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

3.1 **Changing the lubricant**

In our bevel 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 **Spiral Bevel Gearboxes with grease lubrication**

These gearboxes have a lifelong grease filling and are hermetically sealed. Under normal operating conditions, a change of grease is therefore not necessary. In the case of extremely rough operating conditions, we recommend changing the grease after 5 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 recommend by us and refit the flange.

The table below specifies the required grease quantities.

<table>
<thead>
<tr>
<th>Gear size</th>
<th>50</th>
<th>100</th>
<th>200</th>
<th>230</th>
<th>250</th>
<th>300</th>
<th>370</th>
<th>400</th>
<th>500</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grease qty. [kg]</td>
<td>0.1</td>
<td>0.2</td>
<td>0.5</td>
<td>0.7</td>
<td>1</td>
<td>2</td>
<td>3.5</td>
<td>5</td>
<td>13.5</td>
<td>30</td>
</tr>
</tbody>
</table>

3.3 **Spiral Bevel Gearboxes filled with oil**

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.

3.3.1 **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 recommended oil grade to the oil level mark or the centre of the inspection glass
# Replace vent

The table below specifies the required oil quantity.

<table>
<thead>
<tr>
<th>Gear size</th>
<th>50</th>
<th>100</th>
<th>200</th>
<th>230</th>
<th>250</th>
<th>300</th>
<th>370</th>
<th>400</th>
<th>500</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil qty. [Liter]</td>
<td>0.1</td>
<td>0.2</td>
<td>0.5</td>
<td>0.7</td>
<td>1</td>
<td>2</td>
<td>3.5</td>
<td>5</td>
<td>13.5</td>
<td>30</td>
</tr>
</tbody>
</table>

N.B. The volumes stated are approximate values.

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