

Rim Drive Tunnel Thruster (RD-TT)



- Equal thrust in both directions
- Fast response time
- Low level of vibrations and low airborne, structural and hydroacoustic noise (URN)
- Space saving installation
- Reduced installation time and cost
- Reduced hours required by shipyard
- Strong operational support

Kongsberg Maritime Tunnel Thrusters

Embracing decarbonisation for a sustainable future

The Rim Drive Tunnel Thruster (RD-TT) is one of the latest additions to the Kongsberg Maritime thruster portfolio, building on a completely new approach to thruster design and motor integration, with low environmental footprint from low volume biodegradable oil, high efficiency and low noise emission.

The integrated Permanent Magnet (PM) motor increases efficiency and makes the installation more compact. The installation of the thruster system consists of only two lubrication tanks, no pumps and requires less hours from the shipyard than conventional tunnel thrusters.

The RD-TT meets very strict requirements for performance, noise and vibration, and is an excellent choice for operations where low noise and high performance are required. Fast response time to full power gives improved manoeuvrability and operability.

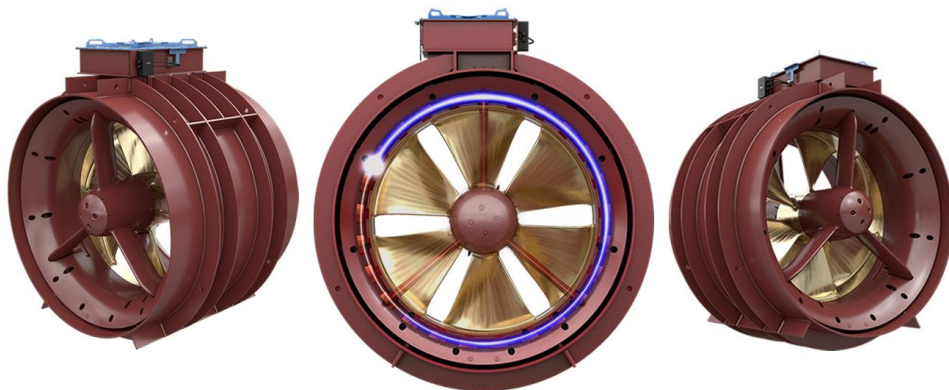
Rim Drive Tunnel Thrusters are currently available in four sizes ranging from 1,000 and 2,700 kW. The Rim Drive tunnel thrusters have been developed for the most demanding applications such as dynamic positioning.

Key features

- High thruster efficiency, hydrodynamically optimised
- Simplified system design with limited auxiliary equipment
- Thruster unit cooled by surrounding seawater, no additional cooling required
- No lubrication pump
- Efficient and space saving PM technology with high torque density
- Reliable design with few rotating parts
- Robust centre shaft carries all propeller loads
- Capability to meet the strictest noise and vibration requirements set by Class societies
- Prepared for easy connection to Equipment Health Management (EHM) system

Space saving installation

Due to its symmetric design the Rim Drive tunnel thruster provides increased flexibility for the ship designer to achieve a more optimal and space-saving installation.



The RD-TT's advanced PM motor technology ensures unmatched efficiency and performance, vital for eco-friendly maritime operations.

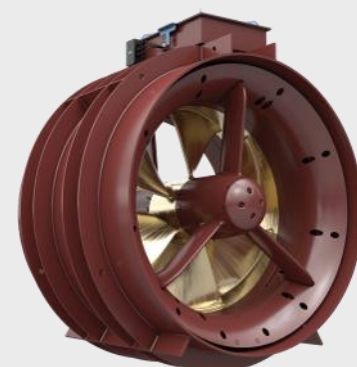
Suitable applications

- Dynamic positioning vessels
- Offshore vessels
- Cruise ships
- Research vessels

Technical data

Thruster type	RD-TT 1600	RD-TT 2000	RD-TT 2300	RD-TT 2600
Power (kW)	1000	1600	2100	2700
Thrust (kN)*	156	243	320	410
RPM	340	280	240	212
Propeller dia (mm)	1600	2000	2300	2600
Propeller type	Monoblock /FP	Monoblock /FP	Monoblock /FP	Monoblock /FP
Direction of rotation	CW/CCW	CW/CCW	CW/CCW	CW/CCW
Drive	AFE or 12 pulse drive	AFE or 12 pulse drive	AFE or 12 pulse drive	AFE or 12 pulse drive

**Predicted system thrust is highly dependent on inlet duct configuration, hull geometry, tunnel inlet geometry, grid design, etc.*



Rim Drive tunnel thruster side angle



Rim Drive tunnel thruster front view