



3-ROLL PLATE BENDING MACHINE

HDR – *THE BENDING GENIUS*

THE HDR

AS FLEXIBLE AS IT'S VARIABLE GEOMETRY

First-class HAEUSLER quality and expertise paired with durability and low operating costs – this is exactly what you get with the 3-roll plate bending machine HDR from HAEUSLER. The HDR convinces by the individually adjustable bending geometry of the bottom rolls, which enables rolling of very thick plates as well as small diameters. Best bending results can be achieved thanks to the use of the patented top roll adjustment by using only pressure loaded cylinders and thus resulting machine symmetry.



| Jürgen Freund, CEO of HAEUSLER



HDR IS PRECISION

Accuracy and perfect bending results - precise to the millimeter. Even with 300 mm wall thickness.



INNOVATIVE BENDING PROCESS

With 100% symmetrical design, the HDR can realize the best and most accurate bending performance.



SUPERIOR TORQUE

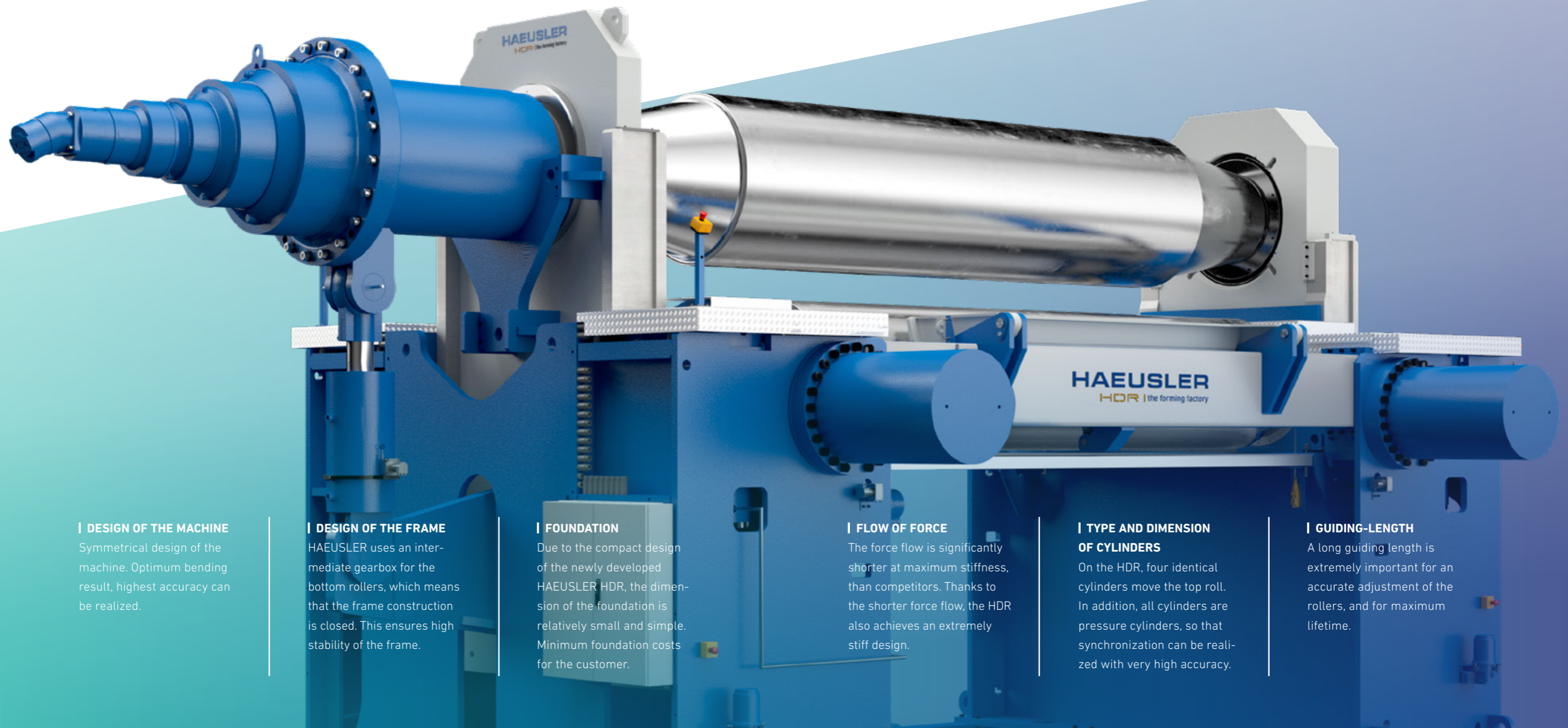
Superior torque is installed very short production times.

