

The OWS-COM uses live data for optimal system performance. solutions concerning water cycles – from drinking-water treatment to wastewater, including bilge water. Bremen-based RWO is now further optimising its comprehensive range of water treatment systems using live data, starting with the oily water separator OWS-COM. With the new OWS-Controller, a compact monitor with a 7in touchscreen, all systems information can now be displayed and evaluated in real time via the user interface. This creates optimal transparency concerning the status and performance of the system. Whether and when any adjustments need to be made can be seen at a single glance. One major advantage is that the monitor can be installed anywhere on the ship for remote monitoring, which signifies an improvement in comfort and safety for the crew.

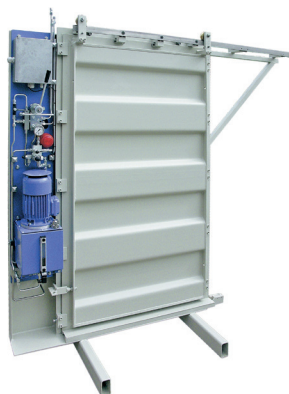
The full potential for optimising water treatment on board is realised by the clean bilge monitoring system RWO-CBM. It comprises the new RWO-Link software and an intelligent bilge economiser. The RWO-CBM acts as the final level of control before water is drained off the ship, making the discharge of bilge water as safe as possible. By accessing GPS coordinates, it automatically detects whether the ship is within special areas and, before discharging the bilge water, determines whether the different maximum parts per notation values for oil content prescribed by the IMO are being observed. This automatically prevents the intentional or unintentional discharge of

contaminated water. In addition, other systems that normally produce clean wastewater, like condensates from air conditioning units, can be connected. A three-way valve automatically governs analysed incoming wastewater and transfers it either directly overboard or into the bilge water tank for further treatment.

The RWO-Link centrally stores, visualises and evaluates all networked systems data. Additionally, the data can be sent from on board to the shipping company in real time using the ship's communication systems.

Further information
RWO
www.rwo.de/en

Watertight doors



Schoenrock's SHIPTIGHT hydraulic watertight sliding door model.

Shipbuilding supplier Schoenrock Hydraulik Marine Systems, headquartered in Schenefeld near Hamburg, Germany, is delighted with an appreciating order situation in 2015 that includes the river cruise business. The company has supplied or is supplying 160 watertight doors to shipyards Neptun Werft (Rostock-Warnemünde) and Meyer Werft (Papenburg) for new river cruise vessels being built for Viking River Cruises.

"The order situation in the river cruise segment has been a successful story for years," says Dr Volker Behrens, Schoenrock's managing director.

The company, a specialist

in ship doors, is currently manufacturing 40 doors solely for new river cruise boats being built for Viking River Cruises and ordered by shipyards Neptun Werft, and 40 doors have been delivered since the beginning of 2015. In addition, Schoenrock has received options for a further 40 doors from Neptun Werft.

Every ship will be fitted with a total of five Schoenrock doors. Four of these doors will be the conventional hydraulic watertight sliding door model, and one will be the new SHIPTIGHT hydraulic watertight sliding door model.

In comparison with competing products, the SHIPTIGHT hydraulic watertight door has variable opening times and, despite its compact construction, is very light. This allows the door to be opened and shut frequently without problems. It can be supplied in various sizes and is able to withstand a water column pressure of up to 15m.

The use of a frame profile with a high degree of stiffness plus a Y-section seal make for optimum equalisation of mounting tolerance when welding in place and, thus, lower commissioning costs. The guide rail and rollers are manufactured from stainless steel and are rust-proof, and the sealing surface is also rust-proof.

Further information
Schoenrock Hydraulik Marine Systems
www.schoenrock-hydraulik.com

Providing custom-built inland and seagoing vessels for 129 years

Next year, Shipyard De Hoop will celebrate its 130th birthday. The company was founded in 1889 and has developed into one of the most established yards of the Dutch shipbuilding industry. At De Hoop, the focus is on designing, engineering and building custom vessels,



Shipyard De Hoop specialises in building custom vessels, and has done for over 100 years.

for the inland and seagoing markets. Using a characteristic down-to-earth approach, the yard provides all-Dutch-built craft for niche markets.

De Hoop has two shipbuilding facilities, one in the Dutch province of Gelderland (De Hoop Lobith) and the other in the province of Groningen (De Hoop Foxhol). At both sites, all the required core disciplines are in-house. To support both facilities, there is an outfit quay in the Rotterdam harbour area.

Currently, De Hoop is building an expedition cruise ship, *Celebrity Flora*, which will explore the Galápagos. Not only is it the shipyard's first expedition cruise vessel, but no one else has attempted to purpose-build a cruise vessel for the Galápagos National Park, which has introduced strict new rules that have been designed to minimise environmental impact.

According to CEO Patrick Janssens, the *Celebrity Flora* hull is halfway through its erection, with the placement of the 31st section block. "When ready, the seven-deck hull of the expedition cruise vessel shall be 21m high on our yard's slipway. The delivery is scheduled for next year, and currently the production is in full swing. This shall be a unique vessel, a notable design and we look forward to getting her into the water."

