Assembly of the Oil Seal

That the assembly of oil seals has to be done with a lot of care speaks for itself. The Oil Seal, the shaft and the housing have to be clean. Dirt, which may enter the system during assembly between the sealing lip and the shaft, can cause leakage.

Because the inside diameter of the Oil Seal during assembly has to be stretched, it is necessary that the shaft has a chamfer. The angle for the chamfer is approximately 30° to 50°.

When a spline on the shaft is present, a mounting sleeve must be used to protect the sealing lip. The housing chamfer must have a length of at least 1 mm. The sides have to be obtused.

During assembly, it is essential to prevent damage to the oil seal. If the Oil Seal must pass over irregularities such as screw-thread or splines, the shaft must be covered with oil soaked paper, tape, or with a protective socket or mounting sleeve made of metal or plastic.

The pressing of the Oil Seal into the housing has to be done evenly. Preferably, an adapted fitting tool should be used, so that the pressure is transferred through the part of the Oil Seal which is reinforced with metal.

In order for the Oil Seal to operate correctly, the sealing lip material has to be compatible with the medium to be sealed. To improve the sliding over the shaft, it is required that both the shaft and the sealing lip are lubricated with oil or grease. Oil Seals with a leather sealing lip have to be oil-soaked in advance.
When an Oil Seal with a metal case (ERIKS types M and GV) is used, it is recommended to apply an Omnifit-fastening product. Lubrication of the shaft will have a beneficial effect during the running-in of the seal. When using a rubber hammer, the lubrication must be applied evenly.

Comment: An Oil Seal may not be force into the housing. By greasing the housing, the assembly will be easier.