

The HYDAC logo is a red rounded rectangle with the word "HYDAC" in white, bold, sans-serif capital letters.The word "INTERNATIONAL" is written in large, bold, red, sans-serif capital letters, positioned to the right of the HYDAC logo.The background is a 3D rendered image of a steel mill. A large, dark grey ladle is tilted, pouring bright orange and yellow molten metal into a circular opening in a large, reddish-brown structure. The scene is filled with industrial machinery, pipes, and structural elements, creating a sense of a busy manufacturing environment.

**Components,
Systems and Service.
Iron - Steel - Metal.**

HYDAC

Your professional Partner. Iron - Steel - Metal.

With more than 5,000 employees worldwide, HYDAC is one of the leading suppliers of fluid technology, hydraulic and electronic equipment. From the outset we work in partnership with our customers to develop the systems for Iron - Steel - Metal.

Our wide range of products, combined with our expertise in development, manufacturing, sales and service enables the Iron - Steel - Metal 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.

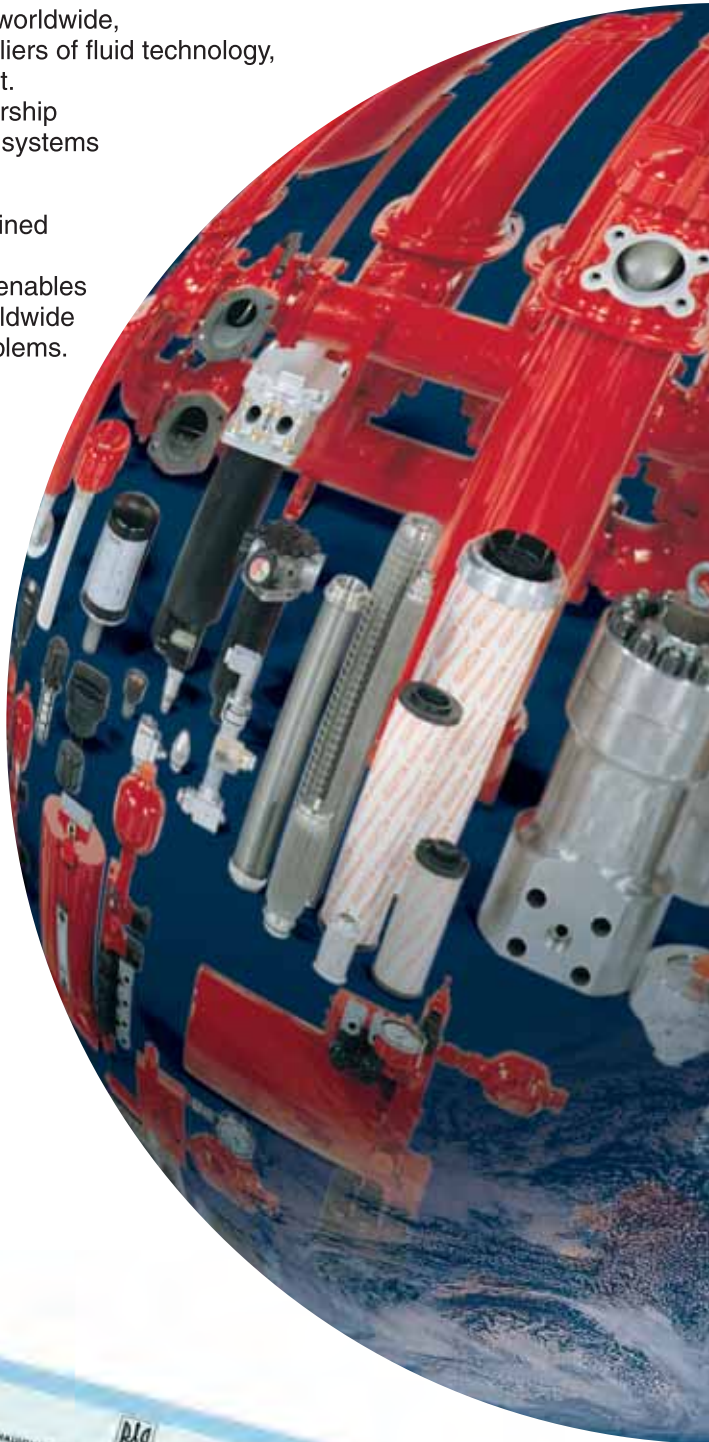
Global yet local.