Besides the current building of the *Celebrity Flora*, De Hoop has also received a new order from long-time client Spido, the tour operator in the Rotterdam harbour area. The fast increase

in tourism in Rotterdam requires an expansion of the Spido fleet with a new day-passenger vessel.

Further information
Shipyard De Hoop
www.dehoop.net

The benchmark for noise and vibration reduction



Sika Marine offers bonding, sealing, and noise and vibration-reduction solutions.

Sika Marine is a division of Sika, a global company based in Switzerland specialising in the manufacture and supply of chemical-based products for construction and industry. A world leader in its field, Sika has subsidiaries in more than 70 countries.

The marine division delivers technologies known as Sikaflex that focus on the specific requirements of sealing and bonding for marine environments. This product portfolio includes products developed specifically for sealing, deck bonding, levelling and caulking, and sealing for organic and mineral glass systems, and panels or sheet materials.

SikaFloor Marine, a world leader in marine flooring solutions that comprise primary deck coverings, A60 solutions, and noise and vibration-reduction systems, offers a sophisticated range of acoustic marine flooring systems for cruise ships to combat structure and airborne noise. These noise-abating systems have been

developed to achieve class-leading noise-reduction values, particularly in the comfort-class vessels. The exceptionally fast installation times mean that work can be carried out during passage or while in dry dock for minimal disruption to operations. Floors can be walked on in just two hours following installation.

SikaFloor Marine's deck coverings are highly efficient in absorbing structure-borne and airborne noise. SikaFloor Marine PU-Red, a fire-retardant polyurethane, is part of a range of products that form Sika's SikaFloor Marine's viscoelastic systems and viscoelastic floating floors to reduce noise and vibration carried through the air and the vessel structure. SikaFloor Marine Litosilo Steel, which comprises an insulating layer covered by a composite steel plate layer, is used in conjunction with SikaFloor Marine PU-Red to create a floating floor to help combat airborne and structure-borne noise.

SikaFloor Marine acoustic flooring systems carry the EU Marine Equipment Directive (MED) wheelmark and are A60-class fire-approved, fully complying with the latest IMO standards. Sika's global technical support team is on hand to assist with flooring system selection, validation and the application of Sika materials.

Further information
Sika Marine
www.sika.com

The smartest lithium battery in class

The latest Super B Epsilon battery is a lightweight, easy-to-use lithium battery that offers enormous power and is extremely suitable for maritime applications.

The Super B Epsilon is drop-in rather than lead acid and has all the benefits of lithium iron phosphate. It has superior weight reduction (20kg less, compared



The Epsilon Super B is a powerful, lightweight, drop-in battery with a range of smart features.

to lead-acid batteries), enormous energy reserves and stable voltage even at extreme loads. This lithium battery is suitable for 12V installations, and eliminating the need for an external safety relay means the lithium battery is easy to install. The Epsilon is maintenance-free and has a long service life (up to 5,000 cycles). With its high capacity (90Ah/1200Wh), the battery can power coffee machines, air conditioning, refrigerators and other devices that could not be powered by traditional batteries.

The Super B Epsilon has integrated battery monitoring that provides details about its status, such as voltage, current, temperature, state of charge and time remaining. Hands-on monitoring is also possible via Bluetooth and LED indicators to inform you about the actual status of the battery.

The free 'Be in charge' app provides 24/7 information about the state of charge, time to go and status of the Epsilon battery. This, together with its integrated battery management system and great features, makes the Epsilon one of the most intelligent lithium batteries available today.

Further information
Super B
www.super-b.com

Delivering easy transport on board

The cruise industry is booming. An increasing number of people are discovering a love of cruising across the seven seas. However, it is only possible to offer the large number of

guests the perfect feel-good holiday when all aspects of the crew's day-to-day tasks are running smoothly.

Wanzl Hotel Service is the number one partner for optimum luggage handling. For years, the practical GS-Compact luggage collection trolley from Wanzl has ensured effective, ergonomic and first-class transport of all kinds of luggage items on upscale, premium and luxury cruise liners. The GS-Compact models are true space-savers, in all regards. Depending on their needs, customers can choose between a short or longer platform, which can be folded up to reduce the amount of storage space the trolleys take up. There is also a special feature to aid loading and unloading – the back of the GS-Compact can be swiftly converted into an interim loading area.

Simply fold out the stand on the back to give it a sure footing, tip the trolley backwards and effortlessly load or unload the luggage onto or off the trolley. This makes this arduous task much easier for your staff, thereby contributing to occupational health protection.

To ensure that passengers' cases and bags are treated with care, all loading areas are fitted with a tough, non-slip carpet, which is available in a subtle charcoal grey colour or an elegant shade of red. If you are looking for a particularly sophisticated appearance, the round, stainless steel tubes can also be gold-plated. Thanks to the two extra-large pneumatic tyres, the luggage collection trolley can be handled gracefully, silently and with ease.

Further information
Wanzl
www.wanzl.com