POWER DEVELOPMENT WITH SENSITIVITY

The new HDR design, with all its advantages is based on over 35 years of development. It is our firm conviction that the latest design concept, that was invented in 2009, is superior to any other concepts that are available on the market. Based on this fact we protected our model by worldwide patent.

In addition to the conceptual advantages of our HDR, numerous other design aspects, such as the rigid construction of the machine frame, the symmetrical load induction, the completely

covered guiding plates or the robust spherical roller bearing dimensioning help our HDR to achieve unique quality and a long service lifetime.



| DESIGN OF THE MACHINE

Symmetrical design of the machine. Optimum bending result, highest accuracy can be realized.

| DESIGN OF THE FRAME

HAEUSLER uses an intermediate gearbox for the bottom rollers, which means that the frame construction is closed. This ensures high stability of the frame.

| FOUNDATION

Due to the compact design of the newly developed HAEUSLER HDR, the dimension of the foundation is relatively small and simple. Minimum foundation costs for the customer.

| FLOW OF FORCE

The force flow is significantly shorter at maximum stiffness, than competitors. Thanks to the shorter force flow, the HDR also achieves an extremely stiff design.

| TYPE AND DIMENSION OF CYLINDERS

On the HDR, four identical cylinders move the top roll. In addition, all cylinders are pressure cylinders, so that synchronization can be realized with very high accuracy.

| GUIDING-LENGTH

A long guiding length is extremely important for an accurate adjustment of the rollers, and for maximum lifetime.



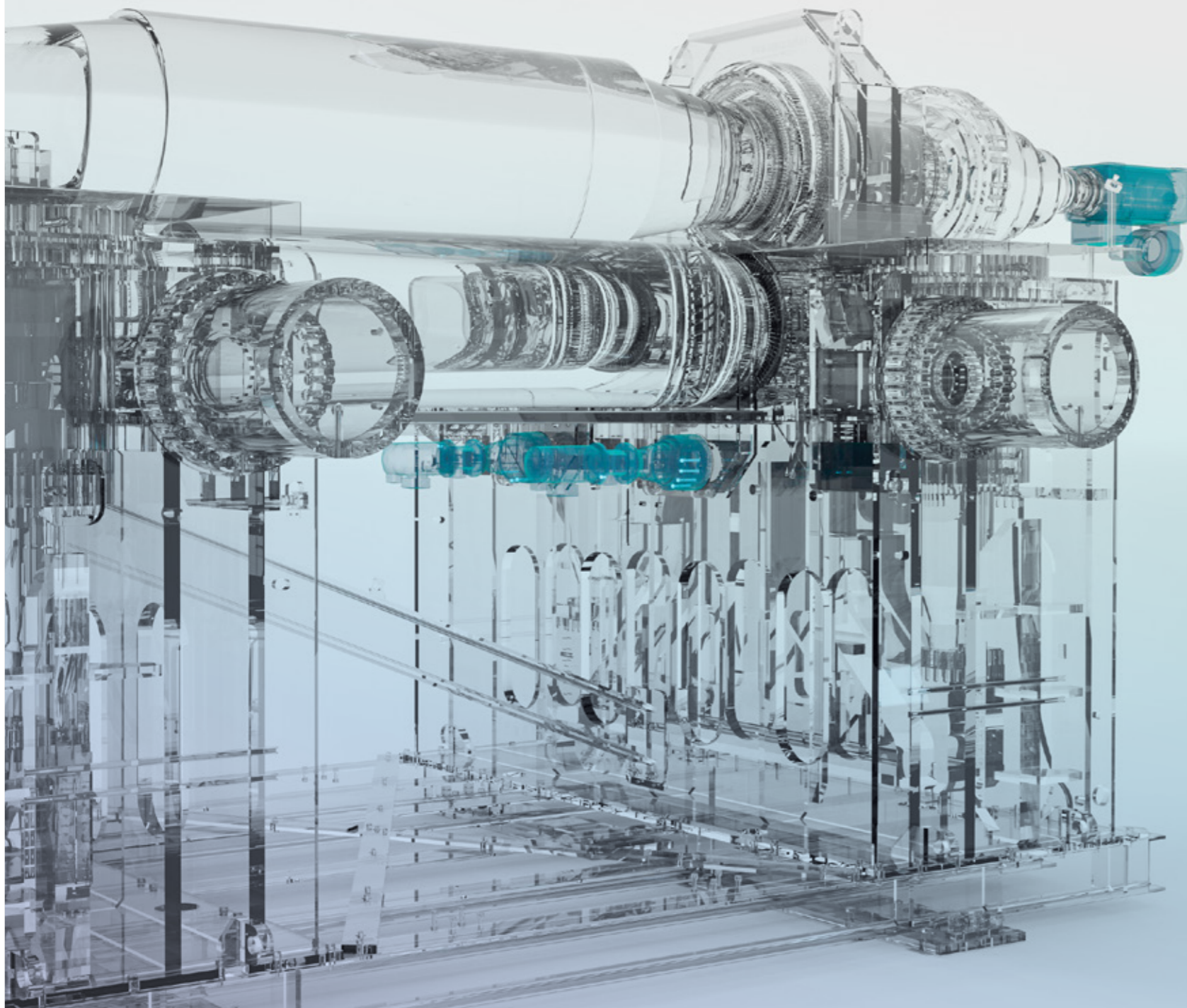
50% COST SAVINGS

Reduced running costs due to usage of electrical motors in combination with planetary gearboxes.