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 specifications and approvals.



HYDAC Headquarters Germany



HYDAC China



HYDAC Poland



HYDAC USA



HYDAC India



HYDAC Korea



HYDAC Netherlands



HYDAC Brazil



For every task the right solution.

- Condition monitoring of oil cleanliness and oil ageing in hydraulic and lubrication oils
- Measuring technology and electronics
- Cooling and filter systems
- Extending service life and ensuring operational safety through the use of high quality filtration
- Dewatering and oil service units
- Hydraulic systems and components



Pressure Switch EDS 1700 for wall mounting.



Portable Data Recorder HMG 3000 (10 input channels).

Condition Monitoring and Sensor Technology

Sensors for condition monitoring in hydraulic and lubrication oils.

Changes in initial state (oil cleanliness, water content, viscosity...) can be observed and used to plan maintenance work.

Critical system conditions, such as tank overflows and unplanned system stoppages can be avoided.

Water in oil



AquaSensor AS 2000, % S/T.



AquaSensor AS 1000, % S/T.



ASFW Sensor (free water), 0.5 ... 50, % V/T.

Solid particles in oil



ContaminationSensor CS 1000, Cleanliness to ISO 4406 and SAE 4059.



ContaminationSensor CS 2000, Cleanliness to ISO 4406 and SAE 4059.



ContaminationSensor FCU 2000 for mobile data acquisition.

Water/solid particles



FluidMonitoring Module FMM (combination of AS 1000 and CS 1000).

Oil ageing



HYDACLab® Ageing Sensor, % S/T / Viscosity / dielectric constant.

Oil Level



Electronic Fluid Level Sensor ENS 3000.

Measuring Technology and Electronics

HYDAC offers a comprehensive range of sensors for measuring

- pressure,
- temperature,
- flow rate,
- filter contamination,
- fluid level.



Pressure Transmitter
HDA 3800.

Media Temperature in Systems



Oil / Air Heat Exchanger.



Plate Heat Exchanger.



Plate Heat Exchanger,
gasketed.

Filtration

Many years' experience in the filtration of transmission oil and hydraulic oil.

We develop optimised systems for:

- Main filters
- Off-line filters
- Breather filters



Change-Over Filter RFLD,
 $p_{\max} = 16 / 25 / 40 / 64 \text{ bar}$.



Pressure Filter DF,
 $p_{\max} = 420 \text{ bar}$.



Betamicon®
filter elements.



MegaRheo
elements.



Dewatering Unit FAM
and off-line filtration in hydraulic system
using Quintolubric®.



OLF Off-line Filtration
with ContaminationSensor CS 2000.



Bypass Heating Filter Cooling Circuit
with integral condition monitoring.

Hydraulic Components and Systems

System advice and sizing

Design

Manufacture

Commissioning

After sales service



Nitrogen Charging Units
for charging or topping up accumulator systems.



Hydraulic Accumulators
for safety functions and for managing energy peaks.



Valves and Blocks
for fluid systems.

