













KÖNIG + CO. **Bödenpresswerke.**

Committed to tradition. Focus on the future.

KÖNIG + CO. GmbH is an owner-managed family company with a history of more than eighty years. Even a few years after its foundation in 1930, an essential basis was laid for the future alignment of the company – as it is the production of vessel heads.

The early concentration of the company on a single-item and batch production in the field of heads and cones proves the strategic vision of the management at that time.

This also applies for a decision, taken in the 1970ies, to form higher-value materials and special pressing parts.

By the right mixture of "forming know-how", outstanding production techniques and a pragmatism which we have maintained up to now, we have developed to a worldwide leading manufacturer of heads.

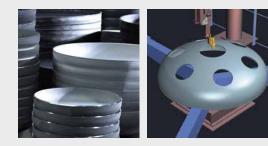
We are grateful and proud to meet the requirements of the future on that basis. By technical innovations, quality and reliability we are an interesting and fair business partner.

Together with our team of more than 240 employees, we are looking forward to a successful cooperation with our customers.

Bernd König General Manager **Jochen König** General Manager

Perfect realization. Setting standards.





Our formula for success. Fresh ideas and competence.

A distinct customer-orientation as well as the great commitment and knowledge of our employees are the central cornerstones of our formula for success. Due to our many years' experience we continuously develop the core processes in forming techniques. Thus we have been able to extend significantly our production program and the variety of materials to process.

Our technical know-how and the extensive knowledge of national and international standards are a solid basis for the production and quality of our products. We endeavour to make the impossible possible and offer solutions to our customers – with fresh ideas and the ability to "think different".

Over the years we have constantly expanded our customer base on the domestic as well as on foreign markets.

At our three production plants in Germany, we offer one of the most extensive delivery programs of dished heads, cones and pressing parts to the worldwide manufacturers of pressure vessels, tanks and plant constructions.

Excellence in forming. Pressing technology as needed.





Heads at their best. Tools for each size.

With our unique tool stock for heads made by deep drawing in a diameter range of 21.3 mm to 2100 mm and wall thicknesses of 2 mm to 200 mm we offer our customers nearly all head shapes.

We have the answer: for torispherical or ellipsoidal heads, for elliptical heads 2:1 or for hemispherical heads.

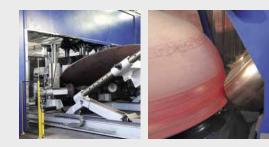
Deep-drawing of heads and pressing parts requires, besides the careful choosing of tools, also knowledge about the specific behaviour of the different materials. Just by this combination, we are able to achieve most narrow tolerances and dimensional accuracy. Our extensive head stock includes torispherical and ellipsoidal heads up to 18 mm wall thickness and 2000 mm diameter, made of common ferritic and austenitic materials. We are able to dispatch them within 24 hours after order receipt.

Besides the production of heads, we have a profound knowledge in the forming of special pressing parts, e.g. turbine and pump housings or special fittings for the pipe and tube production. Thanks to our special know-ledge in designing tools, we develop together with you tailor-made solutions to meet your particular needs. Pressing technology as needed.

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Cold. Warm. Hot. Forming and heat treatment at the optimum.





Our strengths. **Power. Variety. Reliability.**

By combining lean processes and a variety of tools, we realize individual demands. Our new 30-tons production line is the result of the continuous development of the production processes.

Nowadays we can form one-piece heads by dishing and flanging with a diameter of up to 8200 mm, a wall thickness of up to 120 mm and a maximum weight of 30 tons.

For an optimum heat treatment of our heads, we use furnaces, fired by gas, with a maximum temperature of 1200 °C. KÖNIG + CO. is perfectly equipped to perform a variety of heat treatment methods: soft and solution annealing, normalizing, quenching and tempering. One of the worldwide largest NORSOK-approved heat treatment devices has been put into operation at our main works in Netphen: consisting of a high performance furnace in combination with a 500000-litre quenching bath and a 40-tons loading device.

We carry out the final heat treatment at the temperatures and times that are exactly stipulated in the standards. Thus, the mechanical values or corrosion resistance of the different material grades can be guaranteed.

Power, variety and reliability – we have tailored our production processes to highest demands.

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Simply perfect. Spectrum of options.





Perfectly shaped. Precision from a single source.

Besides the core process of the forming technology for heads and pressing parts, we offer a variety of methods for product finishing.

Our scope includes different methods of surface technology, such as sand blasting, pickling or inside/outside grinding at all dimensions.

We attach importance to an exact edge preparation and a high dimensional accuracy of our heads. This is the basis for an optimum subsequent welding of components.

With our 3D robot hole cutting system, the cutting of radial and axial holes can be performed at each position including a complete edge preparation, complex holes at the knuckle area are also feasible.

By plasma cutting, plate thicknesses of up to 85 mm, by autogenous cutting plate thicknesses up to 200 mm can be cut.

Our robot hole cutting system also comprises the precise edge preparation of three-dimensional pressing parts for heads made of crown and petals.

For highest demands, as e.g. at narrow gap welding and its high tolerance requirements, we machine the petals mechanically. Precision from a single source.

Steel. Duplex. Titanium. The connection is essential.





Our lead. The sum of all possibilities.

Before forming, it is in many cases required to weld the initial material. For this purpose, we mainly use combined plasma arc and TIG welding or submerged arc welding (SAW). By SAW we also weld constructions made of crown and petals or cones.

