HENGSTLER

Hydraulic cylinders

Engineered and made in Germany.

OUR VISION

As a forward-thinking traditional manufacturer, we are expanding our leading position as preferred supplier for hydraulic cylinders of wellknown producers in the construction machine, crane and specialty machine industry.

We focus on our core competencies and branch into new markets through investment.

We are committed to our Black Forest location as shown by the modernization and expansion of our facility there.

Andreas Riem, CEO

WHO WE ARE

Customers at center stage

Hengstler Zylinder GmbH is a leading manufacturer of highquality, customer-specific hydraulic cylinders. With over 80 years of experience we know our customers better than almost anybody else. This individual support is valued and has added to our reliability and fairness over many years.

Our guiding principle

We give customers more than they expect. From the initial idea right through to the finished product, we work closely with our customers. We put the focus on their individual needs, from advice about technology, through to production and customer service, to create win-win solutions.

Your partner for demanding tasks

We have the values of a traditional, medium-sized company, and our customers and employees are at the heart of what we do. On this basis we develop products and strategies that are successful today and for the future. This makes us a preferred partner for demanding tasks and bespoke solutions involving hydraulic cylinders.

WHAT SETS US APART?

Solid expertise

Our strength is our specialized knowledge of the design, construction and manufacture of premium hydraulic cylinders for construction machines, cranes and specialty machines.

We have acquired our expertise over many decades of working on countless projects with our customers.

We supply tailored products and comprehensive service with individual support and friendly advice.

Dedicated employees

The high quality of our products comes from the high levels of identification our employees have with customer projects. Young talent and employees with many years of experience complement each other and are proficient in the wide range of products we offer. Together they promote professionalism and creativity for generating optimal solutions to impress our customers.

Quality awareness and customer orientation at every level

Reliable quality, cooperative collaboration and mutual trust guarantee focus and safety.

Listening carefully and communicating in an open and transparent way are important to us. Our business is geared towards long-term, trustworthy collaborations.





OUR HISTORY

Hengstler Zylinder GmbH started out in 1937 as a two-man company manufacturing hydraulic jacks and over many decades developed into one of the leading manufacturers of hydraulic cylinders. Today we supply well-known companies in the construction, crane and heavy duty vehicle industries all around the world.









Hydropumpen und Hydromotoren Zahnradpumpen In allen Größen Hadgeurgen, verschiedere Austinage und reichlichere Fordermengen. Auf -Köhepumpen, Tyde motoren, hydraulich Waschber



1937

Founding the company

On March 1, 1937, at the age of 30, **Erwin Hengstler** founded his own company, E. Hengstler, in Hausach, Germany, and started to produce **hydraulic jacks** in a two-man operation.



over 80 years of experience

Expansion

Along with the strong expansion of the **automotive industry** and **aviation**, the jack continued to develop decisively. In addition, the product portfolio was expanded and the company offered complete system solutions that were primarily used in **agriculture**.

Valves, steering systems, pumps and numerous types of assemblies were manufactured in addition to cylinders.

Large construction machine cylinders

Growing international competition led to the design of large, highlevel cylinders and a focus on core competencies.

The **construction machine industry** became the primary market for Hengstler.



Strategic expansion

Continuous strategic expansion and **production optimization over many decades** have enabled the company to produce cylinders with a piston diameter of \emptyset 400 mm and a component length of up to 6 m.

Hengstler today

Over 80 years of expertise means that today Hengstler is one of the technologically leading manufacturers of hydraulic cylinders for construction machines, cranes, material handlers and bespoke applications.

The company is moving forward through continuous modernization with regard to contemporary brand image and forward-looking investments in production.

A strong team with strong management

In the picture from top left to bottom right: Head of quality management Martin Welke, head of production Christian Seitz, head of technology & distribution Johannes Feger, CEO Andreas Riem and commercial director Jürgen Wagner.



OUR STRENGTHS



Engineering expertise: customer-specific solutions

The central focus of every project is to satisfy the specific customer requirement. Every customer receives the bespoke cylinder that they really need.

Our technical expertise enables us to find, design and produce, in every regard, the best technical and economical solution for every application.