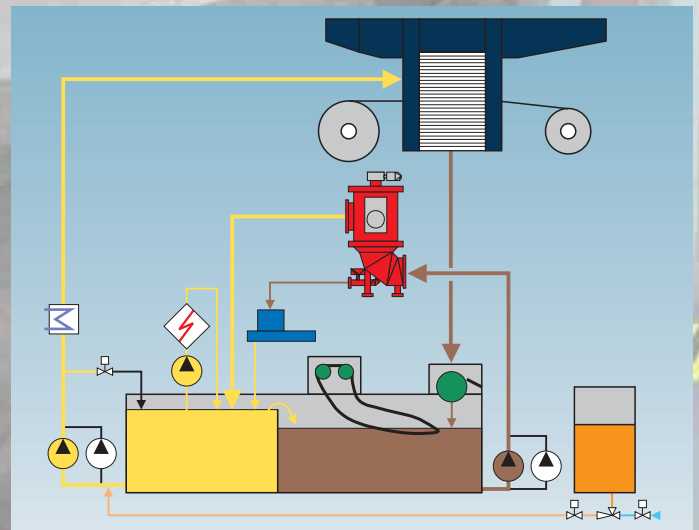


Blast Furnace Gas Expansion Turbine,
oil tank volume 9,500 l, power 500 kW,
flow rate 760 l/min.

Rolling Emulsion

Key technical data:

- System supply flow rate:
1,000 - 2,000 l/min (with frequency control)
- Supply pressure: approx. 6 bar on the rolling stand
- Emulsion processing:
 - Back-Flushing Filter RF 3-2.5 in the bypass with > 2,200 l/min, 4.5 bar and
 - 50 µm slotted strainer candles
 - back-flushing at max. 0.15 bar



Process Filtration

Automatic Back-Flushing Filter AutoFit® RF3

- For descaling – sheet metals and slabs,
- in cooling lubricant systems,
- as a protective filter before pumps,
- for feed water filtration,
- in belt systems...

Automatic Back-Flushing Filter AutoFit® RF3,
flow rate 100 .. 5,000 l/min.

Special Cylinders



For example:
Bending Tool
for continuous casting systems,
operating pressure 300 bar,
piston diameter 400 mm,
piston rod diameter 200 mm,
stroke 400 mm.

Accessories



Clamps and Ball Valves.

Accumulator Station



Piston Accumulator Station
with back-up N₂ bottles,
e.g.: electric oven safety function.

Pump Station



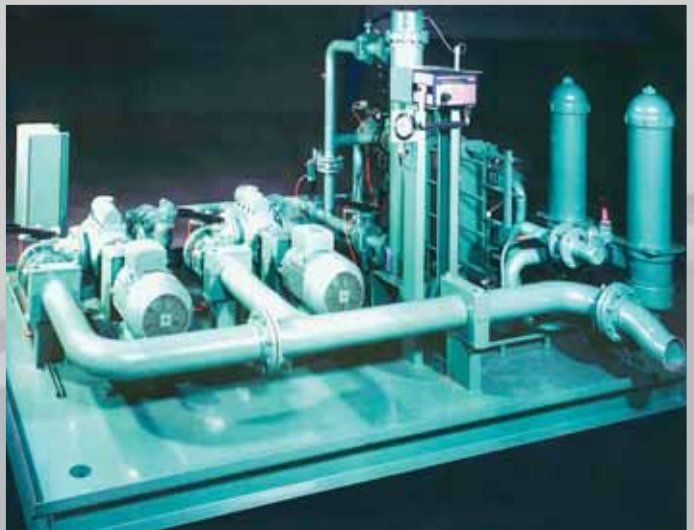
For example: **Pump Station for Strip-Winding Plant**,
oil tank volume 6,000 l, driving power 575 kW,
flow rate 1,900 l/min.

Valve Station



Valve Station for continuous slab casting plant.

Circulation Circuit



Bypass Heating Filter Cooling Circuit
for continuous casting plant.



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 direct relationship is often not sufficiently recognized. HYDAC offers a comprehensive range of easy-to-use measurement and analysis equipment to monitor operating media 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./...



Brochure: Filtration Range DEF 7.000./...



Br.: Filters for Industrial Processing DEF 7.700./...



Brochure: Fluid Service DEF 7.929./...



Br.: Compact Hydraulics DEF 5.300./...



Brochure: Accessories DEF 6.100./...



Brochure: Electronics DEF 18.000./...



Brochure: Cooling Systems DEF 5.700./...

Global presence. Local expertise. www.hydac.com



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- HYDAC Distributors and Service Partners

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