Muhammad Hassan Abbasi Lubrication Engineer at MAL Pakistan Limited

Synthetic gear oil with viscosity @ 40 C = 8200

its application is in locomotives traction gears.

Koustuv Mohanty Owner, KINETICS COMMERCIAL COMPANY

I have seen a product of a reputed brand which is claimed to be 17000 cSt @ 40 deg.C in operation. Feels like a adhesive, though not actually that. Primarily for use in Open gear, preferably for kilns & similar equipment operating at nearly constant load. In mill operation with shock load & higher speeds, this is not the most suitable choice. One thing to be borne in mind - under shear & shock loads, the VI improvers (used for achieving this viscosity) are prone to be sheared down resulting in permanent loss of viscosity.

Sumit Rana Area Sales Manager at ExxonMobil

High viscosity gear oils are required for heavy loaded, slow moving applications like locomotive gears, kilns, girth gears etc. Mobilgear SHC 46M has viscosity of 46000 cst at 40 deg C. many other grades with high viscosity in range of 3000 -8000cst are also available. For testing parameters better compare initial and used oil properties at 100deg c rather than 40 deg C.
http://www.mobil.com/Colombia-English/Lubes/PDS/GLXXENINDMOMobil_SHC_Gear_1500_3200_6800.aspx

Don Howard, ICML MLA II Bel-Ray

Gear lubricants of this viscosity and higher are usually used for mill and kiln girth gears. Lubricants of this type with viscosities of up to 46,000 centistokes are available. Typically mills will use fluids up to about 12,000 centistokes and kilns will use the higher viscosity products on the order of 25,000 to 46,000 centistokes. Typical method of application include intermittent spray by auto-system and immersion. Lower viscosity products can be used in pressurized systems.

Jean-Michel Demaret Technical Expert , Concentrating Mill Maintenance at PT Freeport

Normal test slate for gearbox :Viscosity at 40C, water by KF if possible, oxidation or TAN if the oil is synthetic, metals... the usual. Generally thick oil shears down by 20% rapidly. Check the bottom of the drums these heavy oils are more difficult to blend. Some of the OEM may authorize you to use a semifluid grease, which could be cheaper but more difficult to drain. The choice by the OEM for a very thick oil in the drive box of the locomotive is sometimes related to the quality of the seals instead of the calculation of the elastohydrodynamic oil film thickness.

Luigi Brambilla MEL SYSTEMS Technical Sales Manager; EUROPROGETTARE Consultant;

On-line control: the MEL-SYSTEMS Oil Quality Sensor uses a patented method accurately measuring the electro-chemical properties of the oil at a molecular level. This is achieved by

using a very high frequency AC current to measure the ratio between conductance and capacitance of the oil, giving an extremely high level of sensitivity to all common oil wear mechanisms and contaminations with exceptional temperature stability and repeatability. The sensor is configured with the electro-chemical fingerprint for the required oil, as the oil changes (for example with oxidisation, additive depletion, contamination water, TAN and viscosity change), the electro-chemical fingerprint of the oil also changes and these minute differences are detected by the Oil Quality Sensor.
MORE on: www.mel-systems.it (in Italian)
You may find some information of Oil Sensor in English at my Linkedin address: it.linkedin.com/pub/luigi-brambilla/22/a32/a06/

Masoud Aghamasihi
For spraying lubricant for open gears you need two line that should join together in a spray nozzle. You can use Lincoln SD series and Bijur-Delimon SC1-2 series. For more information please refer to the website of Lincoln and Bijur-Delimon.