SCHOTTEL RUDDERPROPELLER
THE SUPERIOR PROPULSION SYSTEM

SRP · SCHOTTEL RUDDERPROPELLER
The heart of our product range
THE SCHOTTEL RUDDERPROPELLER. FROM BRILLIANT INVENTION TO GLOBAL CLASSIC

The SCHOTTEL Rudderpropeller is recognized worldwide as the classic marine propulsion system. Developed and built in 1950 by Josef Becker, founder of the present-day SCHOTTEL Group, it quickly conquered the world of modern shipbuilding. The name of SCHOTTEL has become a synonym for azimuthing rudderpropellers. In 2005, Josef Becker was honoured posthumously with the renowned Elmer A. Sperry Award for his pioneering invention. The original SCHOTTEL Rudderpropeller (SRP) has been subject to continuous ongoing development. Today, with a power rating of up to 6000 kW, it is the superior propulsion solution for a wide range of vessels.

COMBINATION OF PROPULSION AND STEERING

The principal characteristics of the SRP derive from the combination of propulsion and azimuth steering. There is consequently no need for a rudder, and the engine power is optimally converted into thrust. The 360° rotation of the Rudderpropeller means that the full input power is available for manoeuvring.

PROPULSION FOR EVERY APPLICATION

In tugs of all classes, in inland shipping or on the open sea, in offshore applications, under tropical or arctic conditions – the SRP can be found everywhere. SCHOTTEL engineers develop the appropriate propulsion concept for every requirement, whether diesel-electric or diesel-direct drive.

6900 TDW OIL PRODUCT TANKER KURA RIVER
Main propulsion: 2 x SRP 1012 FP (1200 kW each) / 1 x STT 170 LK (230 kW)
The SRP is the ideal propulsion solution for many vessels where the focus is on optimal implementation of the available power.

The SCHOTTEL experts provide advice and support in matters of hydrodynamics, tank and model tests, monitoring and steering options, FE calculations, ice-class considerations and special solutions. Their experience forms the basis for long-term customer satisfaction.

Here you can find the technical data

ADVANTAGES

- Maximum manoeuvrability
- Optimum efficiency
- Economical operation
- Space-saving installation
- Simple maintenance
- High reliability
- Optimized in terms of cavitation and vibration
- Dependable design
- Fixed or controllable-pitch propeller
- Z or L drive
EQUIPMENT VARIANTS FOR WIDE-RANGING REQUIREMENTS

WELL INSTALLATION

Well installation from below is the most common type of installation. Installation from above is required if the vessel cannot be dry-docked or trimmed. This form of installation facilitates maintenance and complete exchange of the Rudderpropeller.

Bolted or welded? SCHOTTEL supplies the desired installation variant taking both the philosophy of the shipyard and the constraints of the design into account.

RETRACTABLE SYSTEM

The SCHOTTEL Rudderpropeller is available as a hydraulically retractable system. In this case, the typical features of the SRP – such as the availability of the full input power throughout the 360° range of rotation for manoeuvring and dynamic positioning – are coupled with the additional advantageous capability of being retracted and lowered as required for open-water service, DP or varying water depths.

53 T BP ASD TUG CAPO MOLINI
Main propulsion: 2 x SCHOTTEL Rudderpropeller Type SRP 1212 (1650 kW each)

126 M MEGAYACHT OCTOPUS
Manoeuvring aid: 2 x STT 330 TLK (350 kW each)
1 x SCHOTTEL Rudderpropeller Type SRP 330 ZSV (450 kW)
SRP WITH CONTROLLABLE-PITCH PROPELLER

The Rudderpropeller is available with CP (controllable pitch) and FP (fixed pitch) propellers. The pitch of CP propeller blades can be adapted to the respective operating conditions. Rudderpropellers with a controllable-pitch propeller are used, for example, when not only the propeller but also a fire-fighting pump or a generator are to be powered by the engine.

