



## Trends in Lubrication for Manufacturing Sector

In the past, additive developments drove most major shifts in the industry. More recently, improvements in base stocks have been a key catalyst, write **Jayanta Ray**.

The demand for lubricants goes into transportation, automotive, construction, and industrial machinery. Of these, the automotive industry held a dominant share in the global lubricants market and is likely to remain a key contributor of growing demand, both synthetic and mineral in the coming years. Technological advancements in the lubrication industry are changing the shape of the lubrication landscape dramatically. In the past, additive developments drove most major shifts in the industry. More recently, improvements in base stocks have been a key catalyst.

The advent of the higher quality, better performing Group II and Group III base oils has caused a shift in the market where GS Caltex is leading the way with its superior high performance KixxLubo base stocks. Technological changes in automotive

industry mainly with low viscosity yet highly durable engine oils are driving the change from Group I Base Oils to superior Group II/III category.

Even Hi-Performance base stocks like KixxLubo is now competing with Group IV (Polyalphaolefin, or PAO) base stocks. Until recently, Group IV base stocks outperformed other base oils in key properties such as viscosity index, oxidative stability, volatility and pour point. Technology has altered that trend: modern manufacturing techniques like two stage HCR production process and newer advanced additives have improved those properties for modern Group III base oils so they now can rival — and, in some cases, outperform — Group IV base stocks. Today's Group III base oils also can surpass Group IV base oils in terms of lubricity, solubility and anti-wear properties.

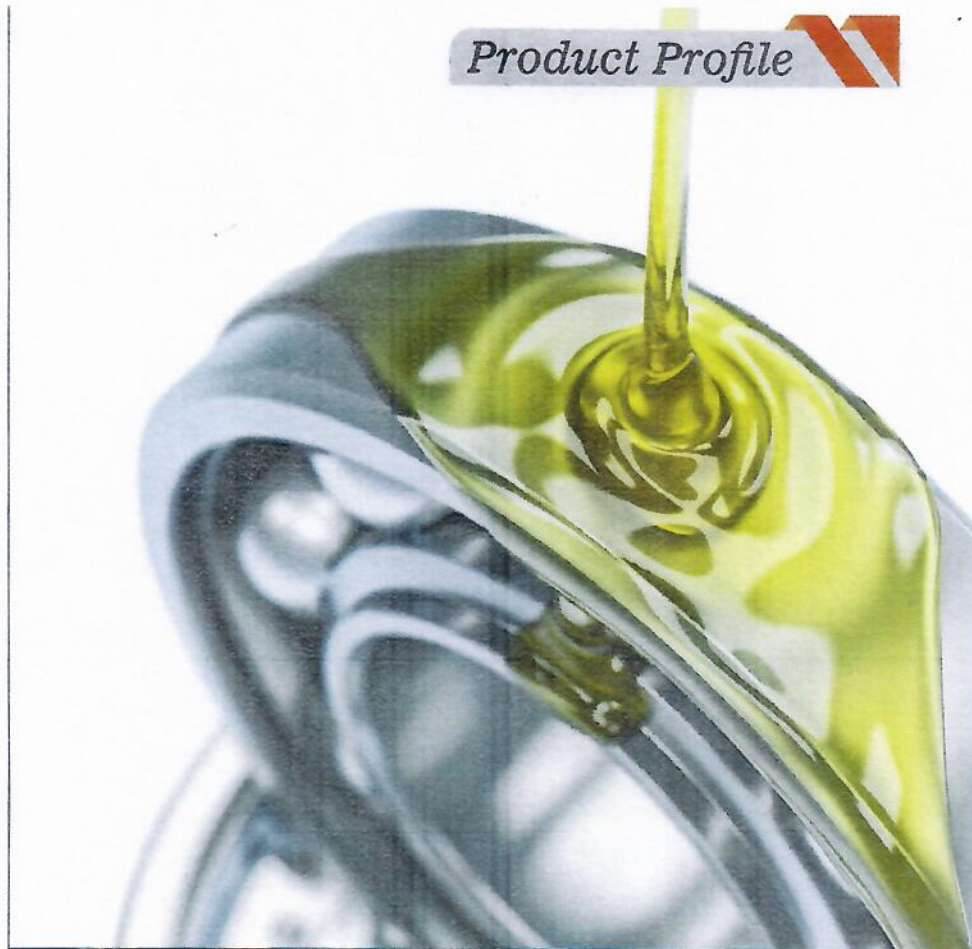
GS Caltex Hi Performance KixxLubo



Our team of experts are available to work with industrial sector customers to help optimize overall lubrication management.

- Jayanta Ray  
GM Industrial and OEM  
GS Caltex India

Using the correct lubricant can help to reduce maintenance costs, reduce operational costs and increase the service life and productivity of equipment. ▶



Base Oil is environment friendly, has low volatility is helping key customers and OEMs reducing oil consumption and improving fuel economy. KixxLubo offers high thermal and oxidation stability to support drain interval extension. All these advantages with cutting edge hydrocracking technology help GS Caltex to adapt more efficiently to changing market conditions and generate greater customer satisfaction.

GS Caltex lubricants made from high quality KixxLubo base stocks focussed on maximising productivity

and reducing costs in manufacturing operations. Wear protection helps limit wear and corrosion to guard against breakdowns. The longer an oils life, the less fluid maintenance is needed for equipment.

Using the correct lubricant can help to reduce maintenance costs, reduce operational costs and increase the service life and productivity of equipment.

GS Caltex KIXX range of lubricants is designed to add value to any manufacturing operations due to following parameters as listed below:

**Wear Protection:** Helps limit wear and corrosion to guard against breakdowns.

**Longer Oil Life:** The longer an oils life, the less fluid maintenance your equipment requires so it can continue to operate without interruption.

**Maintain System Efficiency:** Helping your equipment to operate under higher stresses for longer.

Apart from manufacturing superior KixxLubo base stocks and creating advanced technology KIXX lubricants range supplying to major OEMs in India and abroad, our value added services are an integral part of GS Caltex offering. Our team of experts are available to work with industrial sector customers to help optimize overall lubrication management. **ET**

GS Caltex KIXX range of lubricants is designed to add value to any manufacturing operations. ▶

