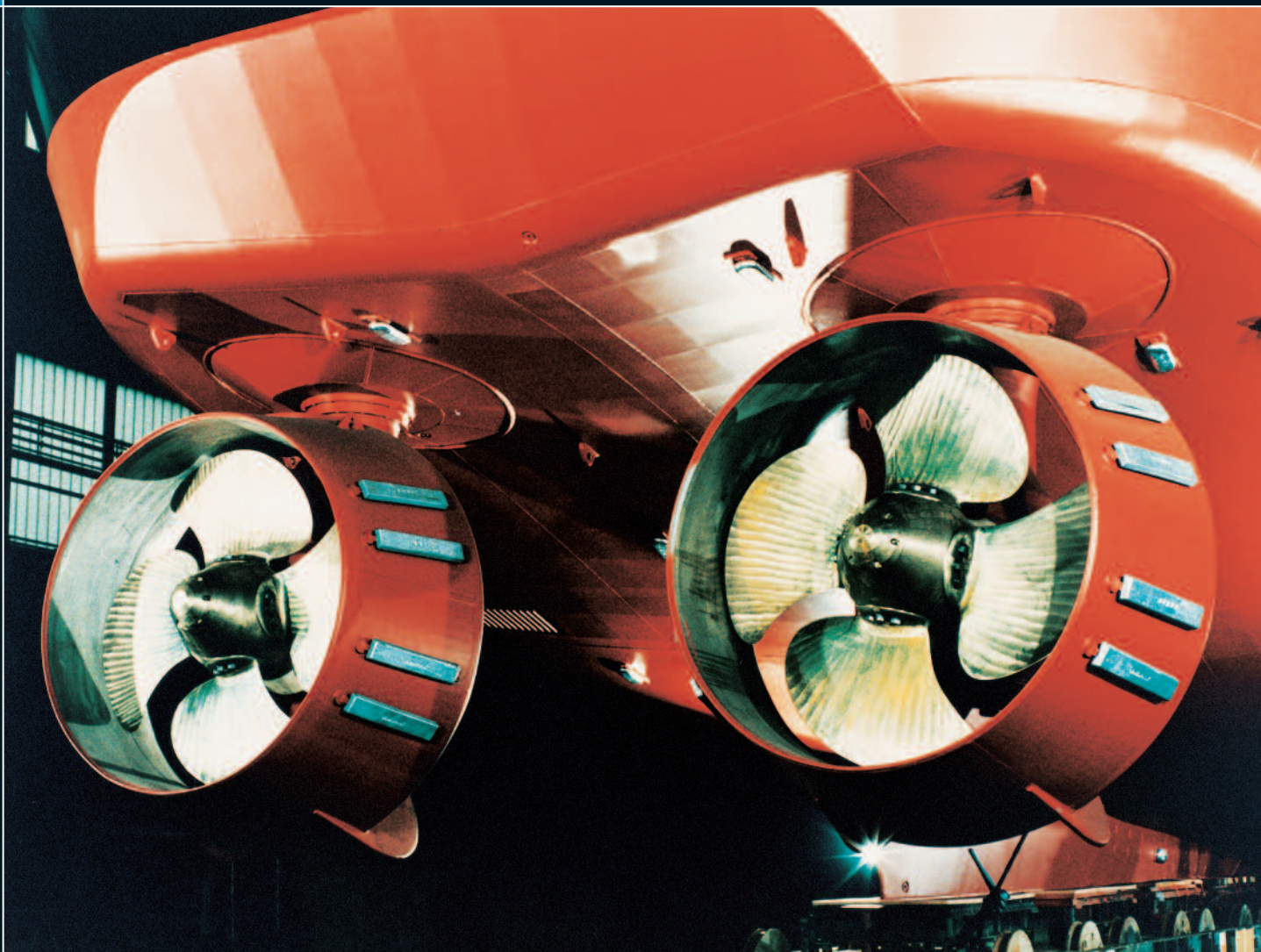
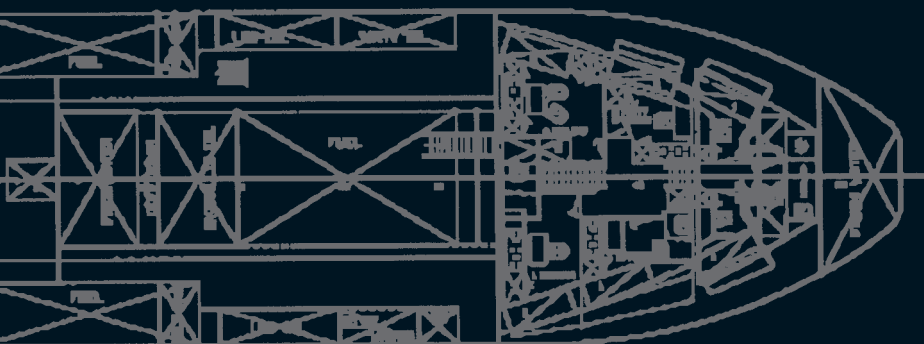


