

HYDAC INTERNATIONAL

**Components,
Systems and Service
for Shipping.**





HYDAC Headquarters in Germany



HYDAC USA



HYDAC Singapore



HYDAC Korea



HYDAC Denmark



HYDAC Norway



HYDAC Netherlands



HYDAC Great Britain



Your Professional Partner for Shipping.

With over 5,500 employees worldwide HYDAC is one of the leading suppliers of fluid technology, hydraulic and electronic equipment.

Our wide range of products, combined with our expertise in development, manufacturing, sales and service enables the shipping industry worldwide to overcome the most diverse problems.

Our quality and environment certification to ISO 9001/2000 and ISO 14001 denote first class quality and responsible management of our resources.

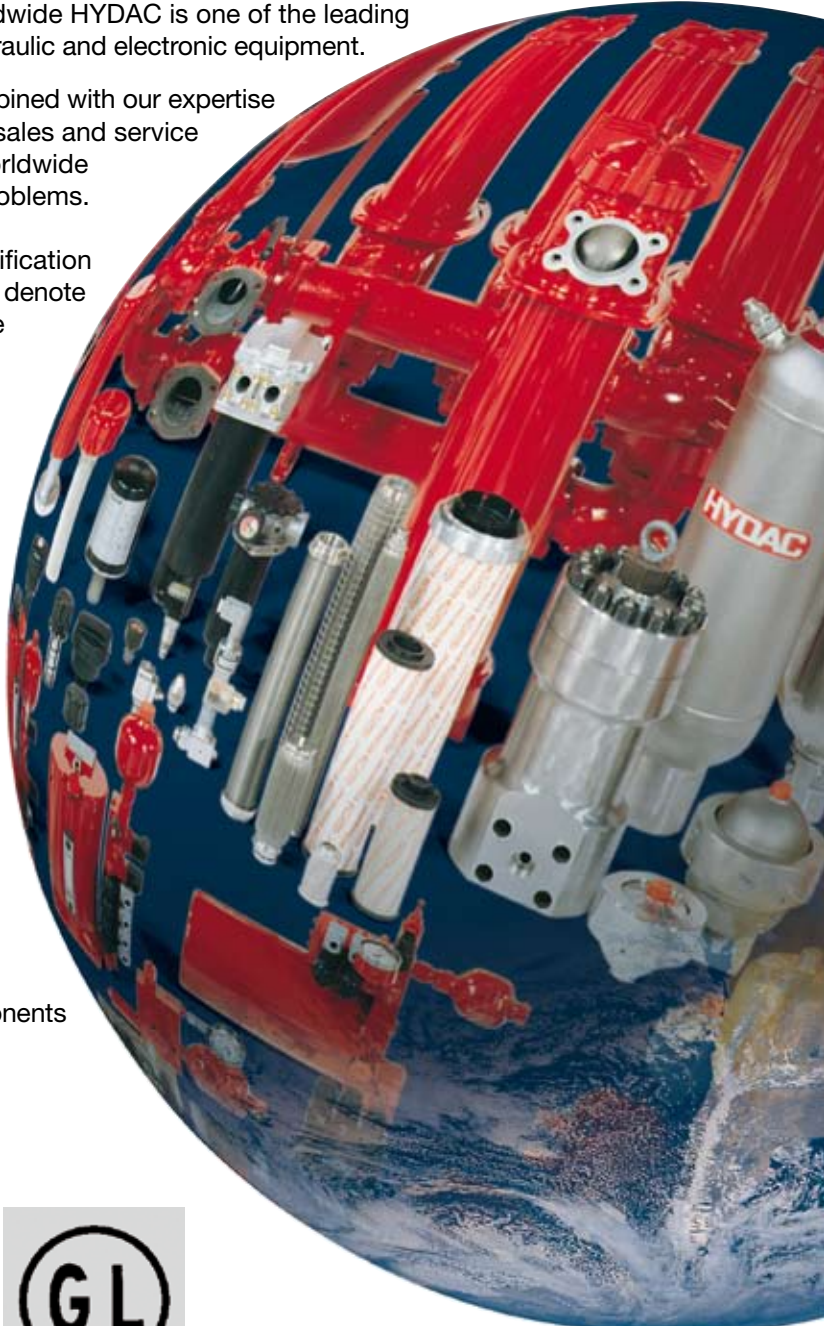
Global and yet local.

