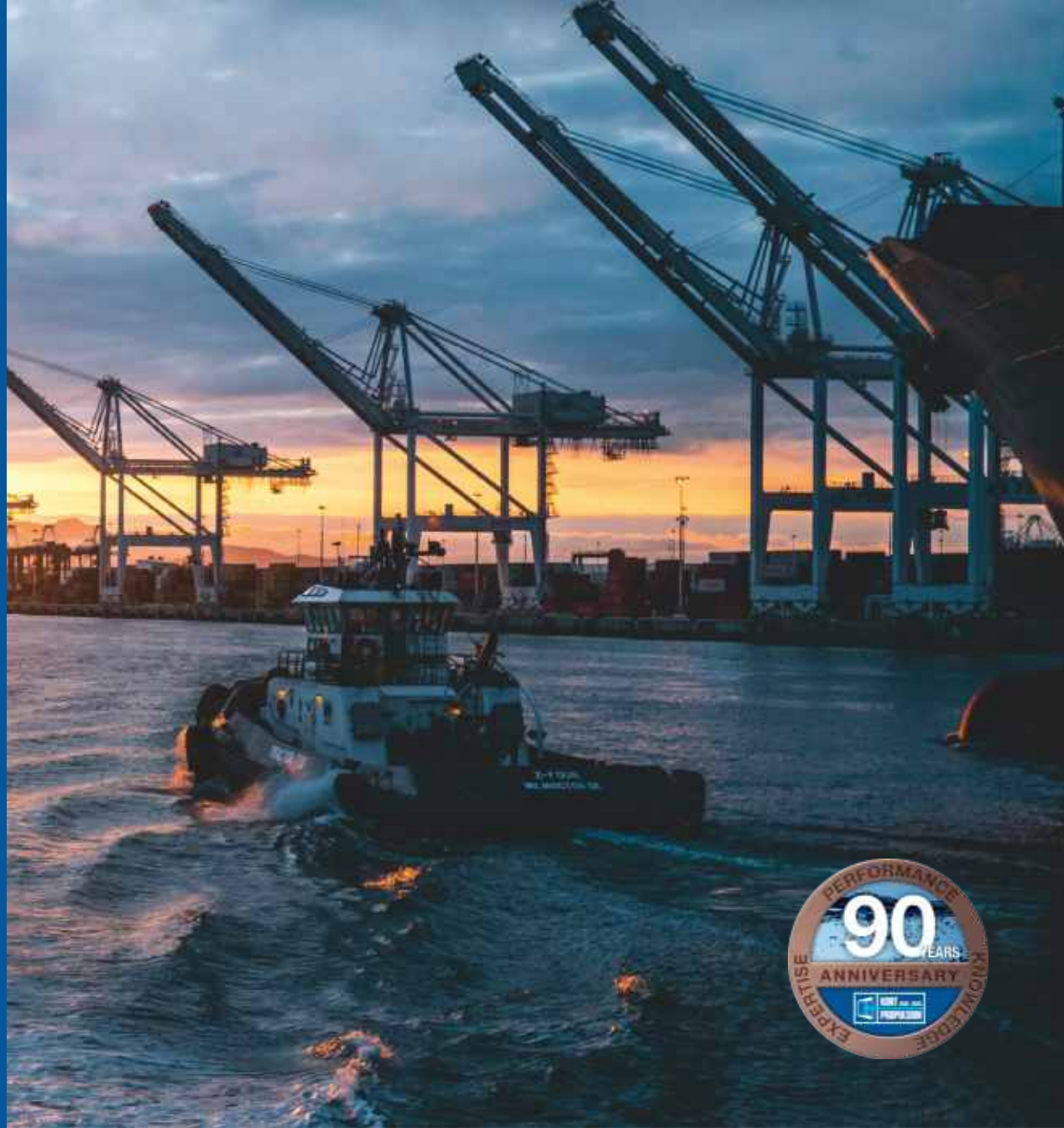


# Take Advantage of the Kort Experience

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# Kort Nozzles & Propellers

**The advantages of Kort Nozzles are well known for towing vessels such as tugs and fishing boats.**

However, significant improvements in performance can be achieved on vessels such as coasters, inland waterways craft and bulk carriers using designs optimised for each vessel type.