SUPERIOR PRODUCTIVITY

Step-less adjustable rotation speed from 0 - 8 m/min, which is an increase of 60%.



ENERGY EFFICIENT HHDS®

HYBRID DRIVE SYSTEM

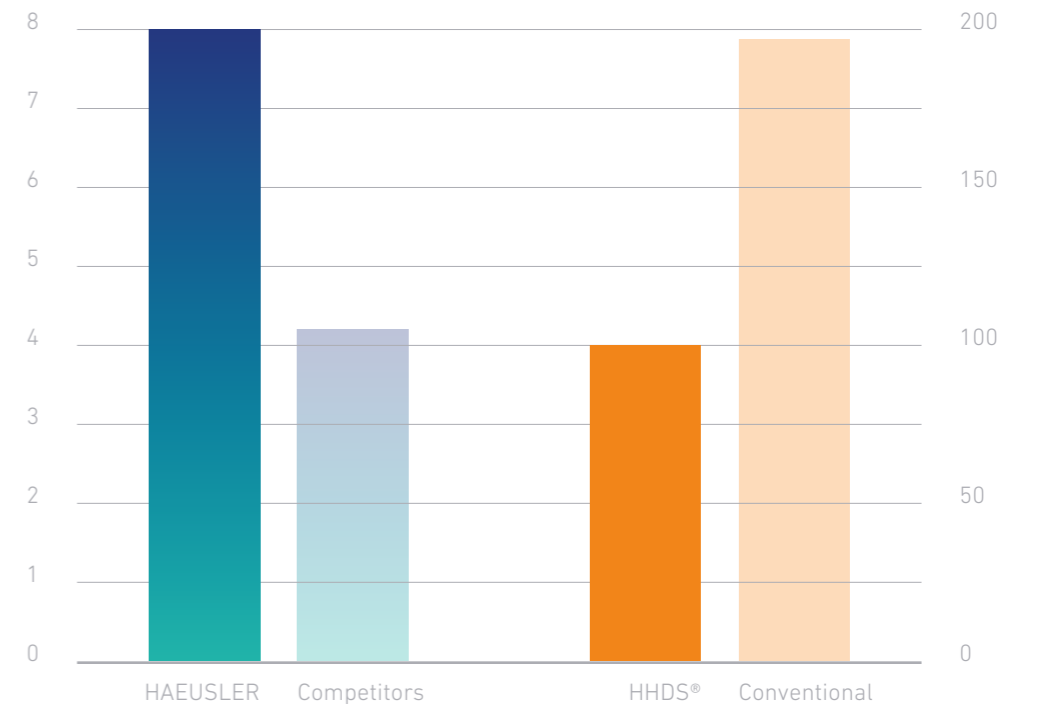
The HAEUSLER Hybrid Drive System HHDS® provides an unmatched efficiency due to the consequent usage of electrical motors in combination with planetary gearboxes. In practice this means savings of up to 50% of the running costs. Additionally the Hybrid Drive System allows a step-less adjustable rotation speed from 0 - 8 m/min. This is, compared to other machines that are available on the market, an increase of 60% and the basis for a high productivity.