With 40 overseas subsidiaries and over 500 distributors and service partners, HYDAC is your reliable partner worldwide.

System solutions. One supplier. One contact.

Wherever you need us, we are there to help you find the most effective solution – for every application, from components to a complete system.

Worldwide approvals.



HYDAC in Shipping.

Development and manufacture of fluid technology components and sub-systems for use in shipping:

- Offshore, subsea or onshore solutions
 - from development and approvals through to production
- Our operations include:
 - Conditioning of operating media and fuel
 - Control of operating cycles
 - Energy storage for emergency functions
 - Special materials such as:
 - Cast steel (CS); Stainless steel (SS)-Duplex; Steel (S)-Duplex
 - Flushing according to customer requirement
 - International approvals and designs
 - Collaboration with development partners and institutes
- Pressures up to 1,035 bar / 15,000 PSI
- Monitoring of oil cleanliness and oil ageing in hydraulic and lubrication oils
- Worldwide technical and commercial support thanks to global presence



Loading equipment

- Shiploaders
- Ship unloaders
- Marine grabs
- Bulkhead closing mechanisms



Engine

- Conditioning of operating fluid
- Monitoring of operating conditions
- Filtration
- Pulsation damping
- Pressure measurement technology
- Lube systems for main propulsion gearboxes



Damping of pressure fluctuations in the injection process of the injection pump using a metal bellows accumulator.



Diaphragm accumulator for damping in the lubrication system.



Plate heat exchanger PWT for freshwater cooling of lubrication oil.



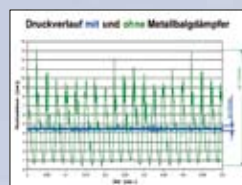
Change-over filter



Fuel conditioning modules (dampers)



Marine block with EDS 300 for monitoring operating conditions, such as pressure, temperature etc.



Pressure graph with damping.



Offline Separator for dewatering operating fluids.



Cylinder



Ship unloader



Power unit for lifting gear operation



Power unit for undercarriage operation



Grabs



Cylinders in shiploaders



Compact power unit CA



Control blocks



Control of motion sequences

Cylinders, power units, accumulators, valves for use on stabilisers

Complete hydraulic equipment for dredgers



Breather filter BF7 to CNOMO standard



Ball valves KHMFF



Carrier cylinder



Coaxial valves



Change-over return line filter RFLD



Power unit



Hydraulic unit



Steering gear / Propeller

- Steering gear
- Pitch adjustment



Filter systems: FluidContamination Unit FCU, SensorMonitoring Unit SMU, FluidMonitoring Module FMMHP.



Filter clogging indicator



Temperature sensor ETS 3000



Level sensor ENS 3000



Pressure filters



Filter elements BN4



Power unit for propeller adjustment.



Components and systems for ballast water treatment

- Filtration of ballast water
- Ideally suited for integration into the overall system
- Reliable operation
- Small footprint
- Variable filter isometry
- CIP – cleaning in place
- Just one cleaning agent required
- Excellent separation rate
- Flow velocity up to 3,000 m³/h



Automatic Backflush Filter AutoFit® RFBW



TwistFlow Strainer AutoFit® TFS



Deck superstructure

- Marine cranes
- Winches
- Freefall lifeboats
- Ships hatches
- Equipment for adjusting to the sea swell



Hydraulic cooling in open or closed circuits.