The key to vessel performance lies in design of the propeller! This is true whether an open propeller or Kort nozzle system.

## Kort's experience spans over 90 years

During this time the company has been involved in many model tests and full scale trials for a wide variety of vessels. Kort engineers therefore have the expertise to provide powering and performance estimates for every application from 100mm diameter propellers for an ROV thruster to 5300mm and above for commercial vessels.

Designs have been made for controllable pitch propeller blades for Kort nozzle operation up to 5300mm diameter. Kort have also supplied high definition propellers and impellers for high speed craft with conventional propulsion, surface piercing drives and waterjets. Propellers for azimuthing units and tunnelthrusters are designed and supplied.

## Consultancy Services

Kort is employed by many owners, shipyards and designers at the design stage to ensure vessel performance meets specification.

This service can cover basic advice on selection of propulsion system or engine/gearbox combination through to full performance estimates and attendance on trials.

Kort are often asked to supply propulsion and manoeuvring equipment packages in addition to Kort nozzles and propellers. We regularly supply sterngear, seals, engine cooling systems, tunnelthrusters, rudders and steering gear. We are in a position to advise on the optimum propulsion system and items of equipment for a particular vessel and our propellers are always custom designed for a particular application



# Kort Thrusters

**The Kort thruster range has evolved in response to customer demand.**

Our reputation is for provision of impartial advice and effective propulsion packages which have grown to include our range of tunnelthrusters and small azimuthing propulsion units.

These are designed for hydraulic drive up to a maximum of 300HP input power.

## Kort Range

Our thrusters are primarily designed for commercial displacement vessels but have been successfully fitted to planing craft and inland waterways pleasure craft.

Long service life and ease of maintenance have been key factors in design and development.

Models KT30-KT170 have the hydraulic motor fitted in the drive housing directly coupled to the propeller shaft which runs in taper roller bearings housed in the nose cone assembly. These are pre fitted and tested prior to delivery.

Models KT200-KT300 have a lower gearbox within the tunnel with the hydraulic motor plugged into the input housing inside the vessel. These larger units can also have diesel drive via a cardan shaft and right angle gearbox. A range of ratios is available to suit engine rating.

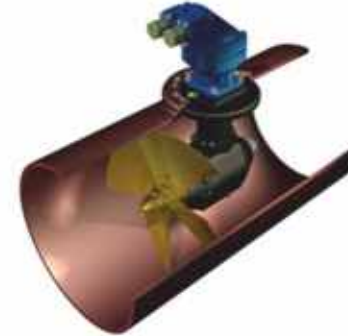
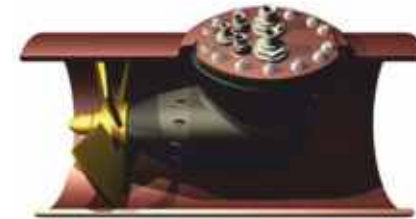
All models can be supplied to suit a range of system operating pressures and can be integrated with either closed loop or open loop hydraulic systems.

All units are supplied with a comprehensive instruction manual.

Our joint experience working with shipbuilders and repairers has influenced the design of our thrusters, resulting in lower installation costs and more reliable commissioning.

Hydraulic services and testing can be carried out on site in conjunction with Hercules Hydraulics.

Tunnels are supplied in standard lengths in mild steel, aluminum or grp with stainless steel ring in way of the propeller.

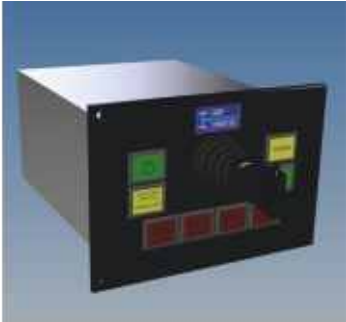


# Wheelhouse Controls

Our intelligent wheelhouse controller gives big boat performance at small boat cost.

