

# HYDRAULIC CYLINDERS



**HOVEN**  
HYDRAULIK

MOVING TECHNOLOGY

HYDRAULIC CYLINDERS • POWER UNITS • RECYLINDERING • SERVICE & MAINTENANCE

HOVEN.DE

# MOVING POWERFUL WITH MAXIMUM PRECISION

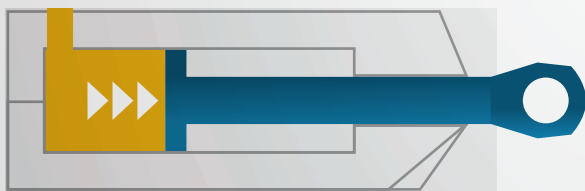
To move big things, you need powerful hydraulic cylinders. And the right power units to set them under pressure.

We love the challenges posed by particularly large dimensions or complex details. Therefore our engineering and production team is specialized in the field of individually designed cylinders and small series for the global process industry. Hydraulic cylinders by Hoven guarantee productivity in automotive, chemical or oil- and gas production units. They also provide solutions for demanding applications in specialized machines in mining, excavation or tunneling. We have been doing this successfully for more than six decades, our cylinders are synonymous with german engineering know-how and manufacturing expertise. Quality is our passion and the commitment of Hoven staff.

Convince yourself of our technology that moves.

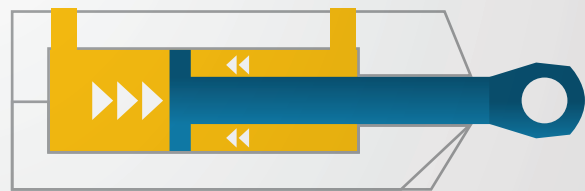
## FOUR WAYS OF MOVEMENT: THE ENTIRE RANGE OF OUR HYDRAULIC CYLINDERS

▶▶▶ Pressure direction    ■ Hydraulic oil



### PLUNGER CYLINDERS

*Hydraulic cylinders single-acting*



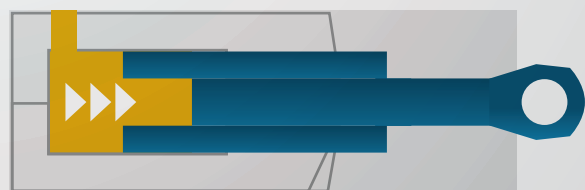
### DIFFERENTIAL CYLINDERS

*Cylinders double-acting*



### DOUBLE-ACTING CYLINDERS

*With two piston rods*



### TELESCOPIC CYLINDERS

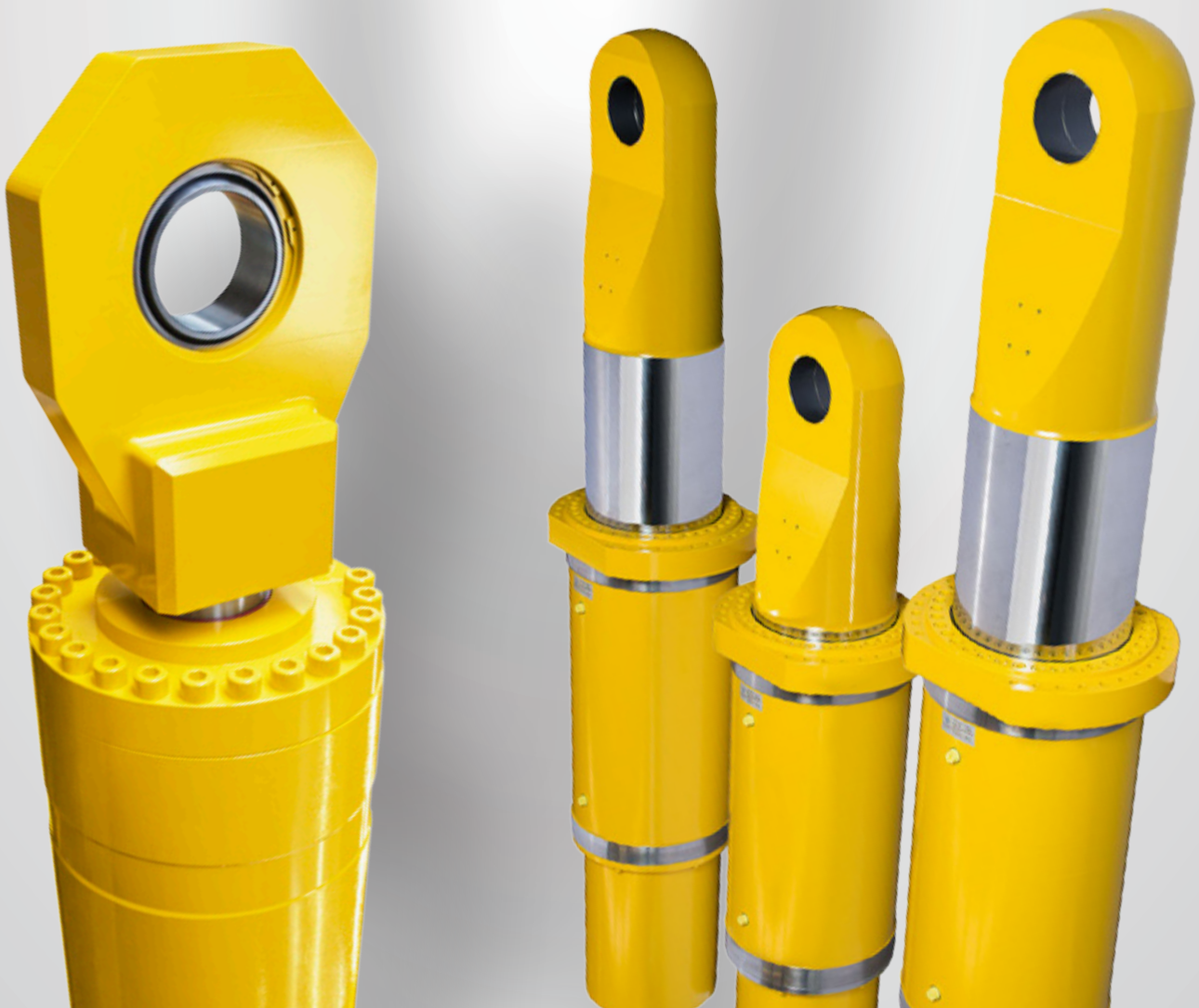
*Large stroke at small installation dimension*

