Marine Controllable Pitch Bow Thruster

Propellers can be driven by either an electric motor or diesel engine. The power range reaches up to 4200 kW, with options for fixed or varied pitch and steel or aluminum hulls.

ADDITIONAL IMAGES

Overview

High-Performance Maneuvering Solutions

These marine tunnel thrusters are engineered to significantly improve vessel docking, station keeping, and low-speed maneuvering in challenging environments. Available in both fixed and controllable pitch configurations, they offer versatile propulsion options driven by electric motors, diesel engines, or hydraulic systems. With a power range extending up to 4200 KW and propeller diameters up to 3.3 meters, these thrusters are suitable for a wide array of vessels from tugboats to large ocean engineering ships.

Key Performance Metrics

Featured Capabilities

4200 KW	3.3 m	504 KN
Max Power	Max Propeller Diameter	Max Nominal Thrust

Technical Configuration

Pitch Configuration

- Fixed Pitch (FP)
- Controllable Pitch (CP)

Drive System Options	Electric Motor, Diesel Engine, Hydraulic Motor
Hull Material Compatibility	Steel Hulls, Aluminum Hulls

Technical Specifications (CP Type)

Controllable Pitch Model Specifications

Model	Propeller Dia (mm)	Max Power (kW)	Max Thrust (KN)
SCT100-CP	1000	310	49.6
SCT150-CP	1500	580	92.5
SCT200-CP	2000	1250	200
SCT260-CP	2600	2100	336
SCT330-CP	3300	3150	504

Applications

Proven applications across diverse maritime sectors including crane vessels, tugboats, and research ships.

Recommended Vessel Types

- Transportation Vessels
- Tug Boats
- RO/RO Ships
- Ocean Engineering Vessels
- Cargo Liners
- Coast Guard & Patrol Boats
- Scientific Research Vessels

Compliance & Quality

Compliance with major IACS members including ABS, BV, and Lloyd's Register.

IACS Classification Certificates

ABS • BV • CCS • LR • BKI • IACS Member Societies

Manufacturing Excellence

Advanced Precision Machining

The production facility spans 23,000 square meters and is equipped with heavy-duty machinery including 18-meter lathes for main propellers, large boring machines, and CNC machining centers. Quality is ensured through rigorous testing using universal material testing machines, ultrasonic detectors, and dedicated test stands for tunnel thrusters and oil dispensers. The assembly workshop supports a maximum sling load of 80 tons with a hoisting height of 20 meters.