Hydraulic system expertise born out of experience

System integration is a must for us. Our more than 80 years of experience means that we understand your needs both in detail and holistically moreover. Our hydraulic system expertise allows us to integrate peripheral equipment and potential interactions with adjacent components.



Product service life and ease of service

Our cylinders are designed for constant use and meet the highest demands that our customers make of them. In addition to impermeability and corrosion resistance, this relates primarily to issues of wear and resistance. These are areas that can lead to huge energy savings over the life of the product and therefore impact positively on the TCO. Our products also have groundbreaking ease of service, they can be easily maintained with basic tools.



Production: Made in Germany

We supply our customers with reliable and consistently high-quality products. This is down to our German production site, which really proves itself through expertise, consistency, reliability and precision. At Hengstler we take quality and customer requirements seriously. All our processes are certified, carried out and monitored by welltrained specialists.





FOR CONSTRUCTION MACHINES

Highly dynamic - versatile - resilient

Construction machines work in dust and dirt, with dynamic loads, in the heat and the cold.

Environmental conditions like these place specific demands on cylinders and their seals and result in the use of forces that are difficult to calculate.

Everything that a construction machine moves is done using hydraulics, which is why the range of different cylinders and their operating parameters is so vast. Whether it's steering, supporting or lifting attachments, we know what it takes.

> Special seal package for an exceptionally long service life

Boom adjustment cylinder

Piston diameter: up to 300 mm Stroke length: up to 2,800 mm Pressure rating: up to 360 bar

Long service life for bushings thanks to dusttight mounting points

Designed for highly dynamic loads thanks to the particularly robust mounting of the guide head

Easy-to-service design: can be dismantled and assembled with standard tools

Further cylinders for construction machinery: lift cylinder, tilt cylinder, outrigger cylinder, etc.

FOR CONCRETE PUMPS

Mobile – powerful – resistant

Whether in building construction and civil engineering, or in tunnel construction, concrete is an important part of every building project. No matter how challenging the task or how much cement dust there is in the vicinity, we have a solution that will work.

Concerning all hydraulic cylinders surrounding your concrete pumps for transporting, pumping, spreading and storing concrete – let us advise you what to look out for in these demanding operations.

Support cylinder

Piston diameter: up to 300 mm Stroke length: up to 1,500 mm Pressure rating: up to 400 bar

High degree of customization on the supporting plate socket

Weight-optimized design for a greater payload for road vehicles

Complete safety whilst supporting thanks to integrated safety valves

Further cylinders for concrete pumps: mast cylinder, slewing cylinder, telescopic cylinder, etc.

FOR EXCAVATORS

Robust – easy to maintain – tough environmental conditions

Demolition, earthworks or clearing, excavators and their cylinders work with all types of materials and have to put up with extremely dusty and dirty environments.

A particularly robust design, special seals for operating in tough conditions and easy maintenance mean that these cylinders are resilient and long-lasting in both hot and cold conditions, and guarantee that the excavator remains reliable.

Bucket cylinder for mobile walking excavator

Piston diameter: up to 300 mm Stroke length: up to 2,800 mm Pressure rating: up to 360 bar

Maximum resistance and strength guaranteed thanks to friction-welded piston rod to rod head connections

Hydromechanical end position cushioning for comfortable and material-friendly operation

Further cylinders for excavators: boom cylinder, stick cylinder, etc.

FOR MOBILE CRANES

Weight-optimized – safe – for dynamic and static loads

The challenge regarding cranes is the application-based development of complex cylinder solutions, which for additional functions such as electronic path and force measurement or position switches require maximum possible safety for as little weight as possible.

Various valves and control elements, or integrated mechanical interlocking devices mean that hydraulic cylinders are one of the most important functional elements of a machine, and even on the largest of cranes they ensure maximum stability and the safest ballasting, so that people and machines are protected as they carry out their work.

Multi-stage extension for increased lengths

Telescopic cylinder

Piston diameter: up to 250 mm Stroke length: up to 5,000 mm Pressure rating: up to 280 bar

Constructive optimization on the crane thanks to piston head oil feed

Further cylinders for mobile cranes: tilt cylinder, support cylinder, etc.