SRP

Rudderpropeller



**Application-oriented
propulsion systems**



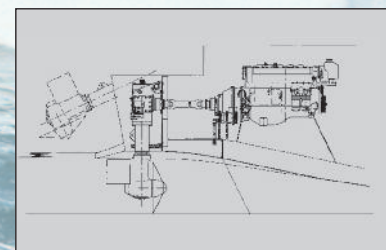
The SCHOTTEL Rudderpropeller – the superior propulsion system for vessels of all kinds

About 50 years ago, SCHOTTEL ushered in a new era in the field of marine propulsion. With the development and construction of the SCHOTTEL Rudderpropeller (SRP), our engineers created a combined propulsion and steering system that not only converts the engine or motor power into optimum thrust but also, thanks to 360° rotation of the underwater assembly, enables the full propulsive power to be used for manoeuvring the vessel as well. A principle that is just as effective as it is simple.

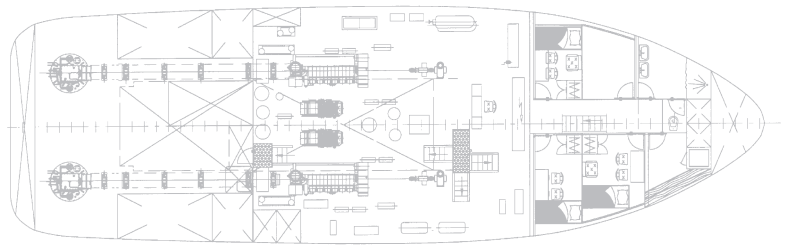
Maximum manoeuvrability, optimum efficiency, safe and economical operation, space-saving installation and easy maintenance – these are the outstanding features of the SCHOTTEL Rudderpropeller. This propulsion concept has set standards worldwide: for main and auxiliary propulsion, on inland waterways and in the toughest offshore operations, under tropical and arctic conditions.

Today we develop, design and manufacture standard systems rated at up to 6000 kW that are distinguished by their perfection and reliability. For special applications, such as amagnetic, shock-resistant and low-noise propulsion units, we produce competent solutions and installation variants meeting all requirements.

Our team comprises highly motivated experts in the fields of hydrodynamics, hydraulics, electronics, systems engineering and ship-building and is familiar with the world of shipping. This comprehensive know-how is the basis for individual customer support from the project stage onwards and is reflected in our application-oriented system solutions.



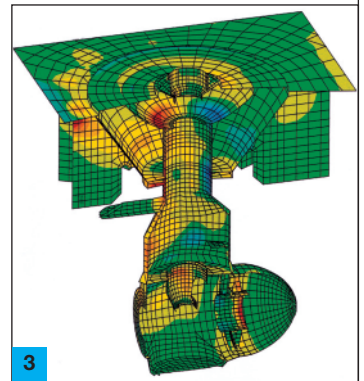
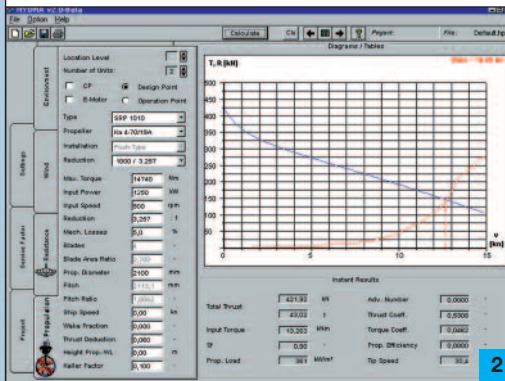
Transom installation



