



# Lubricants: Smooth Sailing Ahead

With the government moving fast to meet the latest emission norms and OEMs making further improvement in design, the lubricants industry is set to witness a major revolution in product innovation.

**A**s per the common definition, "A lubricant is a substance introduced to reduce friction between surfaces in mutual contact, which ultimately reduces the heat generated when the surfaces move." With the help of additives, lubricants may also perform the function of transmitting forces, transporting foreign particles, or heating or cooling surfaces.

The concept is changing day-by-day and year-after-year. With the change in designs of various equipment, varying climate conditions and the regular up-gradation of emission norms, lubricants have undergone a drastic change in formulation and functional parameters. Last but not the least, the thrust on reduced emission, reduced fuel consumption, increased power output, extended equipment life, extended service intervals and overall increase in productivity, has made lubricant experts busy in their jobs to meet the demanding expectations from the user industry.

## Current trends

The trends in the lubricant industry are directly linked to the requirements and demands from OEMs. As far as mining, construction and material handling equipment OEMs are concerned, they are now in the process of designing their equipment to get more performance output at the lowest energy consumption. This is where lubricants can play a vital role.

**Akhil Jha, Vice President Technical, Shell Lubricants India**, says "Shell sees the key five drivers in the HDDEO market. These drivers are influenced by hardware changes and new technology from the OEMs as well as legislative pressures regarding environmental concerns."



Photo courtesy: ExxonMobil

According to **Sanjay Khemka, Director, Pensol Industries Ltd**, the objective of a lubricant is to give more performance output with better reliability of equipment.

He says, "Mining, construction and material handling equipment manufac-

turers tend to design their equipment in such a manner that more performance output with lower energy consumption is achieved, with a focus on energy saving. In the current scenario, the size of the equipment is reduced, but with the same output as given earlier. The lubri-