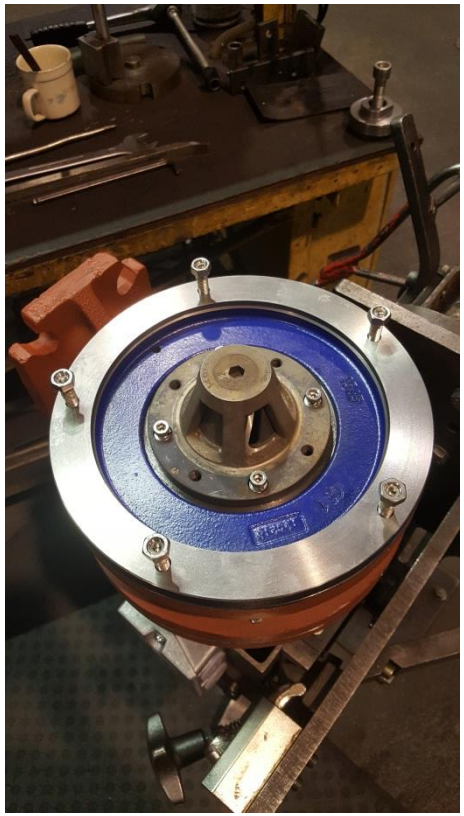
Disassembly/ Assembly of cutting system with end-face seal at ES 120-164

Disassembly of cutting system with end-face seal at ES 120-164

- Wear safety goggles and protective gloves
- Clean the pump from heavy soiling
- Place the pump with the intake upwards in a suitable device
- Remove the nuts M8 and take off the intake

Disassembly of cutting system with end-face seal at ES 120-164



- Release the nuts M8 and remove the housing cover
- Remove the fixing screws M6x16
- Insert studs into the knife M8x12
- The knife is lifted out of the cover
- Remove the housing cover and the knife

Disassembly of cutting system with end-face seal at ES 120-164

- Slide the lever with claw 14x14 length 390 into the discharge port, minimum 200 mm
- Turn the cutter until the lever clamps in the channel of the impeller

Disassembly of cutting system with end-face seal at ES 120-164

- Loose the cutter with an Allen key 8 mm
- If necessary, hit the cutter with a hammer (wear protection goggles)
- if the cutter can not yet be loosened, smooth separation can be caused by heating
- For this purpose heat the cutter evenly in the area of the impeller
- After heating the cutter can be loosened
- Allow the cutter to cool down and disassemble

Note:

The more the cutter is worn out the more complicated is the disassembly

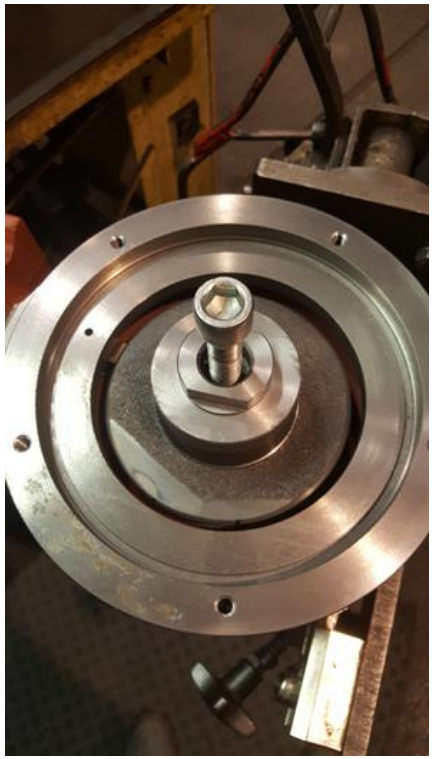
Disassembly of cutting system with end-face seal at ES 120-164

- Disassembled cutting system
- In the intake of the single-channel impeller the lever can be seen

