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GARING

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SCHOTTEL



SMOOTH SAILING

Spending a relaxing time on board means having reliable and high-quality equipment. Efficient propulsion technology, low noise levels and dependable support – requirements that are all met perfectly by SCHOTTEL propulsion systems. Whether as main propulsion unit or manoeuvring aid, SCHOTTEL

products open up more flexibility for ship design thanks to their compact structures. This allows the available space to be used according to individual customer requirements. SCHOTTEL Automation Systems and Marine Services can be used to exploit further potential.



LOW NOISE AND VIBRATION FOR HIGH COMFORT







SCHOTTEL IN THE YACHT MARKET

1954 First yacht with SRP



Expertise in the development and production of propulsion systems



Service stations worldwide

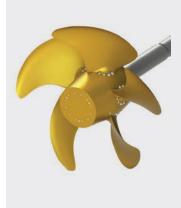
HIGH QUALITY AND RELIABLE PROPULSION

YOUR MAIN PROPULSION OPTIONS



SCHOTTEL EcoPeller SRE

- Best values in drive efficiency and course stability
- Optimized for open seas and coastal operating conditions with powerful DP operation
- Numerous configuration options for integration into a wide range of ship designs
- Versatile applications, especially suitable for medium to higher speeds
- New features such as HTG, LeaCon or full-feathering mode (CP propeller)
- Compatible with SCHOTTEL hybrid solutions (SYDRIVE-E and SYDRIVE-M)
- Outstanding comfort as LE-drive: extremely low vibration and noise level
- Various installation options



SCHOTTEL ControllablePropeller SCP

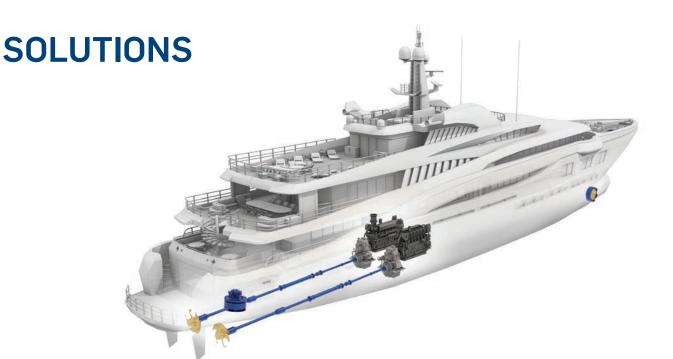
- Maximum thrust force at changing speeds and loads
- Reduced noise and vibration levels (particularly with 5-blade version)
- Full-feathering mode (optional)
- Minimal maintenance thanks to its robust design
- Easy access to hub for less servicing effort
- Hydrodynamically optimized hub available for fast vessels with high propeller load
- Complete propulsion package available with comprehensive equipment



SCHOTTEL TwinPropeller

- Numerous installation variants for diverse ship designs
- Increased level of efficiency
- Reduced noise and vibration levels
- Especially suitable for applications with limited propeller diameter
- Exclusive features: SCHOTTEL LeaCon sealing system or DuroVario (optional)

Click on www.schottel.com for more information



STEERABLE AUXILIARY PROPULSION

SCHOTTEL PumpJet SPJ • Azimuth jet thruster

- Installation flush with the vessel's hull, fully protected
- Maximum thrust with extremely compact design
- Reduced noise level
- Can be used as take-home system
- SCHOTTEL CoaGrid for even more efficiency (optional)
- Elastic installation version ensuring reduction in noise and vibration levels while enhancing comfort (optional)
- Suitable for extremely shallow draught operation

MANOEUVRING AID



SCHOTTEL TransverseThruster STT

- High-comfort version with the following features, e.g.:
 - Decoupled by elastic suspension elements
 - Dedicated low noise propeller design
 - Flow optimized gearbox struts
- Bow geometry specific propeller design and layout (blade number, area ratio, pitch distribution)
- Space saving installation methods like horizontal power input
- Air injection system (optional)

SCHOTTEL Retractable RudderPropeller SRP-R

- Silent, DP capable thruster, working outside the hull
- Enhanced drive efficiency with 98-degree gearbox variant
- Flexible: Adaptation to different operation profiles
- Can be used as take-home system
- Based on successful SCHOTTEL RudderPropeller technology



SCHOTTEL RimThruster SRT

- Minimum noise and vibration levels
- Compact and quiet
- Environmentally friendly with water-lubricated, oil-free bearing system
- Replaceable blades and plain bearings
- Easy installation for integration into a wide range of ship designs
- Elastic installation version (optional)



DEMAND YOUR VESSEL'S FULL POTENTIAL

SCHOTTEL AUTOMATION SYSTEMS

he modular and highly standardized propulsion control system from SCHOTTEL reliably transmits the control instructions of the ship's crew to the propulsion unit. Every propulsion type as well as auxiliary units, clutches, gearboxes and motors are controlled.

Analogue, digital and serial interfaces are available to enable seamless and secure communication with peripheral systems on board. All elements of the system from the sensors and actuators to the switch cabinets, the underlying software and the control desk components are developed, designed and manufactured by SCHOTTEL.

A wide range of control panels, indicators and control levers ensure that the high requirements in terms of ergonomics, safety and regulations are met in all applications.