WORKING SPEED

in m/min

ENERGY COSTS

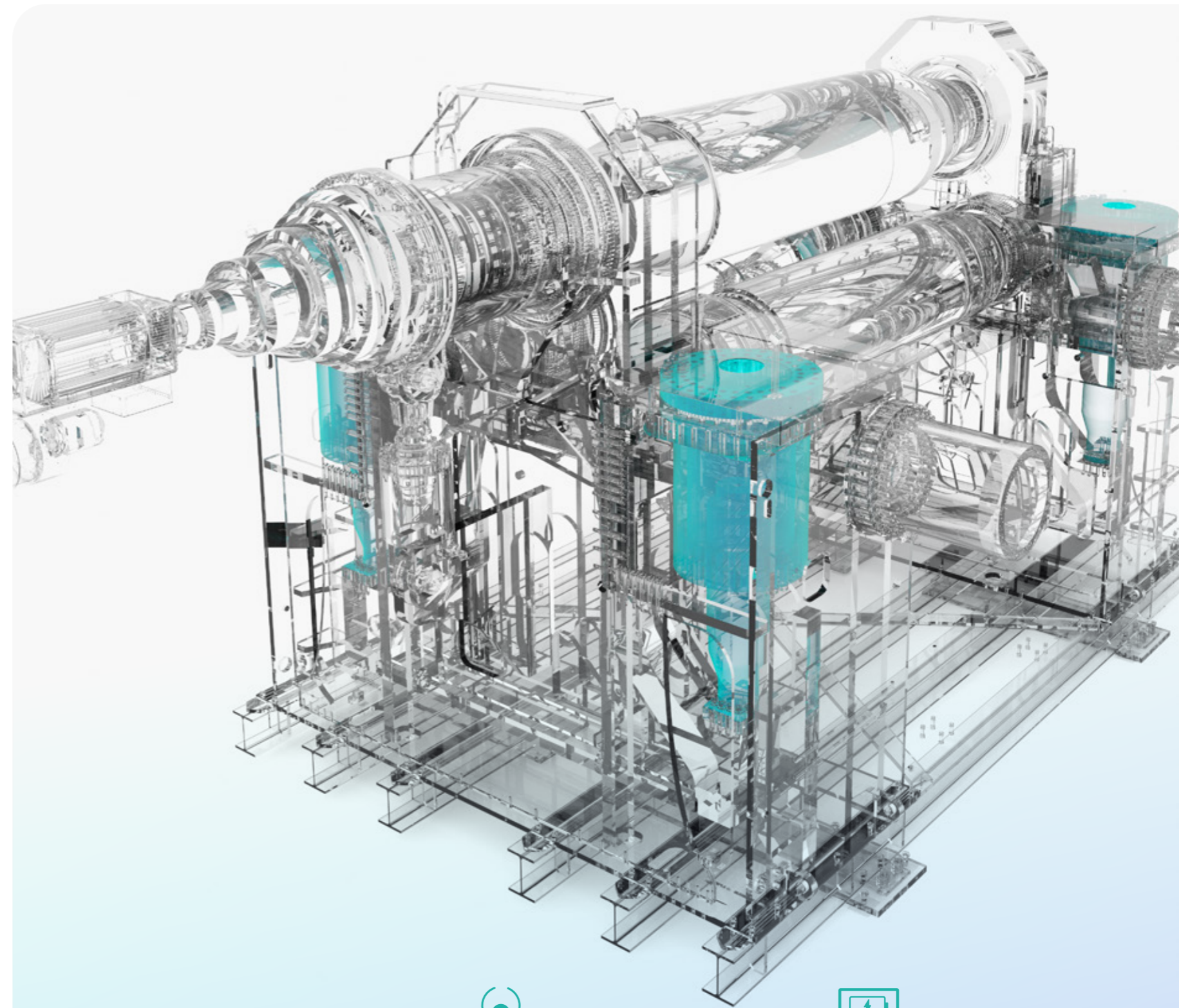
in %



ROLL ADJUSTMENT

As with all sheet metal bending machines, special attention must be paid to precise and low-wear roll guidance in order to guarantee the highest bending accuracy.

HAEUSLER has developed a patented concept, which allows extremely long guideways and at the same time guarantees the highest possible infeed accuracy. This is achieved by the absolutely symmetrical construction of all roll adjustment cylinders, which are only pressure loaded to adjust the rolls. All cylinders of the HAEUSLER HDR are absolutely identical, both for the bottom and the top roller adjustment. Furthermore, this unique concept ensures very good accessibility to the cylinders, e.g. for maintenance purposes and excellent visibility of the bending process.



PREMIUM 3-ROLL DRIVE

Premium 3-roll drive allows accurate handling of plates and high traction.



INNOVATIVE DRIVE-SYSTEM

All drives feature fast-reacting hydraulic brakes high accuracy & no plate movement during pre-bending.

RIGID MACHINE FRAME DESIGN

Our HDR base frame is designed in such a way that the front and rear columns are made of one piece. As a result, the frame does not have to be split horizontally and bolted together, which enables us to achieve a very compact design.

A particular advantage is that no dynamic process forces are induced into the foundation, so that only a minimal machine pit is required. The HDR is thereby particularly compact and achieves maximum stability under bending forces - with maximum cost savings.



MINIMAL MACHINE PIT

Closed base frame design enables minimal machine pit.



MAXIMUM STABILITY

Maximum stability under bending forces.



MOST RELIABLE TECHNOLOGY

Products of the highest quality made in Germany & Switzerland.



