### ROLLA



## **ROLLA PROPELLERS** YOUR PERFORMANCE PARTNERS

# THE LEADER IN PROPULSION TECHNOLOGY

Since 1963 the name Rolla has been synonymous with the highest quality, most efficient propellers in the world. What started with Philip Rolla individually designing and crafting race-winning propellers has grown to become the leader in propeller technology for high-performance pleasure and commercial craft as well as military vessels.

#### **EXPERIENCE FORTIFIED BY SCIENCE**

After winning every major international racing category over the course of two decades, Phillip Rolla officially founded Rolla SP Propellers in 1983 to focus on bringing that race-winning experience and expertise to a wider market.

In 2004 Rolla joined the Twin Disc family of marine products. Twin Disc offers boat designers and builders, engine manufacturers and boat owners and operators one source to satisfy all their propulsion needs.

Today, Rolla offers a wide variety of service for every aspect of propeller design, manufacture and application, from complete hydrodynamic analysis and engineering capabilities to computational fluid dynamic (CFD) hull analysis to sea trials.

Because of its incomparable design and application experience, Rolla has an extensive proprietary database of propeller performance profiles. This invaluable information eliminates much of the trial and error approach required by other manufacturers, thereby saving you development costs and time yet assuring you of the best propeller performance.







#### **NOTHING LEFT TO CHANCE**

All of our products and services are designed, developed and produced in-house, allowing Rolla to maintain tight control of every process, every step of the way. Our philosophy has always been to retain the most talented people and arm them with the latest technologies and equipment.

For each application, the propeller has a dedicated design and pattern. All the design codes are proprietary and are developed by our staff in-house. Our propellers can be designed to meet any classification register, including Lloyd's Register, ABS, RINA and others.

All Rolla propellers are dynamically balanced and geometrically comply with the "S" Class of ISO 484/2 standards. A laser scanning machine report can be supplied for each propeller for register purposes.

#### **ROLLA FULLY-SUBMERGED PROPELLERS**

Fully submerged propellers are manufactured in NiBrAl up to 3.5 meters diameter with a power range from 500 hp up to 5000 hp. Rolla-developed proprietary software, based on the panel method, is used to design our fully-submerged propellers. This software analyzes all possible shapes and inputs, including diameter, number of blades, skew, rake and more, to determine the best possible design for the application. A different Rolla designed CFD code is then used to fine tune the propeller load and detect any potential cavitation or flow problems.



Scan for more information on Rolla propellers

#### **ROLLA SURFACE-PIERCING PROPELLERS**

Surface piercing propellers are manufactured in NiBrAl up to 60" diameter with a power range from 500 hp up to 5500 hp and in Stainless Steel – Duplex or 17.4PH – up to 28" diameter with a power range from 250 hp up to 1500 hp. Our CFD software, along with countless tunnel tests and thousands of successful applications, provide Rolla with an unmatched technology database to use in the design and application of our surface-piercing propellers. We consider the lateral, vertical and horizontal thrusts combined with different diameter and pitch options to determine the optimum propeller for each surface-piercing application. USA • AUSTRALIA • BELGIUM • CHINA • FINLAND • INDIA • ITALY • JAPAN • NETHERLANDS • SINGAPORE • SWITZERLAND



# WE PUT HORSEPOWER TO WORK<sup>®</sup>



TWIN DISC, INCORPORATED • MILWAUKEE, WISCONSIN, USA • 262-638-4000 • TWINDISC.COM

©2024 TWIN DISC, INC • 2407\_BROCHURE\_ROLLA