

DISMANTLING AND MOUNTING OF THE KS PROPELLER

General rules

It is important to study the drawings and the instruction manual carefully before a dismantling operation.

It is of great importance that the parts which are to be dismantled, as well as the parts close by, are cleaned as much as possible before the dismantling takes place. Use a table or a tray to place the dismantled parts on. Protect the propeller equipment against moisture and impurities. Before dismantling check the position of every part so that they can be re-assembled in the correct way.

Practically every component of the Kamewa propeller is machined to great dimensional accuracy and smoothness. Handle them with great care. Heavy components must be lifted in loops, not in wires or chains. When it is necessary to use a wire or chain, inserts must be used. Use the special tools, which are delivered. Use only linen rags not twist when cleaning. For washing, use paraffin or fuel oil. Trichlorethylene must not be used as the rubber seals may be damaged. Lubricate the cleaned parts before re- assembling with the same oil as in the hydraulic system. Screws and bolts must be tightened with the prescribed torque when specified (see "Technical data") and locked according to the instructions.

Propeller blades

Empty the oil from the propeller hub chamber if more than one blade is to be changed.

1. Turn the propeller until the blade to be removed is in a vertical position on top of the hub.
2. Cut away the tack welds on the locking plates of the blade bolts with a chisel.
3. Loosen and dismantle the blade bolts with the special tools.
4. Install the blade removal tools and lift the blade straight out of the hub. Use a lead hammer if necessary. Be careful so that the blade sealing ring under the blade flange is not damaged.
5. Before the blade is re-installed inspect the bearing and sealing surfaces under the blade flange and in the hub so that they are clean and free from scratches and wear and from foreign particles embedded in them.
6. Insert the new O-ring of the correct type. Lubricate the bearing and sealing surfaces before installing the blade.

7. Install the blade. Mount the bolts which must be tightened with a torque according to the directions in "Technical data". Tightening tools are delivered.
8. Secure the bolts with locking plates, which must be tack-welded into the blade flange. See the special instructions in the supplementary list.
9. Fill the propeller hub chamber with oil and make a pressure test.

Blade sealing ring

Change the O-ring in the blade sealing ring for one blade annually, e.g. during drydock painting or classifying or when docking for other reasons. The O-ring change has to be recorded. The following year change the O-ring under another blade and after a third year under a third blade and so on. Thus a continuous change of sealing rings is achieved and leakage from wear is avoided. If the O-ring seems to be damaged on inspection, the O-ring under all the blades must be changed.