

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

3.1 Changing the synthetic lubricant

N.B.!

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

gear ratio $i = 6$ to $28,6 \rightarrow$ synthetic gear oil ISO VG 150

gear ratio $i = 33,6$ to $48 \rightarrow$ synthetic hypoid oil

See more on this in the tables below.

This gearbox is filled with a synthetic oil.

N.B. Do not mix mineral and/or 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. 1.000 operating hours. Further oil changes are necessary after every 10.000 operating hours. max. 3 years please work with point 3.3

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 specified oil grade to the oil level mark or the centre of the sight glass
- # Replace vent

The tables below specify the specified oil grade and quantities.

3.4 Specified oil grade for gear ratio $i = 6$ to $28,6$

Mobil	Klüber	Shell
Mobil SHC 629	Klübersynth GEM 4-150 N	Omala HD 150

3.4.1 Specified hypoid oil grade for gear ratio $i = 33,6$ to 48

Mobil	Klüber	Shell
Mobilube SHC 75 W-90 LS	Klübersynth GE 4 75 W 90	Transmission MB 75W-90
SGO SAE 75W-90		Spirax ASX 75W-90

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.