Disassembly of cutting system with end-face seal at ES 120-164

- Disassembly of the impeller retaining washer by loosening the countersunk screw with a hexagon socket
- After loosening, the countersunk screw M8x25 DIN 7991 and the impeller retaining washer need to be removed
- Remove the lever from the impeller now
- Pull of the impeller with dismantling tool ORPU order number 170002
- Insert the pressure piece in the hole M8 of the shaft
- Screw the dismantling tool into the impeller

Disassembly of cutting system with end-face seal at ES 120-164

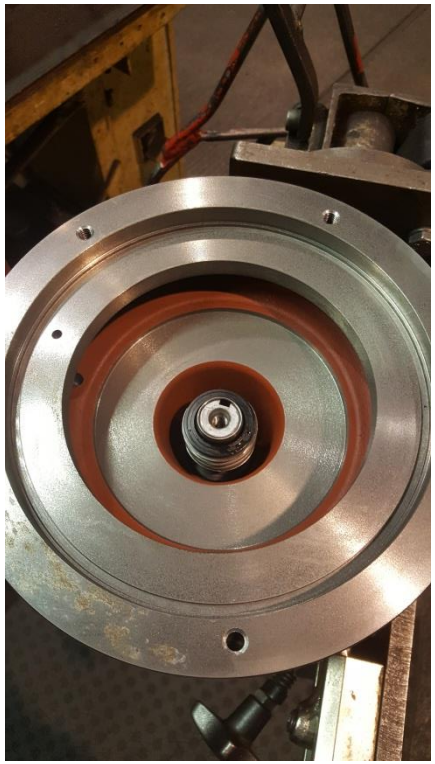


- Hold the dismantling tool with a spanner 36
- Screw in the pressure screw by using an Allen key 14 mm
- The impeller is pulled by the shaft
- The end-face seal is now accessible

Important:

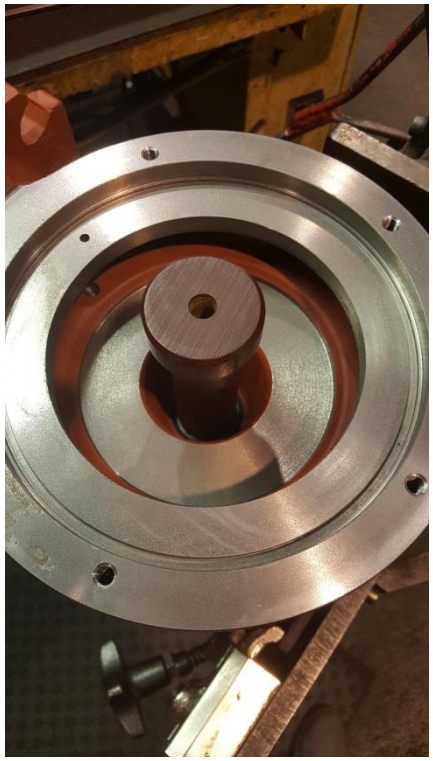
The lever must not be in the impeller otherwise it will be destroyed.

Disassembly of cutting system with end-face seal at ES 120-164



- The single-channel impeller is dissembled now
- To dismantle the end-face seal the parallel key has to be removed from the groove
- With a sharp punch it is no problem
- With a suitable tool the end-face seal is pulled from the shaft
- The use of 2 stable slot screwdrivers has proven to be successful
- Remove the counter ring from the pump housing afterwards

Assembly of cutting system with end-face seal at ES 120-164



- Clean the sealing surface thoroughly with a suitable cleaner (brake cleaner has proven its reliability)
- For an easier installation of the counter ring, moisten the O-ring with detergent
- Use an assembly sleeve (170021) to assemble the end-face seal
- Press in the counter ring with ORPU tool 170017
- Place the thrust ring in the middle of the end-face seal
- Insert the parallel key into the shaft groove

