

Naval Steering Gear & Rudder System

CAPABILITY SHEET - ELECTRO-HYDRAULIC STEERING MACHINE - ENGINEERED TO ORDER & INDIGENISED

THE SYSTEM

WHAT	A ship's steering gear is the machine that moves the rudder to steer the vessel - answering the helm order from the bridge, fast and reliably, with full redundancy.
OUR ROLE	Neometrix designs, builds and indigenises the electro-hydraulic steering machine - power units, actuator, control and telemotor; the rudder-stock forging is bought-in.
STATUS	Engineered to order / indigenised; sized to the rudder torque, the ship and the classification rules. No specific delivered ship or class is claimed on this sheet.

THE MACHINE

POWER UNIT	An electro-hydraulic power unit - motor-driven pumps, reservoir, valve manifolds and piping - supplies the hydraulic power; main and auxiliary units are duplicated.
ACTUATOR	The actuator turns the rudder stock: hydraulic rams on a Rapson-slide tiller for large rudders, or a compact rotary-vane actuator direct on the stock.
CONTROL	A telemotor / follow-up control turns the bridge helm order into a commanded rudder angle, with rudder-angle feedback and an emergency local steering position.

REDUNDANT & SAFE

MAIN + AUXILIARY	Main and auxiliary steering, two independent power units and changeover give the redundancy classification and naval rules require - a ship must never lose steering.
FAST + PROTECTED	The gear swings a large rudder fast to answer the helm, with relief and buffer protection, and holds it on the ordered angle; shock-mounted for naval service.
SURFACE SHIP	For surface warships and naval vessels - the steering machine in the steering-gear compartment, distinct from the deck machinery on the deck above.

DISTINCT & HONEST

VS DECK MACHINERY	Deck machinery - winches, capstans, windlasses, davits - handles lines, anchors and boats on deck; the steering gear moves the rudder. Different machines; we build both.
OUR FRANCHISE	It is an electro-hydraulic, controls and heavy-fabrication machine - our competence; the rudder-stock forging and classification-approved valves are bought-in.
ENGAGEMENT	Send the rudder torque, the ship and the rules to sales@neometrixgroup.com for a clause-by-clause compliance matrix in two working days.

DEFENCE PROGRAMMES DESK

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