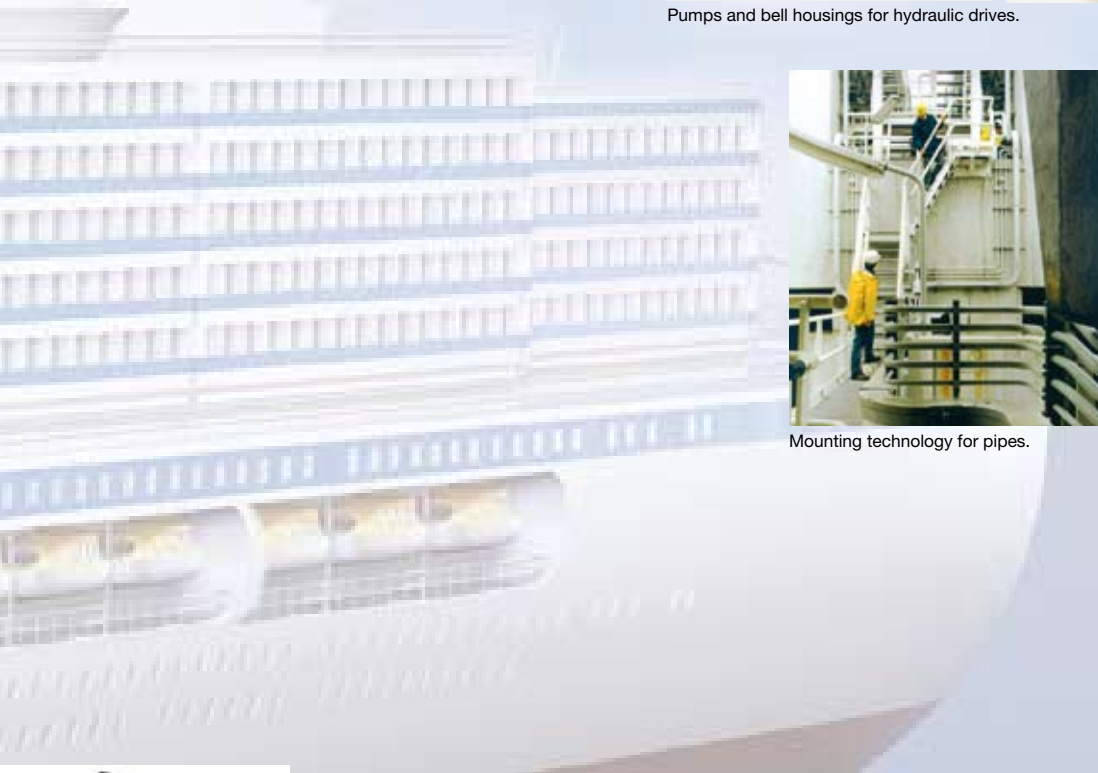
Accumulators for energy storage for emergency functions.



Hydraulic filters for emergency functions.



Pumps and bell housings for hydraulic drives.



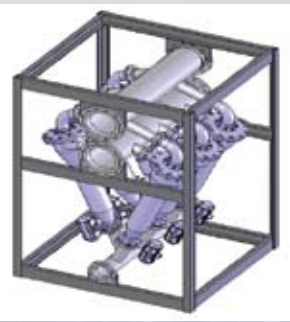
Mounting technology for pipes.



Ball valves



Pressure switch for load monitoring of crane booms.



TwistFlow Strainer AutoFill® TFS skids



Special cylinders in hydraulically manoevrable cover equipment.



Dewatering unit FAM

Fluid Engineering and Service – worldwide.

Analysis and Diagnostics.

70 - 80 % of all breakdowns in hydraulic and lubrication systems are due to contamination of the fluids and components used. In practice, this is often not sufficiently recognized.

HYDAC offers a comprehensive range of easy-to-use measurement and analysis equipment to monitor fluid and component cleanliness. Fluid laboratory vehicles are at your service worldwide.

Commissioning, Optimisation, Engineering.

As a systems and fluid service specialist, HYDAC provides a comprehensive fluid engineering concept: from cleaning, to complete maintenance packages, to system optimisation, HYDAC is your principal partner.

Our concern is to improve the operational availability of machines and hydraulic systems.

Fluid engineering is the total package of technical and commercial services for the benefit of the customer.





Brochure: Accumulators DEF 3.000



Broch.: Filtration Range DEF 7.000



Br.: Filters for Indust. Processing DEF 7.700



Br.: Systematic Fluid Service DEF 7.929



Broch.: Compact Hydraulics DEF 5.300



Brochure: Accessories DEF 6.100






Brochure: Electronics DEF 18.000



Broch.: Cooling Systems DEF 5.700

Global Presence. Local Expertise. www.hydac.com



-  HYDAC Headquarters
-  HYDAC Companies
-  HYDAC Distributors and Service Partners

HYDAC INTERNATIONAL

Head office
HYDAC INTERNATIONAL
GMBH

Industriegebiet
66280 Sulzbach/Saar
Germany

Phone:
+49 6897 509-01

Fax:
+49 6897 509-577

Internet: www.hydac.com
E-Mail: offshores@hydac.com