→ **WATCH OUR VIDEO AT:**
haeusler.com/en/plate-bending-machines/hdr

BEND IT

PERFECT CONTROL

BEND IT CONTROL SYSTEM

The BEND IT control system is the result of a cooperation between HAEUSLER and BECKHOFF. The newly developed and programmed software is state of the art with amazing features, not comparable to any others available on the market.





HAEUSLER HDR EQUIPMENT

HAEUSLER offers a range of additional equipment for the HDR to equip your plate bending machine according to your needs.

STANDARD EQUIPMENT



| AUTOMATIC CENTRAL GREASE LUBRICATION

By using an automatic central grease lubrication system, all relevant points of the machine are automatically lubricated.



| FAST REACTING OVERRUN BRAKE

The quick-reacting overrun brakes fitted as standard enable the operators to work very precisely.



| ETHERNET CONNECTION

The online access enables our service engineers to access our customers' machines within the shortest possible time and guarantees an optimal support.

OPTIONAL EQUIPMENT



| CHANGE ROLLS

Exchangeable rolls enable our customers to bend even very small diameters. The HDR is equipped so that the roller used is automatically recognised.



| PLATE STOPS

The optionally available plate stop simplifies the alignment of the plate in the machine, is time saving and helps to achieve best bending results.



| FASTER ROTATION

Especially when bending very large diameters, the speed of rotation of the machine is decisive for productivity.

HAEUSLER HDR ACCESSORIES

With the optional accessories for the HDR plate bending machine, the bending experience can be optimised even further.



UPPER SUPPORT

By using an automatic central grease lubrication system, all relevant points of the machine are automatically lubricated.



LATERAL SUPPORT

The quick-reacting overrun brakes fitted as standard enable the operators to work very precisely.



