

Components, Systems and Service for Mobile Power Units



Your Partner for Expertise in Mobile Power Units.

HYDAC has been one of the leading suppliers of fluid technology, hydraulics, electronics and cooling equipment for more than 50 years and has over 7,500 members of staff worldwide.

The breadth and depth of our product range and our recognised skills in development, manufacture and service allow us to solve all kinds of problems worldwide.

Our mobile systems are designed for use in highly diverse conditions (arctic or desert).

The designs range from light duty to heavy duty, installed in containers or open design. The HYDAC Technology platform makes it possible to create complex system structures. A wide variety of options is available for noise protection or international acceptances.



Options or special requests for all power units:

- ATEX versions
- Approvals from various certification companies, such as Germanischer Lloyd and DNV
- Various temperature versions (arctic, desert)
- Offshore capability
- GPS monitoring
- Additional noise protection [< 60 dB(A)]
- 3G modem remote service
- Oil pan, including monitoring and walkway grids
- Special paint (RAL)
- With lifting and/or lashing points
- Underbody in skid design

Customer benefits:

- Robust technology, suitable for construction sites
- High-performance and reliable drives using proven HYDAC system technology
- Tailor-made drive solutions developed for your specific application
- **On-site service worldwide:** Over 45 international companies and more than 500 sales and service partners
- **Worldwide acceptances and specifications**

From the component to the system.

Intelligent integration of HYDAC products creates innovative and technologically advanced subsystems and complete systems.

Pumps

- Open circuit
- Speed-controlled (KineSys)
- Fixed displacement internal gear pumps, external gear pumps and vane pumps
- Variable pumps



See catalogue no. 2.900 – Pump Specifications

Valve technology

- Mobile valves (open centre, load-sensing)
- Cartridge valves
- Manifold mounting valves



See brochure no. 5.254 – Mobile Valves and catalogue no. 53.000 – Fluid Technology

Control technology/sensors

- Internal power unit monitoring
- Via radio remote control
- Power units networked via traffic-light function or bus control



See catalogue no. 18.500 – Control Technology for Mobile Machines

Cooling systems

- Stand-alone filter cooling system
- Integrated temperature/pressure monitoring
- Continuously variable fan control



See brochure no. 5.700 – Cooling Systems

Filtration

Complete product range for all applications and operating conditions, including Stat-Free® technology



See catalogue no. 70.000 – Fluid Filters

Power units provide a functional, acceptance-ready modular solution

HYDAC can support you in the design and construction of power units for diverse applications, as additional drive units, auxiliary power units or emergency back-up supply, for your particular situation. The possible power unit designs range from open housings, to light or heavy duty series, right up to containers of various sizes. These may be individual stationary units, or units mounted on a skid or trailer chassis, to take account of the subsequent application and operating conditions. We have an extensive portfolio of hydraulic products, components, systems and subsystems from our various product divisions. This unique range of products provides you with all the components necessary to meet your varied requirements.

Light duty range

- Fixed/variable displacement pump system max. 420 bar
- Sheet-metal bolted structure, suitable for building site
- Hand-over when fully-operational, with reports and acceptance documentation
- Lift and loading equipment built into housing



Open design, without housing

- Special customer solutions 50–1500 kW
- Rear power units for crawler tracks
- Fully operational and approved modular solutions,
- Integrated frame subsystems including tanks and cooler
- Fully equipped pump splitter gearbox



Containers

- 8'/10'/20'/30'/40' standard container 75–1400 kW
- Open side solutions with container corners with/without roof
- Special solutions with oil pan, openings and doors as required
- Multiple fixed/variable displacement pump systems with/without splitter gearbox
- Integrated sound insulation / after-treatment of exhaust gases



Heavy duty range

- Sturdy structure suitable for building site
- Fixed/variable displacement pump system max. 420 bar
- Hand-over when fully-operational, with reports and acceptance documentation
- Extra-strong base with lashing points for skidding
- Tanks integrated into frames



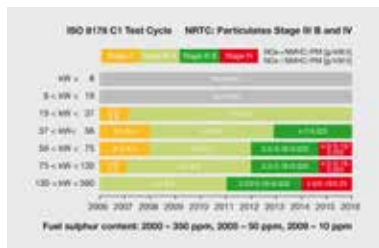
Various drive concepts for power units

We can offer various drive concepts in a wide range of power ratings, in line with your requirements and your particular operating conditions. Whether the drive unit is to be designed as a petrol, diesel or gas engine, an electric motor or even a hybrid, we will always find the perfect solution for your needs, in full compliance with emissions guidelines.



Combustion engines

- 8–1400 kW
- Diesel/petrol/gas engine drives
- EU Stage II/IIIA+B/IV
- US TIER II/III/IV/i/IV



Electric power units

- Power levels from 0.25 to 315 kW
- Asynchronous drives
- Speed-controlled from 0 to 3000 rpm
- Constant speeds of 1500/1800/3000 rpm
- KineSys drive systems

See brochure no. 10.146 – KineSys
The Intelligent Drive System



KINESYS



Hybrid power units

- Accumulator power units with bladder or piston accumulators
- Boost accumulators to allow downsizing of the combustion engine or electric motor

Power units for special operating conditions

When power units are to be used in special climate conditions or environments, there are numerous options in the HYDAC product portfolio to choose from. We will also support you in preparing for and carrying out power-unit acceptance procedures for a wide range of certification companies (such as Germanischer Lloyd, CCS, DNV and Bureau Veritas).

Arctic

- Design type:
 - Enclosed design
 - Separate cooler room
 - Housing insulation
- Starting temperature -40 °C
- Storage temperature -50 °C
- Oil: Special media
- Heating:
 - Electric
 - Diesel
 - Petrol
 - Gas



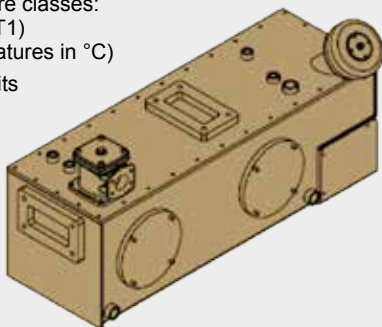
Desert

- Design type:
 - Enclosed design
 - Separate cooler room
 - Housing insulation
 - Sand traps in air intake duct
 - Roof shading/cooling
- Ambient temperature max. 55°C
- Oil: Special media
- Cooling:
 - Stand-alone cooling systems
 - HD fins
 - IBT bypass integrated
 - ESC fan control
 - Heat exchanger
- Cooling power units



Atex

- According to equipment group I (category M1 or M2) or equipment group II (category 1, 2, 3 or zone: 0, 1 & 2 for gases, 20, 21 & 22 for dusts)
- According to explosion group for gases and vapours from IIA and IIB to IIC
- According to temperature classes:
 - for gases (from T6 to T1)
 - for dusts (with temperatures in °C)
- Oil-immersed power units
- Use of special diesel engines



Offshore

- Design type: marine design
- Special paint
- Tank design: Water sensors
- Water separator
- Closed hydraulic tank systems
- Special oils





Accumulators 30.000



Fluid Filters 70.000



Process Technology 77.000



Filter Systems 79.000



Compact Hydraulics 53.000



Accessories 61.000






Electronics 180.000



Cooling Systems 5.700

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