

### 3. Maintenance of Spiral Bevel Gearboxes Type K / L / H / LS / LV / MK / ML / MH / MLV

#### 3.1 Changing the lubricant

This gearbox is filled with a synthetic lubricant.

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

#### 3.2 Spiral Bevel Gearboxes with grease lubrication

These gearboxes have a lifelong grease filling and are hermetically sealed. Under normal operating conditions, (Transmission temperature  $\leq 80^{\circ}\text{C}$ ) a change of grease is therefore not necessary.

In the case of extremely rough operating conditions, we recommend changing the grease after 10 years. To do this the flange on the gearbox must be removed (4 screws)

The grease can now be removed from the gearbox.

Then refill the gearbox with a type of grease specified by us and refit the flange.

The table below specifies the required grease quantities.

Grease type according to parts list or equivalent grease from other manufacturers, miscibility must be checked.

##### 3.2.1 Required grease quantities

Gear size	050	100	200	230	250	300	370	400	500	600
Grease qty. [kg]	0,1	0,2	0,5	0,7	1	2	3,5	5	13,5	30

#### 3.3 Spiral Bevel Gearboxes filled with oil

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.

It is necessary to change the oil, please work with point 3.3.1

##### 3.3.1 Procedure

- # Allow gearbox 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 inspection glass
- # Replace vent

The table below specifies the required oil quantity.

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

##### 3.3.2 Required oil quantities

Gear size	050	100	200	230	250	300	370	400	500	600
Oil qty. [Liter]	0,1	0,2	0,5	0,7	1	2	3,5	5	13,5	30

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

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