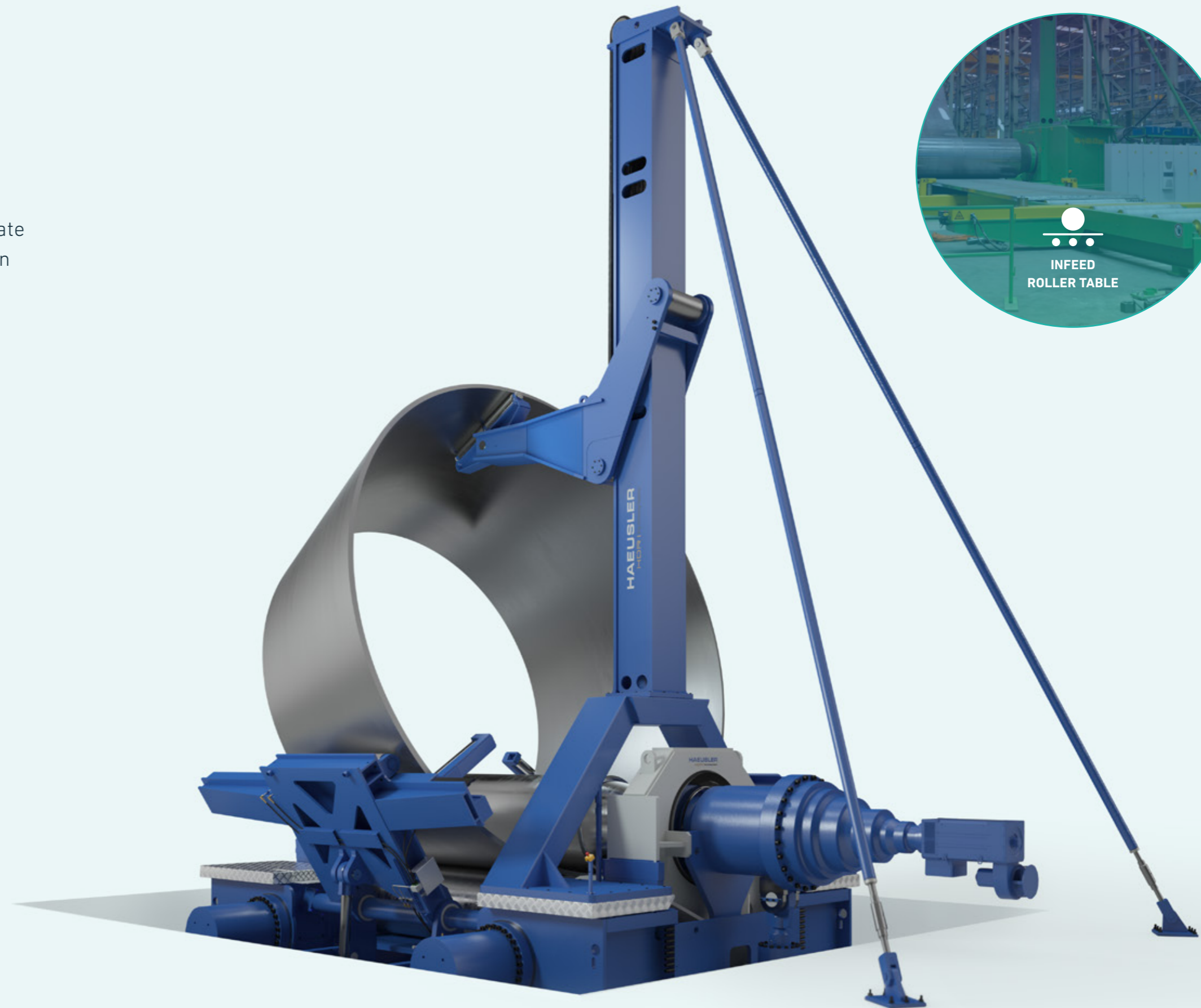
INFED ROLLER TABLE

Infed roller table simplify loading the machine. Sheets are placed on the roller table and transported into the machine from there.



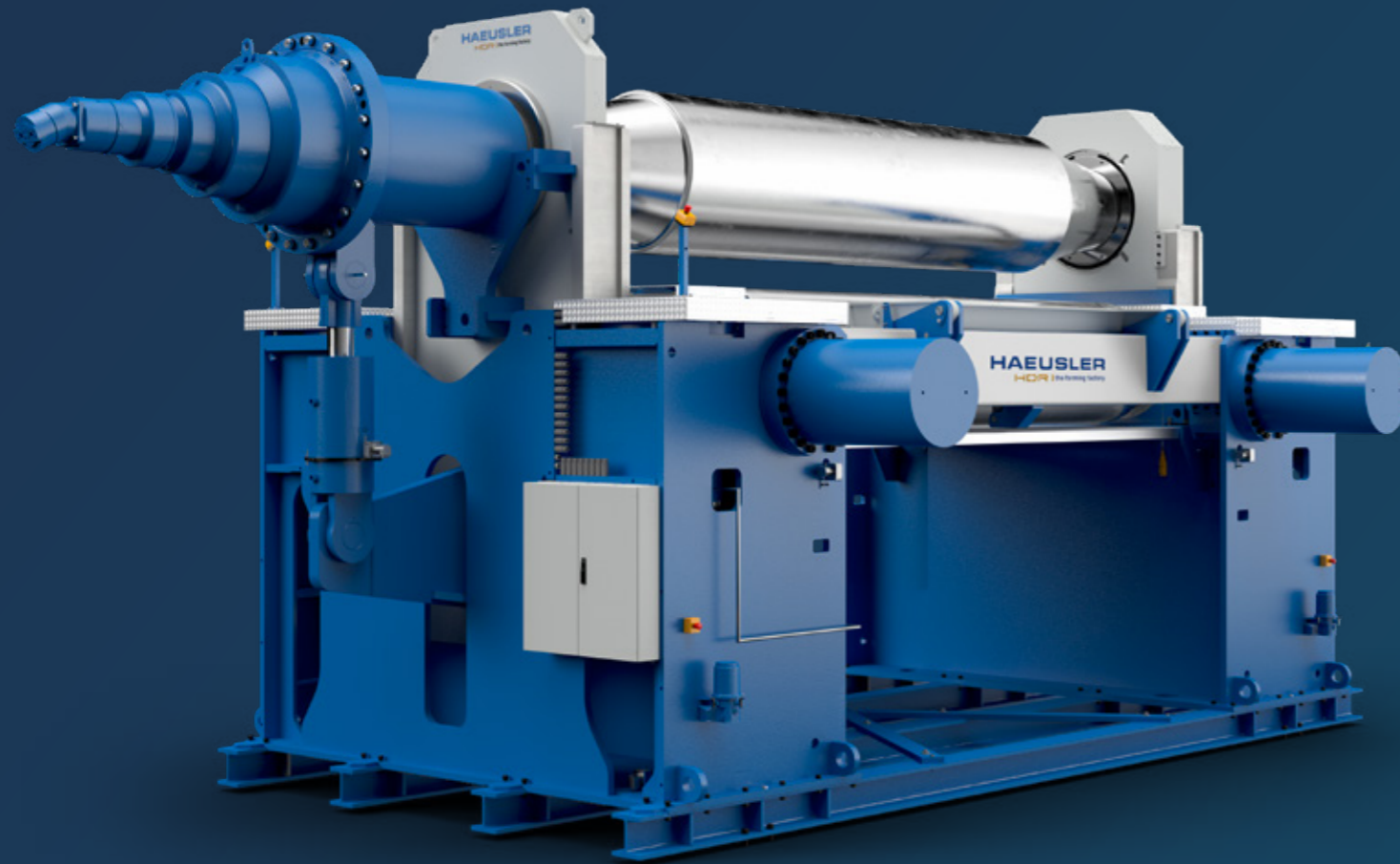
CALIBRATION OF CONES

By inclining all three rollers, the cone can be brought into a position on the machine where it can be held stably. This allows continuous calibration of cones. Cones can also be calibrated without manipulators. Manipulators and the upper support ensure time saving in positioning the welded cone on the machine



