overhang and competition from inter-linked global markets. This has made it indispensable for the steel industry to pay critical attention to operational excellence to protect market share and margins.

Deploying advanced technologies is therefore imperative to achieving operational efficiency, leading to product excellence. Advanced technology lubrication ensures maintenance and protection of heavy machines and optimisation of performance, resulting in targeted and fast output. With a portfolio of advanced technology lubricants, ExxonMobil™ offers a complete range of lubrication solutions to help extend oil life, achieve energy efficiency and extend equipment life for the metals industry. This also includes OEM-approved products with years of proven performance, as well as advanced problem-solving synthetic oils and greases. A few of ExxonMobil's offerings for the steel industry are:

Mobilith SHC™ Series multipurpose greases are high-performance synthetic lubricants developed to protect equipment in severe applications operating at extreme temperatures. Their excellent adhesion, structural stability and resistance to water make them suitable for use in a wide variety of machinery and components.

Mobil SHC™ Polyrex Series greases deliver high-performance lubrication through advanced polyurea thickener technology. Mobil SHC Polyrex Series greases are designed to offer high-temperature performance, excellent water resistance and balanced wear protection for a wide variety of industrial and food processing applications.

Mobil SHC™ Rarus Series synthetic air compressor oils protect vane and rotary screw air compressors. They are designed for severe service – such as high final compression temperatures or extended oil drain intervals – where other synthetic oils do not meet service life expectations.

Mobil SHC Rarus Series synthetic air compressor oils are formulated to deliver up to three times longer oil drain intervals than other synthetic air compressor lubricants. In fact, Mobil SHC Rarus oils have even demonstrated the ability to perform for up to 24,000 hours in field tests.

Investment in R&D:

The industry needs to make investments in R&D to identify new solutions and technology to ensure energy efficiency, decrease downtime and smoothen operations. The Ministry of Steel also, plans to set up Steel Research and Technology Mission in India to promote R&D activities in the sector. At ExxonMobil, enormous emphasis is placed on ongoing investment in research and development (R&D), working side-by-side with the world's leading original equipment manufacturers (OEMs) to develop the most effective products and maintenance solutions. We intend to grow and invest in programs to ensure and deliver advancing productivity, reliability and energy efficiency benefits to our customers.

With several complex equipment that run round the clock under extreme conditions in a steel plant it is essential for operators to adopt, right lubrication practices to ensure productivity and profitability.

ExxonMobil's range of hydraulic oils and greases address the requirements of the industry and strives to enable steadfast growth for the industry. For further information on ExxonMobil's offerings for the steel industry, log on to mobil.com/industrial