## OUTFITTERS PAGE



## Hänchen's Hydraulic Cylinders

Hänchen's lightweight hydraulic cylinders are the first cylinders to feature piston rods and cylinder tubes made of carbon. The specially developed composite material H-CFRP opens innovative paths for manufactures of machine elements such as pressure-tight tubes, highly stressable rods, or other round components.

The technique developed by Hänchen to integrate metal in CFRP results in components having an extraordinary tensile strength. Cylinders produced are up to 80% lighter, particularly with high bending-stiffness and low-expansion, corrosion-resistant, non-magnetic, and due to their low mass,

are up to 50% more energy-efficient. Three innovations for H-CFRP are the round components which are highly stressable in three dimensions; the high strength CFRP metal bonds; and the tough, wear-resistant surface. The company's 4-year development process for H-CFRP has set a milestone that redefines the limits of technology for hydraulic cylinders and machine elements available on the market. In the Netherlands, Hänchen is represented by R&S Hydrauliek.

l. www.rs-hydrauliek.nl



## Brunvoll Thrusters Introduces New Sealing Systems

The scandinavian manufacturer of thrusters has developed a pioneering solution for sealing systems for all-tosea Interfaces. Environmentally acceptable lubricants (EALs) in oil-tosea interfaces have become compulsory as of December 2013 for all vessels over 79ft calling on US waters. Brunvoll offers appropriate sealing systems for its thrusters fully complying with the above-mentioned rules and permits, providing a costeffective solution to ship owners. The EAL solution is now available for new systems with a retrofit package to follow soon.

i. www.si-benelux.nl

## Conidia Addresses Fuel Storage Contamination



There is growing evidence highlighting the problems caused by microbial contaminants that breed in fuels following water ingress. The resulting growth can form a sludge which blocks filters, fuel lines and in worst-case scenarios, causes tank corrosion. Conidia Bioscience has developed Fuelstat Resinae Plus: a simple, fast and effective onsite test to determine whether your fuel stocks are contaminated. Conidia's Fuelstat Resinae Plus delivers accurate results in 10 minutes. No special skills are required, and no investment is needed in readers to translate the results.

i. www.conidia.com