Dual action for powerful extension and retraction

Extremely lightweight construction increases the crane's load capacity

Highly reliable thanks to safety conscious design

Luffing jib cylinder

Piston diameter: up to 300 mm Stroke length: up to 1,500 mm Pressure rating: up to 300 bar / 420 bar

Counterweight / ballast cylinder

Piston diameter: up to 200 mm Pressure rating: up to 280 bar / 420 bar Stroke length: up to 600 mm

Integrated length measurement and valves enable very precise positioning across the entire stroke length

Highest possible functional safety thanks to the extremely robust design

FOR MATERIAL HANDLERS

Continuous use - efficient - system-oriented

Material handling machines often work continuously in industrial processes. This means that, on the one hand, our cylinders must complete several 100,000 cycles a year, and on the other still guarantee maximum machine and therefore cylinder availability in highly dynamic applications.

The cylinder must be designed to withstand large temperature fluctuations and cope with dusty environments. Our cylinders have to consistently demonstrate their reliable operation, in particular when it comes to resistance and seals, working in ports, sawmills, steelworks and recycling facilities.

> Hydromechanical end position cushioning and robust design for comfortable and material-friendly heavy-duty use

Highest possible resistance in demanding environments and maritime climates thanks to application-specific, mutilayer piston coatings of hard chrome or nichrome





Easy to service: can be dismantled and assembled with standard tools

Stick cylinder

Piston diameter: up to 400 mm Stroke length: up to 3,000 mm Pressure rating: up to 360 bar

Affordable solution thanks to cost-optimized design



Cab lifting cylinder

Piston diameter: up to 250 mm Stroke length: up to 2,800 mm Pressure rating: up to 280 bar

Further cylinders for material handlers: boom cylinder, hybrid cylinder, outrigger cylinder, grab cylinder, baffle cylinder, etc.



Explosion protection – powerful – heavy loads

Mining demands cylinders that can cope with extreme dynamic and static loads with maximum reliability, as the heavy machines move tons of material around the clock.

Vibrations, heat and abrasive dust: the special wear and corrosion protection needed in this operating environment requires lots of experience and expertise in relation to coating and special seals in the design of the hydraulic cylinders.

The two-stage extension enables high lifting heights despite compact installation dimensions

The service-friendly design means service can be carried out by the dealer or the customer on site

Dual action first stage for reliable retraction

Two-stage tilt cylinder for dump trucks (100 t vehicle)

Piston diameter: up to 400 mm Stroke length: up to 5,000 mm Pressure rating: 360 bar

Robust design for an exceptionally long service life

Further cylinders for mining: steering cylinder, etc.



High static capacity - precision - long service life

The highest possible quality and absolute functional reliability are essential for these hydraulic cylinders. In order to guarantee these high capacity and service life requirements, we test our cylinders over long periods of time on our own, specially developed testing rigs.

The use of state-of-the-art engineering and manufacturing processes means that our customers can be certain that our serial components and entire systems will always meet these demands and will remain reliable even when operating in hot and humid conditions for long periods of time.

Wide variety of designs thanks to a modular construction system for more than 80 types

Optimal integration into process technology thanks to integrated length measurement

Customer-specific solutions with different types of mount

21.1

Special flange mounting designed for stationary hydraulics

Positioning cylinder for steam valves

Piston diameter: up to 320 mm Stroke length: up to 1,000 mm Pressure rating: up to 250 bar

Also available as a version for flanged valves and with a synchronization function with continuous piston rods.

FOR AGRICULTURE

The integrated mechanical interlocking device ensures a secure central position for the steering axle for straight on-road driving



Reliability - functionality - comfort

Agriculture requires our products to not only be highly robust and reliable, but also to provide increasing levels of functionality and comfort, and to provide this around the clock, especially at harvesting time.

Goal-oriented engineering and state-of-the-art manufacturing processes guarantee balanced in-series cylinders and systems, perfectly integrated into the machine for every type of agricultural application.

Precise steering motion synchronization thanks to synchronized cylinders and tracking function

Steering cylinder

Piston diameter: up to 160 mm Stroke length: up to 300 mm (left/right) Pressure rating: up to 320 bar

OUR PROMISE



360° SERVICE

Experience and advice

We have worked closely with our customers on a wide range of successful projects and so understand in detail how cylinders are applied. With every customer-specific solution our expertise and experience in designing, constructing and manufacturing our hydraulic cylinders grows.

