



*Designers and Manufacturers of
Advanced Marine
Propulsion Systems*



THRUSTMASTER OF TEXAS, INC.

Thrustmaster



Thrustmaster of Texas, Inc. designs and manufactures advanced marine propulsion equipment for vessels of all types. The company was founded in 1984 as a privately owned corporation. Thrustmaster has grown into a leading supplier of thrusters ranging from 75 to 8000 kW, serving customers all over the world.



"We hear our customers. They want top quality products delivered on time and at a fair price. That's what we do."

- Joe K. Bekker, President



"We listen to our customers. We offer the right products, optimized for each customer's application."

- Bert Ault, International Sales Manager

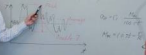


"We learn with our customers. Their success is our success."

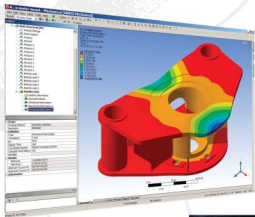
- Jack Chancellor, Sales Manager U.S.A.



$$1) D < D_{cr}$$
$$F = 76.5 \sin(40^\circ) \left(\frac{100}{2}\right)^2 \cdot 0 \text{ (AN)}$$
$$2) D > D_{cr}$$
$$F = 66.5 \sin(40^\circ) \left(\frac{100}{2}\right)^2 (1.44) \text{ (AN)}$$



$$D_{cr} = 0 \frac{M_0}{100 \cdot 0.8}$$
$$M_0 = 100 \cdot 0.8$$



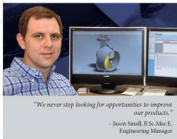
Design

Thrustmaster engineers continue to invent new thruster concepts and improve existing designs using state-of-the-art design and analysis tools, such as SolidWorks, AutoCAD, ANSYS, StarCCM+ and Magma.



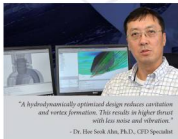
"We design our thrusters for superior performance that lasts a lifetime."

- Dr. Shun X. Dou, M.S.M.E., Ph.D.,
Vice President of Engineering



"We never stop looking for opportunities to improve our products."

- Jason Small, B.Sc., M.Sc.,
Engineering Manager



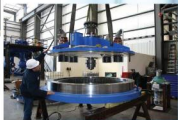
"A hydrodynamically optimized design reduces cavitation and vortex formation. This results in higher thrust with less noise and vibration."

- Dr. Hye Sook Ahn, Ph.D., CFD Specialist



Production Facilities and Administration

Thrustmaster's 200,000 sq. ft. manufacturing plant in Houston is the largest thruster factory in the world. It is completely air-conditioned and outfitted with the latest in automatic welding equipment and CNC machine tools. A highly motivated workforce builds equipment of excellent quality under tightly controlled production procedures per ISO-9001:2008.







Field Service - Installation - Commissioning

Thrustmaster field service technicians and engineers are available for installation, commissioning, dock and sea trials and repairs anywhere in the world.

Experienced Thrustmaster teams routinely install complete diesel-electric and dynamic positioning systems on customer's vessels, including supply and installation of cables, hook-up, testing, FMEA validation, sea trials and lifetime support.



"We are here to help our customers. We have a worldwide network of well trained field service engineers to resolve service issues quickly."

- Fred Brasher, Service Manager



"We support our customers at the shipyard to install and test Thrustmaster and third party equipment on their vessel quickly and cost effectively. Our installation project teams have extensive knowledge and experience with Dynamic Positioning and diesel-electric systems."

- Jan Jennings, General Manager



Azimuthing Thrusters

Thrustmaster's robust Azimuthing Thrusters are used for propulsion and station keeping in many demanding applications. L-drives or Z-drives can be supplied in power ranges from 300 to 8000 kW. Configurations for bottom, top or underwater installation are available.





Portable Dynamic Positioning Systems

Thrustmaster's Portable Dynamic Positioning System is the perfect solution for quick, inexpensive conversion to dynamic positioning. The patented modular system is completely self-contained and can be installed dockside to upgrade any barge or vessel to DP-1, DP-2 or DP-3 in as little as a few weeks.





Propulsion Units for Brown Water

Thrustmaster's Propulsion Units for Brown Water are tough, self-contained diesel-hydraulic thruster packages. Provided with Thrustmaster's patented hydraulic podded drives, these units survive grounding and fouling, making them ideal for river ferries, construction barges, bow boats, military landing craft and causeways.





Bow Thrusters

Thrustmaster's Bow Thrusters span a range from 50 to 8000 kW. Tunnel thrusters powered by direct diesel engine, hydraulic or electric drives are available. Retractable azimuthing thrusters can be hydraulic or electric drive. These thrusters are routinely used for dynamic positioning or as a slow speed secondary propulsion system.





Military Applications

For more than a quarter century Thrustmaster has supplied thrusters to the U.S. Navy, Coast Guard, Army Corps of Engineers, and many governments around the world. Thrustmaster complies with ITAR and other export control regulations. Thrusters and propulsion systems are available for landing craft, station keeping, enhanced maneuvering, lightering and causeways, unassisted docking and secondary slow-speed propulsion systems.



"We are in an exciting era of naval shipbuilding. Navies of the world are employing new technologies. At Thrustmaster, we innovate daily."

Kenneth Boskirt, Military & Government Sales





THRUSTMASTER OF TEXAS, INC.

Manufacturing and Corporate Headquarters

6900 Thrustmaster Drive
Houston, Texas 77041
USA

Tel: 713-937-6295
Fax: 713-937-7962
Email: Info@ThrustmasterTexas.com
www.ThrustmasterTexas.com



Sales and Service Centers

Thrustmaster Gulf Coast USA Service Center

Raceland, Louisiana
Tel: +1-985-532-0525
Email: LaService@ThrustmasterTexas.com

Thrustmaster Europe B.V.

Rotterdam, The Netherlands
Tel: +31-6-10104613
Email: Sales@ThrustmasterEurope.com

Thrustmaster China Service Center

Wuhan, China
Tel: +86-139-8614-8128
Email: Service@ThrustmasterChina.com

Thrustmaster do Brasil Ltda.

Rio de Janeiro, Brazil
Tel: +55-21-3045-9730
Email: Sales@ThrustmasterBrasil.com

Thrustmaster Asia Pacific Pte Ltd.

Singapore
Tel: +65-64651218
Email: Sales@ThrustmasterAsiaPacific.com.sg

Thrustmaster Middle East FZE

Sharjah, U.A.E.
Tel: +971-6-557-4104
Email: Sales@ThrustmasterMiddleEast.com