

Disassembly/ Assembly of cutting system with end-face seal at TES 148



Disassembly of cutting system with end-face seal at TES 148



- 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 fixing screws 4x M6x16 DIN 6912

Disassembly of cutting system with end-face seal at TES 148



- Evenly screw in 2 opposite studs M8x12 DIN 913
- Thereby the knife is lifted out of the pump housing
- Screw until the knife can be removed by hand
- Be sure to wear protective gloves

Disassembly of cutting system with end-face seal at TES 148



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

Disassembly of cutting system with end-face seal at TES 148



- 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 cutting is worn out the more complicated is the disassembly

Disassembly of cutting system with end-face seal at TES 148



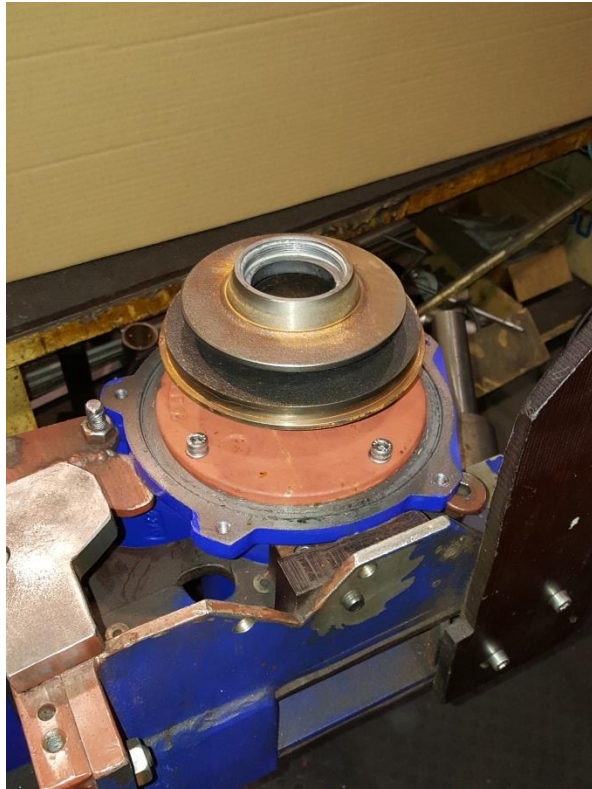
- Disassembled cutting system
- In the intake of the single-channel impeller the lever can be seen

Disassembly of cutting system with end-face seal at TES 148



- After dismantling the cutting system the end-face seal can be dismantled if necessary
- 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

Disassembly of cutting system with end-face seal at TES 148



- Remove the pump housing by dismantling the 5 hexagon socket screws M8x35 DIN 912

Disassembly of cutting system with end-face seal at TES 148



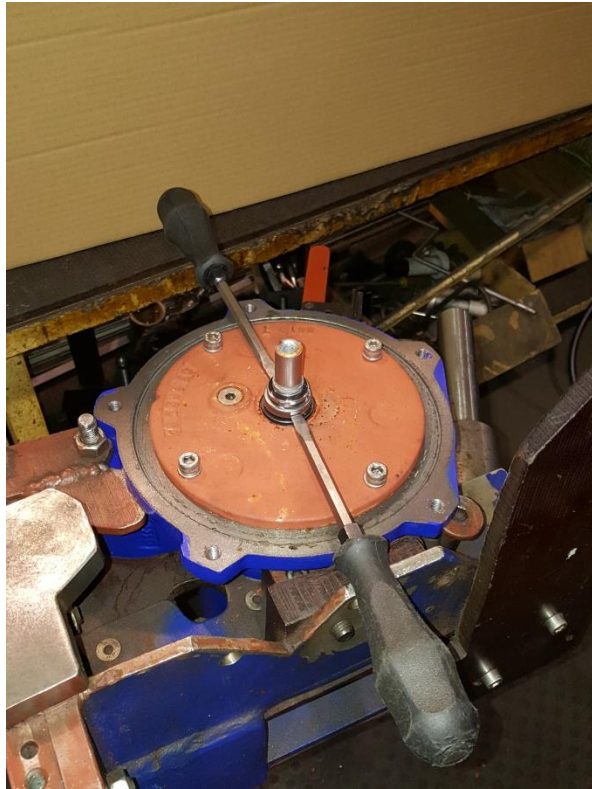
- Pull of the impeller with dismantling tool ORPU order number 170002
- Insert the pressure piece in the hole M8 of the shaft
- Screw the dismantling tool into the impeller
- Hold the dismantling tool with a spanner 36
- Screw in the pressure screw by using an Allen key 14 mm
- The impeller is pulled by the shaft
- The end-face seal is now accessible

Disassembly of cutting system with end-face seal at TES 148



- The single-channel impeller is disassembled now
- Now it is possible to control the oil
- If the oil is mixed with water (turbidity of oil), the end-face seal must be replaced
- The parallel key needs to be removed from the groove to dismantle the end-face seal
- With a sharp punch it is no problem

Disassembly of cutting system with end-face seal at TES 148



- After the dismantling of the locking ring DIN 471 with a locking ring plier, the end-face seal can be pulled from the shaft
- The use of 2 stable slot screwdrivers has proven to be successful
- Remove the counter ring from the oil housing afterwards by removing the 4 Allen screws M8x25 DIN 912 and removing the counter ring from the oil side

Assembly of cutting system with end-face seal at TES 148



- Replace the shaft seal 20x35x7 DIN 3760 NBR as well
- Fill in the new oil before assembling the oil cover (Lubricating oil CL32 ISO VG32)
- The correct level is reached when the oil comes up to the tapering on the end plate
- Now mount the oil cover by using the shaft sleeve

Assembly of cutting system with end-face seal at TES 148



- 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 (170020) to assemble the end-face seal
- Press down the end-face seal with the tool (170018) and install the shaft locking ring afterwards
- Insert the parallel key

Assembly of cutting system with end-face seal at TES 148



- Slide the impeller onto the shaft
- Consider the alignment of the parallel key
- Moisten the countersunk screw with screw locking medium strength
- Guide the countersunk screw through the impeller retaining washer and screw it in the shaft
- Hold the impeller with the help of the lever
- The lever stays in the impeller

Assembly of cutting system with end-face seal at TES 148



- Screw the cutter in the impeller and tighten it with an Allen key
- Hold the impeller with the help of the lever
- 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
- Insert the knife in the pump housing and press it down (all screws are loose)
- Put on the pump housing
- There should not be a gap between the knife and the cutter (centered in relation)
- Mount the screws M8x35 DIN 912 on the pump housing

Assembly of cutting system with end-face seal at TES 148



- 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
- 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
- Only a cutting system, which is set according to the specifications, ensures a safe operation

Disassembly of cutting system with end-face seal at TES 148



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

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