HAEUSLER HDR

FEATURES AT A GLANCE



| DESIGN OF MACHINE

Symmetrical design

| CYLINDER TYPE

Pressure cylinders for movement of top roll

| CYLINDER DIMENSION

Four identical cylinders used for movement of top roll

| FOUNDATION

Simple and small with minimal machine pit

| GUIDING-WAYS

Very long guiding-ways

| UPRIGHT COLUMNS

Made in one piece, even for the largest machine sizes

| NUMBER OF DRIVEN ROLLS

Premium 3-roll drive

| BRAKES

Fast-reacting hydraulic brakes for stopping fo rolls

| INSTALLED TORQUE

Very high torque installed

| LUBRICATION

Automatic central lubrication unit installed

| ROLL MATERIAL

High alloyed steel. For special applications rolls are hardened

| MAINTENANCE

Easy access to all main cylinders HDR supporting dynamic

| INTELLIGENT SYSTEMS

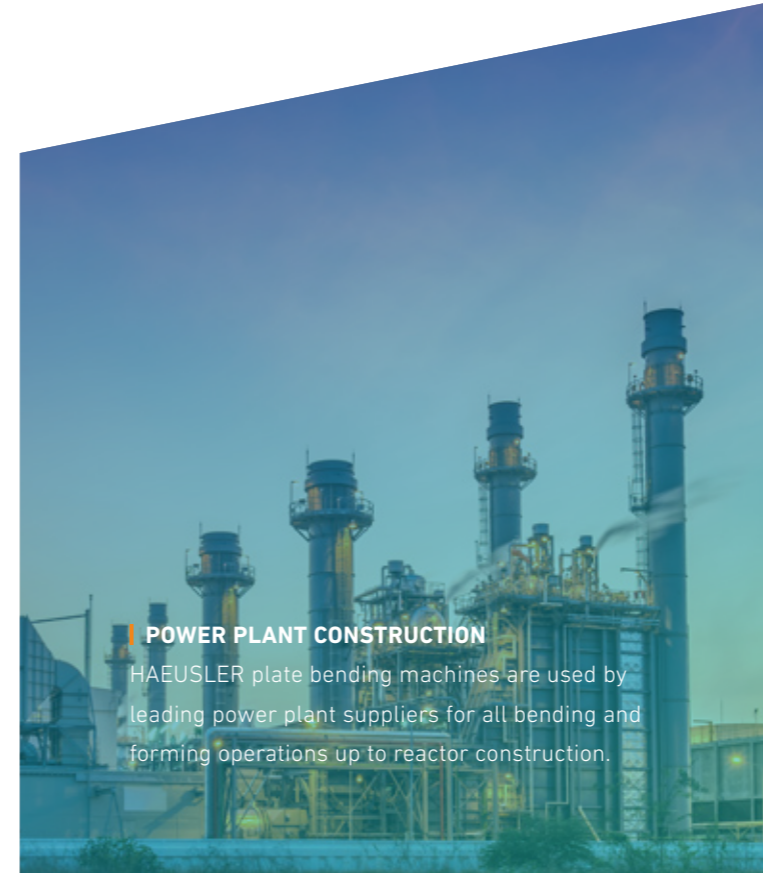
Overload protection system
Absolute measurement system
Automatic central lubrication system