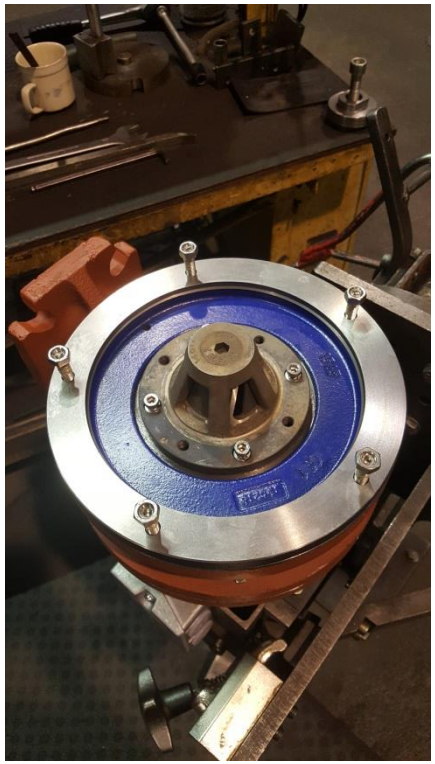
Assembly of cutting system with end-face seal at ES 120-164

- Slide the impeller onto the shaft
- Consider the allignment of the parallel key
- If necessary use the tool 170013 to mount the parallel key on the shaft
- Moisten the countersunk screw with screw locking medium strength
- Slide the lever into the impeller and tighten the countersunk screw M8x25

Assembly of cutting system with end-face seal at ES 120-164

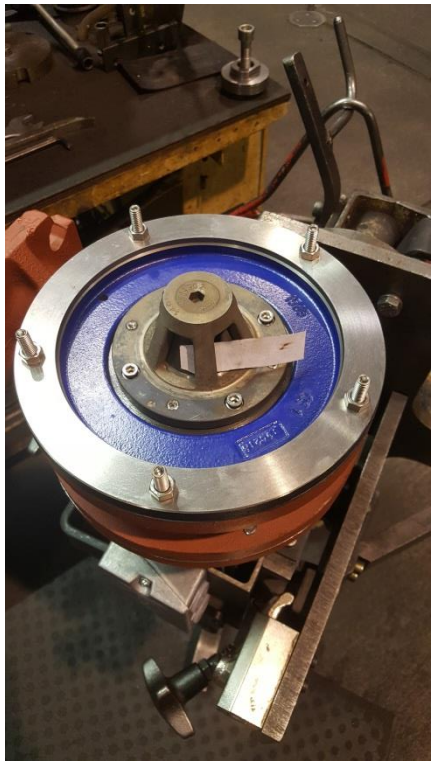
- Hold the impeller with the help of the lever
- Screw the cutter in the impeller and tighten it with an Allen key

Assembly of cutting system with end-face seal at ES 120-164



- Place the knife with O-ring 80x3 in the housing cover and grease with graphite grease
- Screw the studs 8x12 into the knife
- Place spring lock washers 6 mm DIN 127 with screws DIN 6912 6x16
- Place the housing cover with the pre-assembled knife on the cutter, thus the housing cover is centered
- Tighten the fastening screws M6x20
- By lifting the knife the cutting gap of 0,10-0,15 mm is adjusted
- The knife is lifted by the studs M8x12
- Tighten the fastening screws after adjustment

Assembly of cutting system with end-face seal at ES 120-164



- The adjustment must be carried out very conscientiously
- The cutting system is set well if a distance of 0.1-0.15 mm is set on all webs of the knife
- The check can be done with a piece of paper
- Only a cutting system, which is set according to the specifications, ensures a safe operation

Assembly of cutting system with end-face seal at ES 120-164

- Place the O-ring in the entry of the intake
- Apply graphite grease on the sealing surface
- Put on the intake
- Tighten the nuts M8 evenly

Disassembly of cutting system with end-face seal at ES 120-164

If you have any questions or comments about this manual during disassembly, please contact:

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