The Thruster Controller is a 24V DC unit, sealed to IP65 standards for wheelhouse or protected external locations only. Thrust control is via a proportional "put and stay" joystick. Each unit can be selected for duty or set to standby and monitors four alarms. The unit is pre-wired, tested and supplied with plugs and two metres of cable.

Incorporating a proportional control, warning lights and a test for alarm it can be integrated with an autopilot and either single or multi-station systems with full control can be supplied.



# Installation & Maintenance

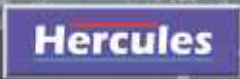
All units are supplied with a comprehensive instruction manual.

Experience working with shipbuilders and repairers has been a central factor in the design of Kort Thrusters resulting in lower installation costs and more reliable commissioning which can normally be carried out unsupervised.



# Hydraulic Tunnel Thrusters

Model	Propeller	Input (kW) (Pump/Motor)	Thrust (Kg)	Tunnel Length (mm)	OD of Tube (mm)
KT30	375	21/19	320	800	406
KT45	375	29/27	420	800	406
KT70	505	31/28	500	900	559
KT90	505	41/37	620	900	559
KT120	505	62/56	800	900	559
KT140	700	58/53	970	1250	762
KT170	700	96/88	1360	1250	762
KT200	750	115/105	1625	1500	813
KT250	750	187/170	2235	1500	813
KT300	750	240/223	2700	1500	813



# Hercules Hatches

The unique design of the locking mechanism and the quality of construction place Hercules Cast Hatches in a class of their own.

[Download Assembly Data and Sizes](#)



## Strength

As the name suggest Hercules Hatches are very strong.

The hatch cover and flange ring are cast from corrosion resistant marine grade aluminium, with deep section webs on the underside to prevent distortion under load

## Durability

All moving parts are engineered from type 316 marine grade stainless steel. All components are made to exacting standards and proportioned with strength and reliability in mind.

The bushes and bearings fitted to Hercules Hatches are manufactured from hard wearing Ertalyte, with replacements being readily available and easily fitted. In fact anything that might wear is easily and inexpensively replaceable, so a Hercules Hatch will last as long as the vessel itself.

## Water Resistance

Hercules Hatches offer exceptional waterproof integrity for a deck hatch.

Hercules Hatches have a fuel and chemical resistant neoprene sealing ring fitted to the underside of the cover giving maximum protection against damage.

## Ease of Operation

The unique Hercules locking mechanism utilises large diameter stainless steel shooting bolts which engage in Ertalyte bushes within the frame. This mechanism makes the Hercules Hatch exceptionally smooth in operation.

On deck the hatch is opened and closed using a recessed handle which is lifted and turned through 90 degrees. Below deck it is operated by a hand wheel.

## Safety

The locking mechanism is precisely engineered for strength and security. Once the shooting bolts are engaged, the hatch cannot be accidentally opened.

Hercules Hatches are designed to with stand years of punishment in the harshest of marine environments. The full cast assembly range have BV type approval.