SCHOTTEL FOR ICE OPERATION

For ships navigating in the ice regions of this world, SCHOTTEL supplies propulsion systems that are specially designed and built for ice-milling and ice-breaking duties. For ice-milling service, which is performed in astern mode, a PULL propeller is generally preferred.

The SCHOTTEL experts attach particular importance to structural reinforcements as well as to material selection and a high-strength protective coating. The entire range of propulsion systems is available in versions meeting ice class requirements. The propulsion unit is designed with the shaftline and steering system to comply with the respective class notation.

OSV BOURBON ATLAS
Main propulsion: 2 x SCHOTTEL Rudderpropeller Type SRP 1012 CP (1200 kW each)

ICE BREAKING SUPPLY VESSEL MANGYSTAU-1
3 x SCHOTTEL Rudderpropeller Type SRP 2020 PULL (1600 kW each)
STEERING SYSTEMS – PRECISE AND USER-FRIENDLY

Propulsion systems are only as good as their steering. Optimally adapted data exchange between the different components (propulsion units and joystick or steering console) is therefore top priority. A further priority is a user interface that is as intuitive as possible, enabling safe manoeuvring even with frequent changes of master. Here too, SCHOTTEL steering systems set the course, both literally and figuratively.

In close cooperation, electronics engineers and propulsion specialists develop complete steering and control systems (SST) custom-tailored for every application. Our product range covers everything from simple, manually-operated wheels coupled directly to the propulsion unit, right up to the remote-controlled computerized joystick of the Masterstick system. A joystick is used to control up to ten propulsion units, steering the vessel in the given direction and with the desired rotation.

The different operating and control modes as well as many other options are selected via a steering console. The use of freely programmable microcontroller circuit boards with an integrated field bus and industry-standard interfaces provides a high degree of flexibility and operational reliability. Our systems give the ship’s master the optimal “tool” for simple and safe navigation, manoeuvring and positioning of the vessel.
HEAVY LIFT JACK-UP VESSEL INNOVATION
4 x SCHOTTEL Rudderpropeller Type SRP 3030 (3500 kW each)
3 x STT 3030 (2800 kW each)

64 T BP ASD TUG FAIRPLAY X
2 x SCHOTTEL Rudderpropeller Type SRP 1515 FP (1865 kW each)

110 T BP ASD TUG CORRADO NERI
2 x SCHOTTEL Rudderpropeller Type SRP 3030 CP (3060 kW each)

OFFSHORE SUPPLY VESSEL HOS RED DAWN
2 x SCHOTTEL Rudderpropeller Type SRP 2020 (2500 kW each)
2 x STT 4 (1180 kW each)

OIL PRODUCTS TANKER VF TANKER-16
2 x SCHOTTEL Rudderpropeller Type SRP 1012 (1200 kW each)
1 x STT 170 (230 kW)

SPLITBARGE ECOLOGICO PRIMERO
2 x SCHOTTEL Rudderpropeller Type SRP 330 (537 kW each)

128 T BP OFFSHORE TUG LUZ DE MAR
2 x SCHOTTEL Rudderpropeller Type SRP 3040 CP (3840 kW each)

SEISMIC RESEARCH VESSEL W G COLUMBUS
2 x SCHOTTEL Rudderpropeller Type SRP 3030 CP (3000 kW each)
PROFESSIONAL PARTNERSHIP – THROUGHOUT THE VESSEL’S LIFE

As a SCHOTTEL customer, you benefit from individual, in-depth advice and support at all stages of a project, from planning and commissioning through to preventive maintenance.

A dense worldwide service network is ready to offer assistance and ensures the swift supply of spare parts – along with experienced SCHOTTEL technicians if required.

The name of SCHOTTEL traditionally stands for quality in engineering, with over 90 years of experience in design and the precision workmanship of a family-owned enterprise. Our innovative propulsion systems are a byword for reliability and high performance and set standards in global shipping.