Additionally, we are able to clad already formed products as well as plates and blanks with all common cladding materials by electro-slag strip cladding.

For this purpose, we employ our 150-tons turn-tilt positioner with a 10x10m welding equipment. Thus, we are able to perform the cladding in efficient manner and consistent quality.

By our various PQRs, we are in the position to meet the welding requirements of our customers for the most different procedures. The combination of the extensive know-how of our employees, the careful selection of the correct filler metals, and suitable process technologies guarantee a constantly high quality of welding.

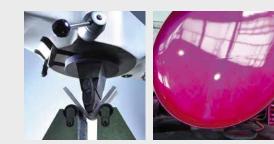
We process a wide range of metallic materials, such as standard steel grades, CrMo steel, stainless steel, duplex and super duplex, aluminium, copper, nickel-based alloys, titanium and zirconium.

The properties of duplex are unique. At an early stage, we have placed special emphasis on processing duplex and super duplex. After solution annealing a quick quenching of duplex is absolutely mandatory. And this requirement demands the correspondingly optimized process technology.

Our knowledge, our experience and the use of all possibilities – especially with regard to sensitive materials – that is our lead.

Inspecting. Ensuring. Certifying. Quality as a consequence.







Your guarantee. Our quality management system.

We have committed ourselves to fulfil highest quality demands. Our quality management system according to DIN EN ISO 9001 is the guideline for all corporate processes. The striving for continuous improvements defines our thinking and action.

Our understanding of quality comprises not only the product, but as a consequence, also the corresponding documentation. The smooth processing of complex orders is guaranteed by our project management, e.g. in the fields of Nuclear energy or Oil & Gas. Numerous approvals, such as PED, ASME U- and U2-Stamp or NORSOK, are the basis for the successful and sustainable cooperation with our customers.

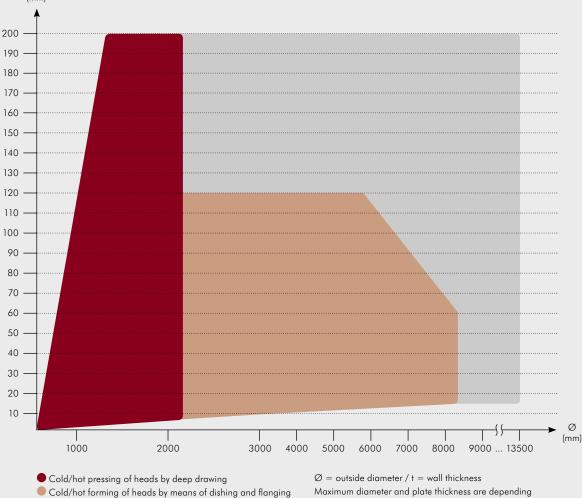
Highly-qualified personnel and our own material test laboratory make sure that our products are conforming to the customer requirements as imposed on us. We perform all common nondestructive and destructive tests. For your guarantee.

Our delivery program. Variety in perfection.

We supply single-part vessel heads up to a weight of maximum 30 tons and at diameters of 21.3 to 8200 mm.

(mm)

Depending on head shape und dimension, we offer heads made of crown and petals, trial-assembled or completely welded.

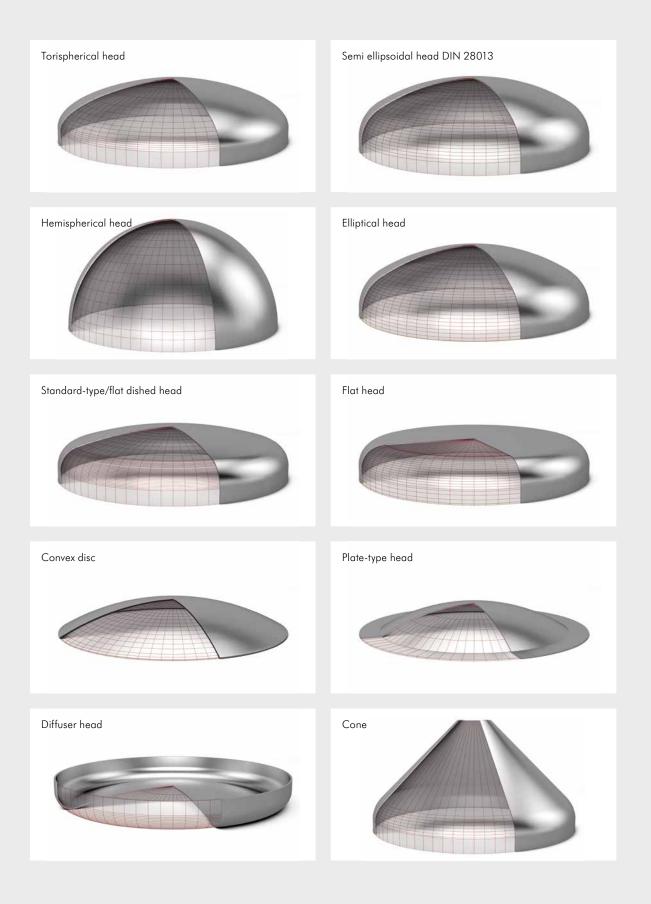


Heads made of crown and petals

Maximum diameter and plate thickness are depending on the form resistance strength of the material to be formed.

Larger diameters and wall thicknesses can also be produced. We are looking forward to receiving your inquiry!







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