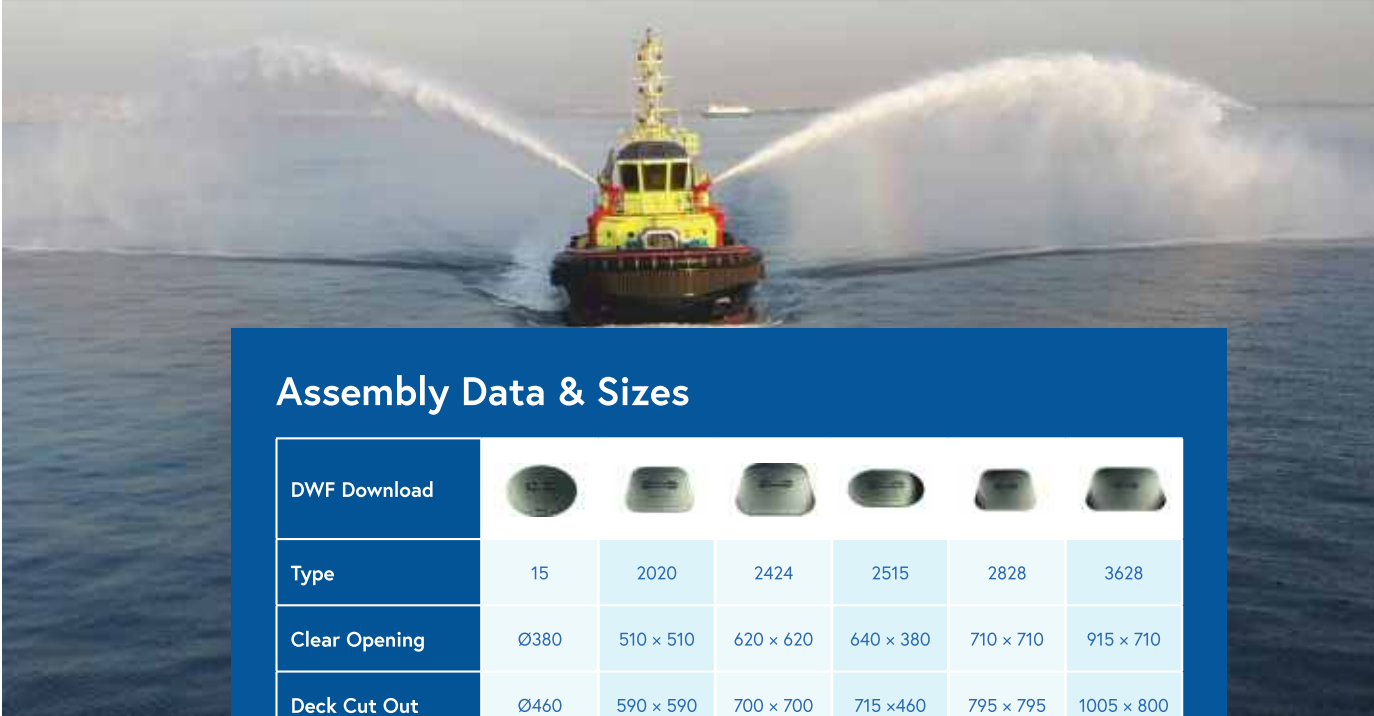
## Accessories

Hinges can be fitted to allow Hercules Cast Hatches to open and fold back flat on the deck or to provide a watertight door in bulkheads. For extra security whilst in port, Hercules Hatches can be locked from below deck by using a simple sprung stainless steel clip on the bolt mechanism.







3D Download

Download BV certificate

Download Care and Maintenance datasheet



## Assembly Data & Sizes

DWF Download						
Type	15	2020	2424	2515	2828	3628
Clear Opening	Ø380	510 × 510	620 × 620	640 × 380	710 × 710	915 × 710
Deck Cut Out	Ø460	590 × 590	700 × 700	715 × 460	795 × 795	1005 × 800
Deck Cut Out Radius	R230	R130	R145	R230	R142	R150
Frame Overall	Ø570	660 × 660	810 × 810	820 × 570	900 × 900	1110 × 900
Fixing Details	12 × M6	16 × M6	24 × M6	20 × M6	20 × M6	22 × M6
Overall Weight	16KG	18KG	30KG	23KG	42KG	52KG



# Hercules Made to Measure Hatches

## A Bespoke Solution to Through Deck Access

Hercules Made-to-Measure Hatches are high quality watertight deck hatches designed to meet your individual requirements.

They can be fitted into any type of deck and made to suit any size of rectangular or square aperture.

[Download M-T-M Hatches Nominal Sizes](#)

## Construction and Operation

The frame is fabricated from a marine grade aluminium extrusion.

The cover is a marine grade aluminium tread plate reinforced with a pre-fabricated sub-frame, and is secured to the frame by our unique and innovative system of captive pull down bolts. The cover also has a rolled edge giving the neoprene seal maximum protection against damage.

Hinges can be fitted allowing the hatches to fold back flat to the deck or provide a watertight door in bulkheads.

The bolts can be quickly loosened or tightened using the speed brace supplied with each hatch. The captive bolts are marine grade aluminium bronze and once tightened render the hatch watertight.