HAEUSLER HDR IN ACTION



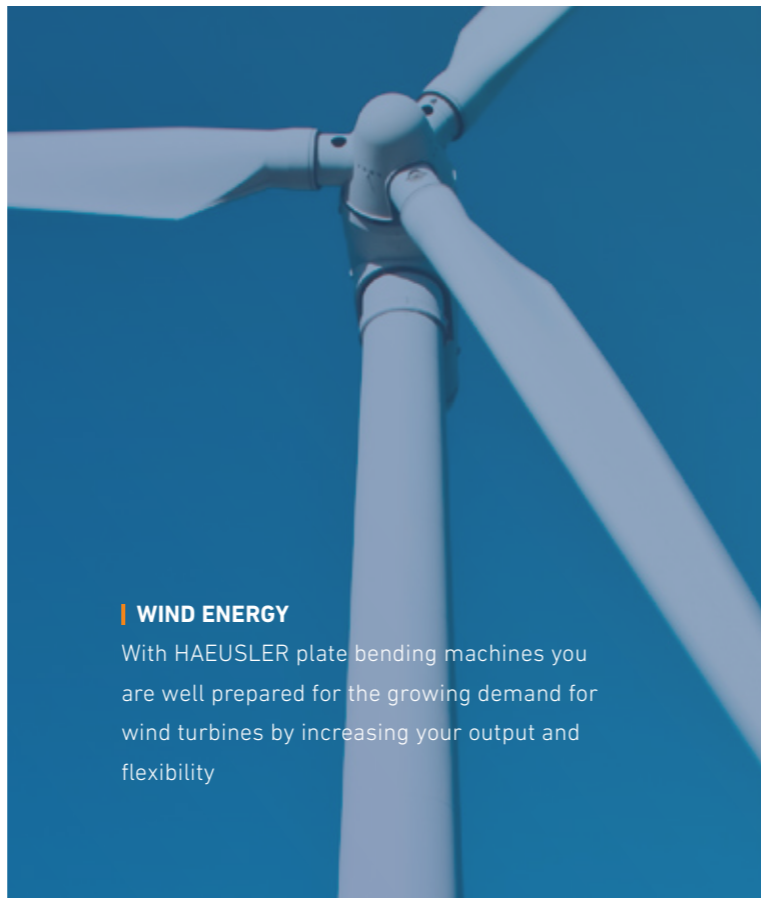
SHIPBUILDING

The HAEUSLER HDR is used in the construction of container, passenger and naval ships, among others.



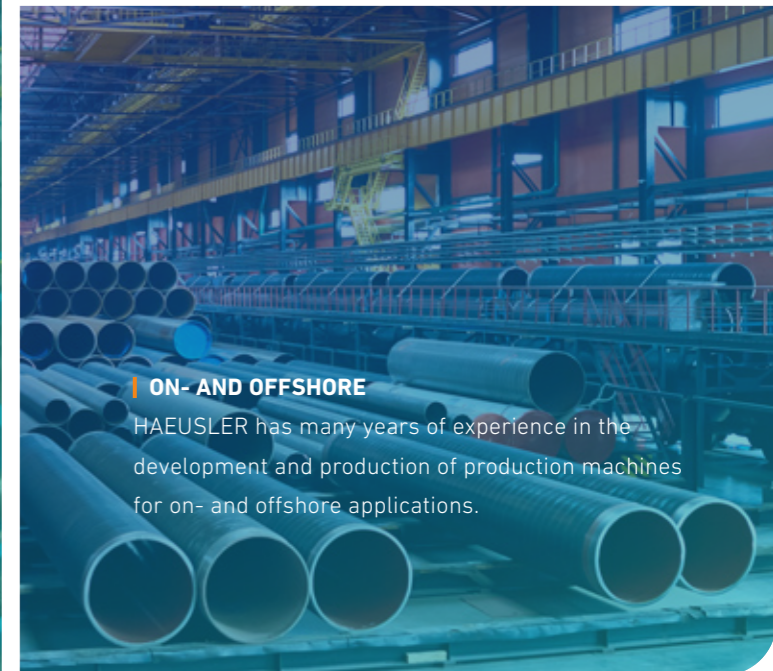
POWER PLANT CONSTRUCTION

HAEUSLER plate bending machines are used by leading power plant suppliers for all bending and forming operations up to reactor construction.



WIND ENERGY

With HAEUSLER plate bending machines you are well prepared for the growing demand for wind turbines by increasing your output and flexibility



ON- AND OFFSHORE

HAEUSLER has many years of experience in the development and production of production machines for on- and offshore applications.

HAEUSLER SERVICES

The highly professional HAEUSLER TECH service team takes care of your needs immediately: Installation, commissioning, training and preventive maintenance – worldwide.



HOTLINE SUPPORT



AUGMENTED REALITY (AR)



REMOTE ACCESS (RA)



SERVICE PACKAGE

The combined service package includes telephone hotline, augmented reality and remote access support.



CUSTOMIZED PACKAGE

HAEUSLER offers tailor-made support, which is designed to meet your individual requirements.

ASK OUR EXPERTS

+41 61 755 22 22

HAEUSLER WORLDWIDE

HAEUSLER sees itself as an export oriented company. Our machines are in operation on all continents and in more than 100 countries.

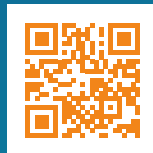


We own two HAEUSLER HDRs (4000mm × 150mm and 3000mm × 115mm). Both machines **fully meet the promised capacities and performance**. The quality of the machines is excellent, as well as the service. After four years of production we are sure that **we have made the best choice**.

| Harry Breman, Managing Director of Breman Machinery BV, NL

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To keep you up to date on current topics, we are also present for you on the social web - follow us on our social media channels and get information about our company, products, career opportunities and trade fair events.



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| the forming factory

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