Steering and control systems



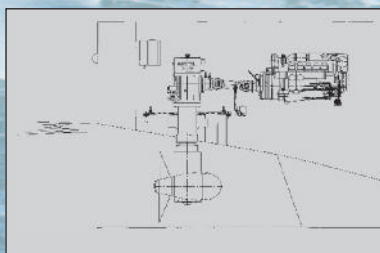
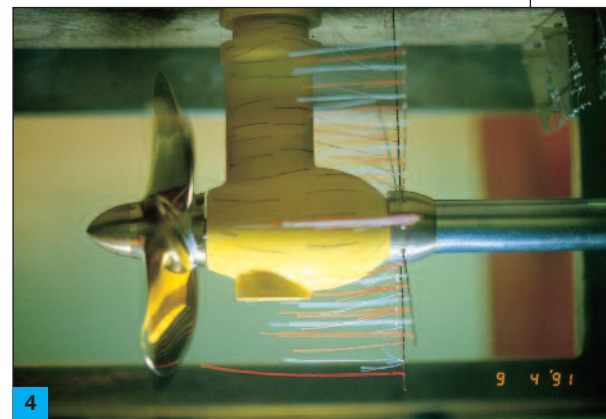
Research and Development



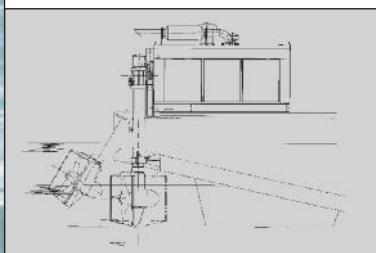
Quality

The application of CAD in development and design, the implementation of advanced manufacturing technologies, the use of high-grade materials, skilful assembly and professional installation on site are the major foundations for the top quality of our products. This is impressively confirmed by the certification of our quality management system according to DIN EN ISO 9001 by American Bureau of Shipping, Bureau Veritas, Det Norske Veritas and Germanischer Lloyd.

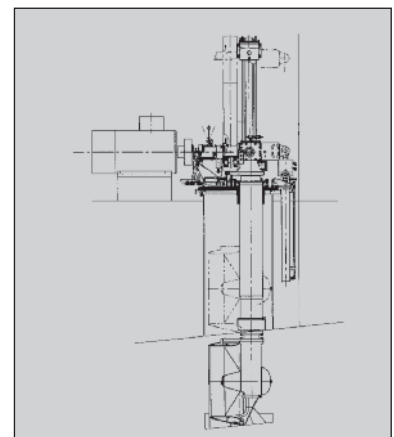
- 1 Our tailored steering and control systems have been service-proven and type-tested for decades.
- 2 HYDRA (Hydrodynamic Analysis) is a software program developed by SCHOTTEL. We use this "tool" for achieving an optimum design of our propulsion and manoeuvring systems.
- 3 Existing Rudderpropeller models are optimized and new types developed using state-of-the-art calculation methods.
- 4 Developed in intensive cooperation with internationally renowned research institutes, the hydrodynamic design of our systems is acknowledged throughout the industry as trend-setting.



Well installation



Navigator installation

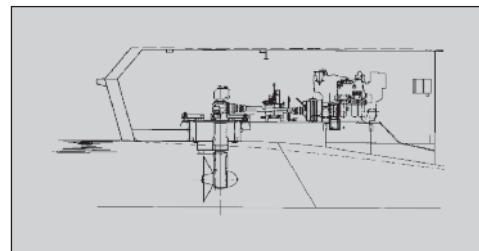


Retractable unit

Installation variants

Passenger vessels

Ferries



4



Passenger vessel, 2 x SRP 170 (284 kW each)
Shipyard: Deutsche Binnenwerften GmbH, Germany
Owner: Rainer Abicht Elbreederei GmbH, Germany



Double-ended ferry, 2 x SRP 350/350 (404 kW each)
Shipyard: Åsi Verken, Sweden
Owner: Swedish National Road Administration and Ferry Operation, Sweden



Passenger vessel, 2 x SRP 170 (285 kW each)
Shipyard: Schiffswerft Lux, Germany
Owner: Bingen-Rüdesheimer Fähr- und Schifffahrtsgesellschaft, Germany



