

**3. Maintenance of Bevel-helical Gearboxes type KS / KSH / MKS / MKSH / MKSHF**

**3.1 Changing the lubricant**

**N.B.!**

**With this gear type, different oil grades must be used according to the gear ratio**

**gear ratio  $i = 6,0$  to  $28,8$  → mineral gear oil ISO VG 150 DIN 51502**

**gear ratio  $i = 33,6$  to  $48$  → special hypoid oil**

**See more on this in the table below**

In our Bevel-helical gearboxes, we use as standard mineral lubricants.

Where synthetic lubricants are used, please refer back to us.

# N.B.! Do not mix mineral and synthetic oil grades. The gearbox could be damaged if this is done.

**3.2 Oil change interval**

The first oil change must be carried out after approx. 500 operating hours. Further oil changes are necessary after every 3000 operating hours. Max. 3 years.

**3.3 Procedure**

- # Allow gears to warm up
- # Secure drive and machine from unintentional movement or switching on
- # Open drain plug. allow lubricant to drain out through drain hole
- # Close drain plug
- # Remove vent and fill with recommended oil grade to the oil level mark or the centre of the sight glass
- # Replace vent

The table below specifies the required oil quantity.

**3.4 Oil type according to parts list or equivalent oil from other manufacturers, miscibility must be checked.**

**3.5 Required oil quantities for all ratios**

Gearbox size	1	2	4	8	16	32	64	128
Oil volume [Litres]	0,3	0,5	0,7	1,8	4	6,5	12	25

N.B.! The volumes stated are approximate values.

The sight glass or oil dipstick is definitive for the precise oil volume.