

Shafts for KS Propellers

The shafts are made of carbon steel or stainless steel, they are hollow drilled to give house to a push-pull rod. Parts of carbon steel shafts that are in contact with seawater are protected by corrosion resistant material.

If there is more than one shaft, they are connected by flanges or by flange couplings or a split muff coupling. At the aft end of the tale shaft there is a flange bolted to the propeller hub.

The performance specifications and the dimensions of the shaft and type of coupling are given in the drawing “Shafting Arrangement”

OIL DISTRIBUTION BOX

O.D. Box located at the forward end of the gearbox – Shafting line type B

An O.D. Box type **F** is located at the forward end of the gear box, it is connected to a tube inserted in a hole all along the secondary shaft of the gearbox. The tube is linked to the pitch setting mechanism placed at the forward end of the shaft, the pitch setting mechanism transfers the Ahead – Astern movement to the push pull rod.

The oil pressure is transferred via rotary joint and flexible pipes that require a certain space inside the O.D. Box. The Ahead – Astern movement of the piston rod is transferred to the remote control as a feedback signal via a transverse shaft in the O.D. Box and a potentiometer placed in an electrical box outside the O.D. Box

O.D. Box located on an Intermediate Shaft – Shafting line type A

An O.D. Box type **A** is located on an intermediate shaft. The aft end of the intermediate shaft is connected to the propeller shaft by a split muff coupling. At the forward end of the intermediate shaft there is a flange connected either to the gearbox flange or to the flange of another solid intermediate shaft.

The Ahead – Astern movement of the piston rod is transferred to the remote control to gives a feedback signal via a yoke and a ring placed outside the split muff coupling which transfer the oscillating movement to a potentiometer placed in an electrical box of a feed back unit.

PUSH-PULL ROD SYSTEM

A push-pull rod is placed in the inner hole of the shaft and it is linked to the piston rod located inside the propeller hub at the aft side and to the pitch setting mechanism at the forward end.