1



5



2



4



3

1 Passenger vessel, 2 x SRP 200 (298 kW each)
Shipyard: Oceanfast Marine Pty Ltd,
Freemantle, Australia
Owner: Captain Cook Cruises Pty Ltd,
Sydney, Australia

2 Double-ended ferry, 2 x SRP 170 (320 kW each)
Shipyard: Saigon Shipbuilding Company,
Vietnam
Owner: Ministry of Transport, Vietnam

3 Double-ended ferry, 2 x SRP 170 (250 kW each)
Shipyard: Karstensens Shipyard, Denmark
Owner: Ministry of Transport, Cambodia

4 Trimaran, 1 x SRP 110 (175 kW),
1 x SRP 60 (100 kW)
Shipyard: Chantiers de Bateaux Parisiens,
France
Owner: Bateaux Parisiens, France

5 Double-ended ferry,
4 x NAV 110 (190 kW each)
Shipyard/Owner: Deghan Sanat Co., Iran

5

SRP 110



Double-ended ferry, 4 x SRP 170 (250 kW each)
Shipyards: Lürssen-Werft/Kröger Werft, Germany
Owner: Verkehrsbetriebe Wesermarsch GmbH, Germany



Tug boats

6



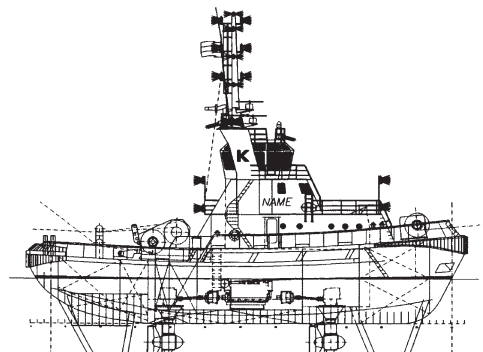
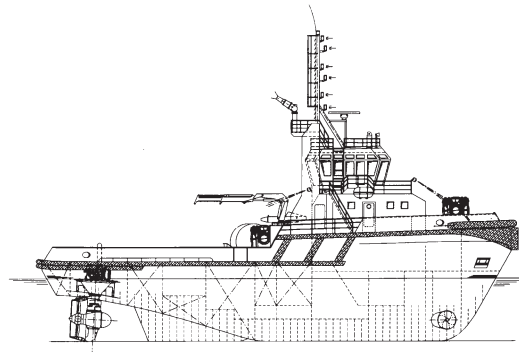
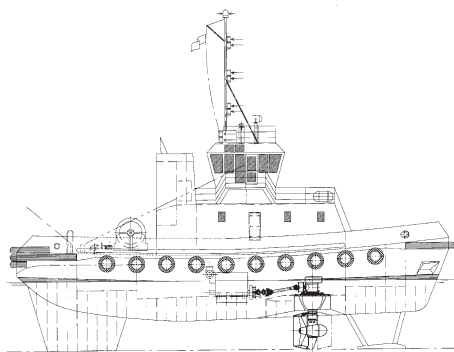
Stern tug, 2 x SRP 1515 CP (1850 kW each), 60 t bollard pull
Shipyard: Cheoy Lee Shipyards Ltd, Hong Kong
Owner: Wijsmuller Salvage BV, The Netherlands

Stern tug, 2 x SRP 1212 CP (1545 kW each), 50 t bollard pull
Shipyard: Damen Shipyards, The Netherlands
Owner: Rimorchiatori Spezzini, Italy



Tractor tug, 2 x SRP 1010
(1325 kW each), 45 t bollard pull
Shipyard: Astilleros Zamakona, Spain
Owner: Remolcadores de Barcelona, Spain





1

1 Stern tug, 2 x SRP 1212 CP (1545 kW each), 50 t bollard pull
Shipyard: Cooperativa Tomassi, Italy
Owner: Rimorchiatori Laziali S.p.A., Italy



3

2 Stern tug, 2 x SRP 1010 (1250 kW each), 40 t bollard pull
Shipyard: Bharati Shipyard, India
Owner: Reliance Industries Ltd., India

3 Stern tug, 2 x SRP 1515 (2100 kW each), 67 t bollard pull
Shipyard: Astilleros Zamakona, Spain
Owner: Fairplay Schleppdampfschiffs-Reederei Richard Borchard GmbH, Germany



2

4 Tractor tug, 2 x SRP 503/505 (640 kW each), 26 t bollard pull
Shipyard: Johann Oelkers, Germany
Owner: Kieler Verkehrs-AG, Germany

