

Marine & Naval Hydraulic Deck Equipment

CAPABILITY SHEET - CLOSURES, WINCHES & CAPSTANS - ENGINEERED TO ORDER

THE EQUIPMENT

WHAT	Hydraulically operated marine & naval deck equipment for naval and commercial vessels: two families driven by a common marine hydraulic system - watertight & weathertight closures, and deck machinery. Generic marine deck equipment - structural and damage-control, not a fighting system.
TWO FAMILIES	Closures - hydraulically operated watertight/gastight doors, hatch covers, ramps and shell doors. Deck machinery - capstans, mooring & warping winches, anchor windlasses and davits. Both driven by a 210 bar marine hydraulic power pack and valve control.
STATUS	Engineered to order and delivered turnkey; quoted across naval and marine deck-equipment requirements. No specific delivered vessel installation is claimed on this sheet.

WATERTIGHT CLOSURES

THE PARADOX	A watertight closure must be as strong and as sealed as the structural bulkhead it sits in - holding the sea and the pressure head - yet open and shut on command for decades in salt, wet and motion. Heavy hydraulic actuation and seals rated to the head solve it.
SEALING & DOGGING	A leaf stiff enough not to deflect and break its seal under load; a seal rated to the pressure head, not to still water; dogging that clamps it uniformly; position indication so the crew always knows its state.
MANUAL OVERRIDE	A door that fails shut can trap a crew; one that fails open can flood a compartment. So every safety-critical closure carries redundant actuation and a manual override - the damage-control discipline, and a class requirement.

DECK MACHINERY & HYDRAULICS

DECK MACHINERY	Capstans, mooring & warping winches, anchor windlasses and davits - sized by safe working load, rendered pull and speed, and above all the brake holding load, with a fail-safe brake that sets automatically when power or control is lost.
MARINE HYDRAULICS	A marine hydraulic power pack (reservoir, pumps, accumulator) at about 210 bar; directional-valve control with local and remote operation and manual override - the single hydraulic heart driving every closure and winch on the deck.
CORROSION	Corrosion-resistant marine steels, bronze and coatings, sealed hydraulics and careful metal pairing - what lets deck equipment survive the salt where shore equipment would gall and seize.

CLASS & ENGAGEMENT

CLASSIFICATION	Designed, built and surveyed to classification society rules - IRS, DNV or LRS - with material and weld certification, then proven in harbour acceptance trials (HAT) and sea acceptance trials (SAT) before handover.
SOURCING	Hydraulic pumps, valves, seals, motors, brakes and instrumentation are proprietary items from established makers; Neometrix engineers and integrates the system - its hydraulics franchise (power packs, cylinders, servo actuators), marinised for the deck.
ENGAGEMENT	Send the opening or load schedule and the class to sales@neometrixgroup.com - a clause-by-clause compliance matrix within two working days.

DEFENCE PROGRAMMES DESK

sales@neometrixgroup.com · +91 7777 876 876 · neometrixgroup.com
Neometrix Defence Limited · E-148, Sector 63, Noida, Uttar Pradesh, India