

REQUIREMENTS FOR LUBRICATING OIL

Lubrication of Sterntube

The lubricating oil used in the sterntube must be of type mineral gear oil with EP additives (Extreme Pressure) single grade oil.

The oil must fulfil the requirements stated in DIN 51517 part 3 for CLP lubricating oils. A special oil intended for sterntube systems can also be used. In that case the oil must be tested to make sure that it suits both the bearings and the sterntube sealings.

Viscosity Grade

The viscosity grade must meet the requirements of ISO VG 100 (100 cSt at 40°C). If other viscosity grade is to be used an approval from Rolls-Royce must be granted.

Degree of Cleanliness

We know from experience that gear oils are sensitive to contamination. That can deteriorate the filterability. It is therefore of utmost importance that the oil is clean at first filling of the system and therefore the following directions must be followed:

- New gear oil must not be mixed up with other oils, even in very small quantities.
- Equipment used to fill the oil must be clean.
- External piping of the hydraulic systems must be carefully cleaned
- New gear oil must be filtered before filling. Rolls-Royce AB recommends as a minimum requirement a cleanliness level of 18/16/13, according to ISO 4406:1999. This is an approximate equivalent of contamination classes NAS 1638 class 7 and SAE AS 4059 class 8. This cleanliness grade will normally be obtained when using a 6 to 8 micron filling filter.

Example of Oil Types

The lubricants in this chapter are typical products only and should not be construed as exclusive recommendations.

Example of oils that fulfil Rolls-Royce's requirements are as following:

- AGIP Blasia 100
- BP Energol GR-XP 100
- Castrol Alpha SP 100
- Chevron MEROPA 100
- Esso Spartan EP 100
- Mobil Gear 600 XP 100
- Shell Omala 100
- Statoil Loadway Marine 100