5 Rotor Tug®, 3 x SRP 1212 (1560 kW each), 75 t bollard pull
Shipyards: Construcciones Navales Freire, Spain · Maschinfabriek Padmos BV, The Netherlands
Owner: Kotug & Tugboat Co
Adriaan Kooren BV, The Netherlands

6 Stern tug · 2 x SRP 1212 (1864 kW each), 60 t bollard pull
Shipyard: Eastern Shipbuilding, Panama City, Florida/USA
Owner: Mc Allister Towing & Transportation, New York/USA



4

Stern tug
2 x SRP 1212 CP (1545 kW each), 50 t bollard pull
Shipyard: Dubai Drydocks, Dubai
Owner: Dubai Port Authority, Dubai



5

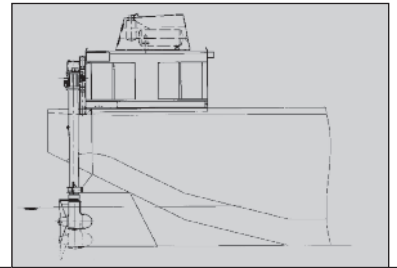


6

Stern tugs, 2 x SRP 1212 (2 x 1470 kW) each, 50 t bollard pull · Shipyard: J. G. Hitzler Schiffswerft & Maschinenfabrik, Germany
Owner: Augustea Emprese Marittime e di Salvataggi S.p.A., Italy



Special vessels



8



Suction hopper dredger, 2 x NAV 1010 (876 kW each)
Shipyard: Scheepswerf Bijholt, The Netherlands
Owner: Naßbaggerei Anton Müsing, Germany



Research vessel
2 x SRP 1010 (900 kW each)
Shipyard: Mjøllem & Karlsen, Norway
Owner: ARAMCO, Saudi Arabia



Pollution control and recovery vessel
2 x SRP 350 LS CP (600 kW each)
Shipyard: C. Lühring, Germany
Owner: German Navy



1



4



2



5



3

- 1 Buoy-laying vessel,
2 x SRP 1010 (1100 kW each)
Shipyard: Damen Shipyards,
The Netherlands
Owner: Commissioners of Irish Lights,
Ireland
- 2 Cable-laying vessel, 2 x SRP 1212
(1200 kW each), 1 x SRP 1212 ZSV
(1200 kW), 1 x STT 1010 (1100 kW)
Shipyard: Scheepswerf De Hoop Lobith BV,
The Netherlands
Owner: Van Der Stoel-Cable,
The Netherlands
- 3 Split barge, 2 x NAV 330/545 (545 kW each)
Shipyard: Peene-Werft, Germany
Owner: August Reiners Bauunternehmung
und Naßbagerei, Germany
- 4 Floating crane, 4 x NAV 330/465 (465 kW each)
Shipyard: Huisman Itrec, The Netherlands
Owner: Scaldis Salvage & Marine
Contractors N.V., The Netherlands
- 5 Floating crane, 2 x NAV 110/125 (125 kW each)
Shipyard: Schiffswerft Boost, Germany
Owner: Wasser- und Schiffsamt Bingen,
Germany