All of our customers benefit from this decades-long practice. They only need one contact person – from the initial consultation right through to installation and onwards.

After Sales Support

More than just a supplier: we demonstrate our efficiency in service issues, optimization and customization requests, on site or in our service workshop. Here we also carry out guarantee and repair work for our cylinders.

Our experts analyze fault patterns, make suggestions for improvements and support our customers competently and closely with all issues – high-quality at expert level.



Development and project planning

Fast implementation of individual requirements into suitable designs is what we do every day. We do it with the help of state-of-the-art FE methods for calculation and simulation, which provide the best technical and economic solution.

Frequent consultation with customers is also one of our hallmarks and leads to cooperative partnerships. In this way, challenging designs successfully grow into controllable series products.

Individual manufacture, quality and tests

Both our machinery and the expertise of our production employees mean that we can build tailor-made solutions for our customers that meet the highest of quality requirements.

We can guarantee this level with empirical field tests, ideally under real conditions at customer premises, and keep improving until the customer is pleased with the result.



CYLINDERS MADE IN GERMANY



PRODUCTION

State-of-the-art machine equipment and production techniques

We invest continually in our cutting edge manufacturing: our production demonstrates high production depth with a set of state-of-the-art machines, the mastery of complex technologies and highly flexible and qualified employees.

Our facilities enable us to work with components that weigh up to 2 t, are up to 6 m long and have a diameter of up to 800 mm.

For certified quality

Our products are well known for their outstanding quality and our customers can expect this level of service from all areas of our company. We ensure this is the case with certified processes for determining customer requirements, for design and production, and right through to testing and prompt delivery.















HENGSTLER



LONG-TERM PARTNERSHIPS





Customers

Successful together: our customers can rely on us and our products to be successful. We value trustworthy collaboration between equals which includes mutual openness, transparent communication and fast reaction times. The loyalty of our long-term customers with whom we have nurtured strategic partnerships is the best possible affirmation for us.

Employees

Average length of employment 20 years: we value the sound knowledge and wealth of experience that our employees have, and recognize that they want to develop in a familiar environment and make a difference. Our employees appreciate the reliability that this provides. Our company-wide cooperative atmosphere creates a workplace that employees enjoy coming to.

Suppliers

Common goals: we develop our suppliers into long-term partners in order to guarantee and facilitate consistent and stable quality. We ensure this through regular visits, quality audits and contracts. In the spirit of a win-win partnership, we provide our suppliers with technical support and advice.

Shareholders

Entrepreneurial vision and commitment: the harmonious yet effective configuration of a down-to-earth, family-owned company group and a determined management team guarantees safety on all counts and ensures we can confidently look to the future together.



YOUR CAREER

APPRENTICES AND SPECIALISTS

Our team

The foundation for the quality and versatility of our products is our employees who demonstrate a high level of professionalism and huge commitment at every level. Our team consists of a good mix of experienced specialists and young talents, who all pull together and actively contribute to the success of the company.

People know each other at Hengstler. We are particularly proud of the solidarity within our company, and our employees value it too. This includes all areas of the company and new employees quickly find their feet with us. An average employment length of 20 years speaks for itself.



Young talent

Whether we are talking about trainees, interns or working students, the targeted support of junior employees is very close to our hearts. As an official apprenticing company, we offer firstclass training. We promote targeted training of junior employees in different job roles in order to move forwards in collaboration with them.





"The things I particularly like about my training at Hengstler are my helpful colleagues and the team spirit. I am delighted to be part of such a good team. It motivates me afresh every day."

Andreas Kern Apprentice in Business Management



"It is fun to work in a team where everyone pulls together. My job in the Human Resources department is varied and brings me into contact with so many different people. I enjoy being able to advise and support them."

Sandra Hass Human Resources Manager



"At Hengstler junior employees are respected. I really appreciate the fact that the right balance of support and encouragement is incorporated into the training and that personal responsibility is encouraged early on."

Igor Schmidt Training Manager

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