



Rudder Trn 200 ST, TRN 400 ST



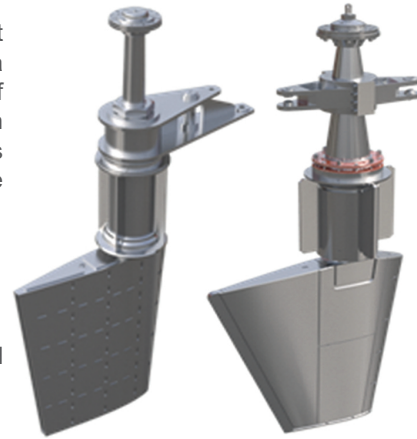
DESCRIPTION

Displacement Vessel Steering System

With more than 20 years of experience, MIO has become serious market player in manufacturing of complete steering gears systems suitable for a wide range of naval vessels. Our products are designed with a range of rudder deflection ensures high performance. Undisputed reliability has been achieved thanks to the doubled hydraulic power units. When a failure occurs as a result of hydraulic element failure, the damaged unit is isolated and the steering gear remains efficient and ensures continuous ship's control.

Piston type steering gear main parts:

- Rudder actuator mechanism: two piston type cylinders
Elements for connecting tiller with cylinders: bolts, eyes, connecting inks, etc. Tie Rod
- Two equivalent power pack units with necessary valve blocks, valves and hydraulic fittings
- Spare oil tank with a hand pump
- Electric equipment of drive and signalling system



SPECIFICATIONS

TYPE	Value	Value
Overall Length	5000 mm	2500 mm
Stock Length	2800 mm	2489 mm
Rudder Blade	2200 mm	1100 mm
Distance Between two Rudders at Installation Point	2734 mm	3000 mm
Rudder Angle of Rotation	Right to Left Side $\pm 32^\circ$	Right to Left Side $\pm 32^\circ$
Mechanical Systems Weight	650 Kg	1300 Kg
Steering Time	17-20 Sec for $\pm 35^\circ$	16-20 Sec for $\pm 32^\circ$

Propellers Surface Piercing & Submerge Propellers

DESCRIPTION

MIO field of activities has a range of designing, reverse engineering and production of various marine propellers for military, commercial, passenger and pleasure vessels since 1996. Our policy is based on the two principles of quality and the minimum delivery time to the customer; in this regard, serious efforts have been taken out by employing the experts' engineers as well as modern technologies and quality control techniques. Our industrial production is expanded to the wide range of different submerged and Surface Piercing Propellers (SPP) and also design and manufacture of different propeller sizes from precise small ones such as calibrator propellers up to large ones such as 3m in diameter. The most advantageous characteristic of propeller products is using the CNC machining technology in the manufacturing and final polishing by expert technicians that facilitates the achievement of the best geometrical precision and surface quality according to the international standard demanded by the customer. It is also notable that in design and manufacturing of the propellers, the best materials with necessary strength and corrosion resistance is utilized; such as the stainless steel, and other marine aluminium alloys. Quality is one of the main targets in our products, the quality considerations are signified in all the production procedures to deliver the qualified products with sufficient safety and geometrical accuracy for the customer satisfactory.



SPECIFICATIONS

N.blades	Direction of Rotation	Pitch	Material	Diameter	Product
3	RH&LH	1620	NB	1180	TPF
5	RH&LH	1650	NB	1500	TPF
5	RH&LH	880	S.S	720	TPS
5	RH&LH	650	NB	500	TPS
3	RH&LH	495	S.S	387	TPF