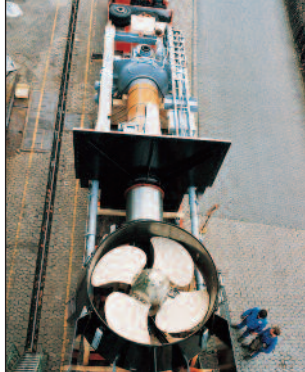
Offshore Sea-going vessels



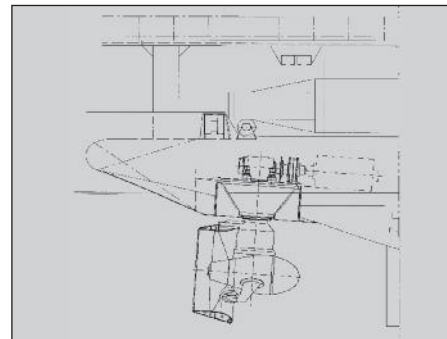
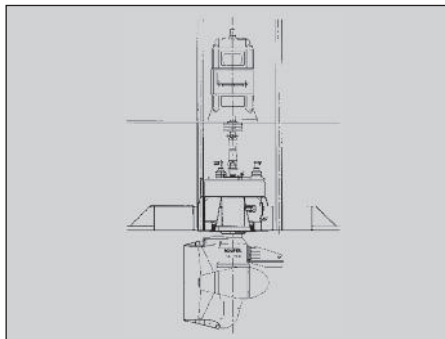
- 1** FPSO, 2 x SRP 1212 (1500 kW each)
Shipyard: Harland & Wolff, United Kingdom
Owner: BP Exploration Operating Comp., United Kingdom
- 2** Semi-submersible drilling rig
8 x SRP 2020 (2240 kW each)
Shipyard: Texas Drydocks, USA
Owner: ENSCO International Inc., USA
- 3** Semi-submersible drilling rig,
2 x SRP 4500 (5000 kW each)
Shipyard: Hyundai Heavy Industries Co Ltd, Korea
Owner: Reading & Bates Falcon Exploration Company, Houston, USA
- 4** Oceanographic research vessel,
2 x SRP 3030 (3000 kW each),
1 x SRP 1212 CP (2000 kW)
Shipyard: Langsten Yard, Norway
Owner: Norwegian Defence Research Establishment, Norway
- 5** Ice-breaking multi-purpose vessel,
2 x SRP 3030 (2900 kW each)
1 x SPJ 520 (2600 kW)
Shipyard: Volkswerft GmbH Stralsund, Germany
Owner: Wasser- und Schifffahrtsdirektion Nord, Germany
- 6** Offshore supply vessel,
2 x SRP (STP) 1010 (954 kW each)
2 x STT 170 LK (350 kW each)
Shipyard: Astill. Balenciaga, S.A., Spain
Owner: Khalifa A. Algosaibi, Saudi Arabia
- 7** Floating crane, 4 x SRP 4500 (6000 kW each)
Shipyard: Fincantieri – Cantieri Navali Italiani S.p.A., Italy
Owner: Saipem S.p.A., Italy



- 8** Offshore supply vessels, 2 x SRP 1212 (2 x 1470 kW) each, 50 t bollard pull
Shipyard: President Marine Pte. Ltd., Singapore
Owner: Boa Ltd., Taubatkompagniet A/S, Norway



SRP 1212 CP



5



8



6



7

Standard types

Specification is subject to change without notice. Status: June 2008.

Type	Rating*	Input power [kW]	Input speed [min ⁻¹]	Well Ø [mm]	Weight [kg]**
SRP 110	A	195	2100	850	880
	B	230			
SRP 170	A	270	1800/2000	1050	1650
	B	310			
SRP 200	A	310	1800/2100	1100	2100
	B	370			
SRP 330	A	470	1800	1400	3600
	B	550			
SRP 440	A	650	1600/1800	1450	7500
	B	780			
SRP 550	A	750	1000/1600/1800	1700	9600
	B	920			
SRP 1012	A	1150	750/1000/1200 1600/1800	2100	17000
	B	1400			
SRP 1212	A	1380	750/1000/1200 1600/1800	2300	17500
	B	1650			
SRP 1215	A	1500	750/1000 1600/1800	2400	19500
	B	1800			
SRP 1515	A	1750	750/900/1000 1200/1600/1800	2600	27500
	B	2200			
SRP 2020	A	2200	750/1000 1200/1800	2800	40000
	B	2600			
SRP 3030	A	2850	750/1200	3400	53000
	B	3400			
SRP 4040	A	3350	750/1000	3800	78000
	B	4000			
SRP 4500	A	4000	750/900	4200	65000
	B	4750			

* Rating A Full power continuous rating 24 hours service
 Rating B Intermittent service with occasional full load
 ** Weight only SRP, well installation, with propeller and oil at PAL min. (from SRP 550 upwards with nozzle)

SCHOTTEL for the Shipping World

- Constant customer support
- Professional commissioning world-wide
- Preventive maintenance and repairs
- State-of-the-art modernizations
- Reconditioned second-hand units
- Close-knit sales and service network



Our product information provides you with explanations and data for planning plants incorporating units from our current programme. On account of the modifications associated with upgrading, the contents of a specific edition will remain valid for a limited time only. Binding for the application concerned are the data given in our tender specification.

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SCHOTTEL



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