## MANUFACTURING EXCELLENCE NEEDS THE RIGHT PEOPLE, MACHINES AND PROCESSES

We are the engineers among the “hydraulic guys”. This is shown by the enormous technical experience of our staff and the numerous technicians and engineers working closely with the production team. We produce hydraulic cylinders of up to 700 bar pressure with piston diameters of 32 – 1,000 mm, a stroke of up to 10,000 mm and weighing up to 20 tons.

Our modern and wide ranged machine park gives us the opportunity to carry out most of the production work ourselves. This in particular applies to the core competencies of turning, milling and welding. We are convinced that our high production depth is the key to high quality and flexibility.

Our manufacturing process is subject to continuous quality management and is certified according to DIN EN ISO 9001. In addition, we are certified according to DIN EN ISO 3834-3 for all important welding processes. We take on customer-specific inspections according to specified standards of the inspection companies and provide for compliance with all relevant safety and test regulations, including ATEX, NEMA, CSA, and UL.



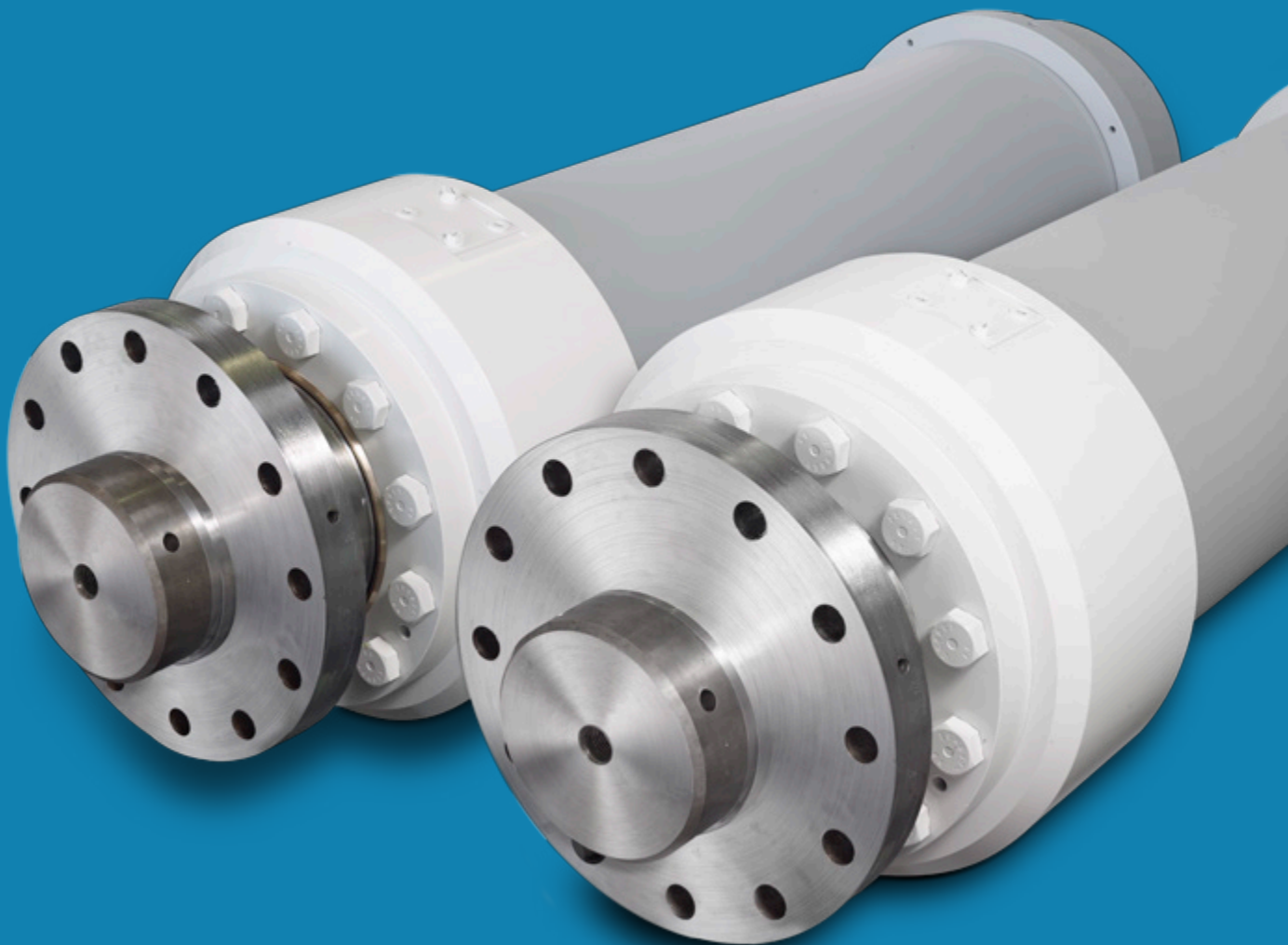


## ENSURING MAXIMUM QUALITY TO DELIVER RELIABILITY

From the beginning we have dedicated ourselves to high quality requirements. This is why, for example, each manufactured cylinder is subjected to a final hydraulic test procedure – according to the applicable standards or adjusted to your individual specifications if required.

The test certificate for the hydraulic cylinders is available on request as well as a detailed documentation. Our quality philosophy also includes the selection of appropriate materials and hand-picked component partners sharing our maximum quality idea. This is the basis for hydraulic cylinders in proven Hoven quality.

The durability of hydraulic cylinders also depends on their sealing technology. Therefore we at Hoven are paying particular attention to this field of technology as we are appreciated for our sealing competence.