PROPULSION CONTROL SYSTEM

PropControl

- + RELIABLE | In any situation, the instructions of the ship's command are quickly and safely translated into a response from the propulsion system
- + UNIVERSAL | Control of all propulsion systems as well as auxiliary units, clutches, gearboxes and engines
- + COMFORT | Ensuring the high requirements in terms of ergonomics, safety and regulations



SCHOTTEL MARINE SERVICES

arine Services allow SCHOTTEL to offer intelligent solutions for remote access, data collection, data evaluation, condition monitoring and predictive maintenance. They also provide

DATA COLLECTION & TRANSFER SYSTEM

MariHub

- + CONNECTED | Link equipment from ship to shore
- + ANYTIME | 24/7 real-time data and insights
- + SECURE DATA | Reliable and encrypted data transfer according to highest standards



remote assistance and hydrodynamic engineering

utilize the potential of their vessels.

services. This enables operators and owners to fully

IoT PLATFORM

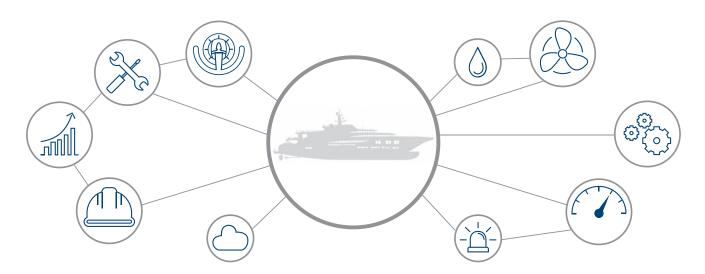
MariNet

- + COMPETITIVE | Advantages due to higher awareness of the vessel's performance
- + **ProCMS** | Propulsion condition monitoring service by SCHOTTEL expert
- + ProDATA | Remote data service with historical and live data view

PROPULSION CONDITION MONITORING SERVICE

ProCMS

- + INCREASED UPTIME | Due to condition-based equipment evaluation
- + QUICK RESPONSE | Shortened process time for solving problems
- + **PREDICTIVE** | Early failure detection to keep downtimes to a minimum



Click on www.schottel.com for more information

YACHTS – BUILT TO CRUISE THE WORLD



108 m Gigayacht IJE $1 \times SPJ 132 (500 \text{ kW})$



133 m Superyacht AL MIRQUAB 2 x SCP 914 (5,000 kW each), 2 x SPJ 57 (200 kW each)



84 m Trimaran Superyacht White Rabbit 1 x SRT 800 (200 kW), 2 x SPJ 57 (200 kW each)



68 m Motor Yacht Soaring 1 x SPJ 57 (200 kW), 1 x STT 110 (185 kW)

WWW. SCHOTTEL.com

CHNOLOGY AFTER SALES REFE

AFTER SALES SERVICE – DURING THE VESSELS LIFETIME

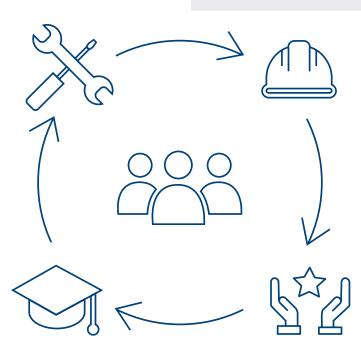
elivering state-of-the-art propulsion and automation solutions is not enough for us. Thanks to decades of experience in the field

of propulsion technology, we are able to offer highquality services tailored to your individual needs throughout the vessel's service life.

SPARE PARTS

- Fast delivery time thanks to global warehouse logistics
- Decades of documentation for clear identification of spare parts
- Production of almost all spare parts
- ► OEM warranty
- Original spare parts with all technical revisions known up to the time of manufacture

- Globally standardized and proven high-quality service levels
- Preventive and predictive maintenance concepts
- Remote service support with augmented reality tools
- ▶ Vibration measurement with SCHOTTEL VibCheck
- More than 140 highly qualified service technicians worldwide





- Customer training courses in local language
- Courses on site or in one of 4 SCHOTTEL training centers (GER, USA, AUS, SGP)
- Permanent international knowledge transfer for service technicians

UPGRADES

Increase of the shipowner's profit

UPGRADE LEVELS:

- Control systems
- Thrusters
- Systems for intelligent operative monitoring



BEHIND THE SCENES

Since the invention of the rudder propeller in the early 1950s, SCHOTTEL has acquired a wealth of expertise in the development, design and production of state-of-the-art marine propulsion and control systems.

Today, a team of more than 100 engineers develops propulsion systems and digital solutions, which are manufactured to the highest quality standards in our modern production facilities in Germany.











REFERENCES

PROPULSION TECHNOLOGY – COMPETENCE IN CUSTOMIZED ENGINEERING

MECHANICAL DESIGN

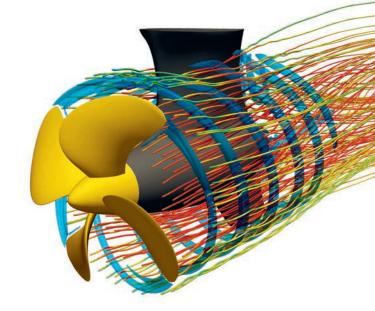
- Mechanical power transmission
- Structural mechanics
- Hydraulics & pneumatics
- Sealing technology

Automation

Power electronicsAssistance systems

HYDRODYNAMICS

- Propeller design
- Model testing
- Computational fluid dynamics





ELECTRICAL ENGINEERING



CUSTOMER-ORIENTED DEVELOPMENT WITH EXPERIENCED IN-HOUSE R&D

SUSTAINABLE MANUFACTURING FACILITIES FOR STATE-OF-THE-ART PROPULSION SOLUTIONS

YOUR QUALITY BENEFITS -

- Ongoing certification process
- Quality controls during production
- Standardized FAT procedure
- Close dialogue with our suppliers

WE KNOW WHAT MOVES SHIPS



Please contact sales@schottel.de for information about your next new build or conversion project.

SCHOTTEL Worldwide



Your local partner		