## THREE DEGREES OF SPECIALIZATION FOR THE PERFECTLY FITTING HYDRAULIC CYLINDER

### STANDARD APPLICATIONS

Serial cylinders in different product series of up to 250 bar and 6,000 mm stroke:

- **LD-series** with welded bottom
- **GD-series** with screwed head and without end position damping
- **MD-series** as durable bolted construction with V-rings and adjustable end position damping

### MODIFIED SERIAL CYLINDERS

Often special requirements can be covered by the modification of standard cylinders. By individualizing the standard we are able to efficiently provide solutions for difficult environments, as for example:

- with hydraulic cylinders in explosion-critical zones manufactured according to the **ATEX-Standard**
- by **Viton-design** for thermally sensitive operating environments
- including **valve assemblies**, e.g. brake valves in safety-relevant areas

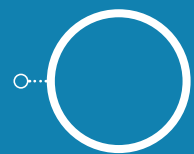
### SPECIAL CYLINDERS

Special cylinders are our **core competence** and at the same time the product area where we at Hoven can exploit our expertise to the maximum. Therefore, we are pleased to design and manufacture individual special cylinders tailored to your specifications. We were given excellent references in plant engineering and press manufacture as well as in the areas of tunnel construction, petro-chemistry and the process industry.



POWER-RADACH.de

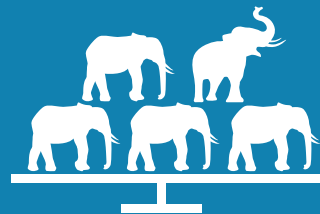
## RANGE OF PERFORMANCE



**32 - 1.000 MM**  
Piston diameter



**1 - 700 BAR**  
Pressure



**0,2 - 20 T**  
Weight



**5 - 10.000 MM**  
Stroke

## MOVING TECHNOLOGY

We see ourselves as manufacturer of demanding small series and producer of extremely reliable custom-made designs – in size and function. We provide the design of suitable power units and with our “Recylindering”-concept overhauling of strained cylinders, power units and hydraulic components.



### CONTACT

Wilhelm Hoven  
Maschinenfabrik GmbH & Co.  
Brockenberg 27  
D-52223 Stolberg (Rhld.)

+49 (0) 24 02 - 96 53 - 0  
+49 (0) 24 02 - 96 53 - 35  
info@hoven.de  
www.hoven.de