

PERFECT BIPOLAR-PLATES

ANDRITZ Kaiser ToP-Line KSH2

Mechanical servo presses for stamping of metallic bipolar plates

ANDRITZ

ToP-LINE KSH2 9.000/13.000/16.000/19.000

Mechanically driven special press for metallic BiPolar plates.

Based on the technical innovations of the ToP-Line 2000 press, ANDRITZ Kaiser has consistently developed this new press series on the basis of bionic principles. The machine combines absolute rigidity with extraordinary precision and high dynamics.
We at ANDRITZ Kaiser are firmly convinced, that now is the right time to take a new step in the development of mechanical presses. E-mobility and the new hydrogen-based drive systems define completely new requirements for mechanical presses.
The production of metallic BiPolar plates made of stainless steel requires an exceptional rigidity of the press. A BiPolar plate consists of stainless-steel strip with a thickness of < 0.1mm. The flow channels and edge beads are very filigree and relatively deep compared to the strip thickness. Therefore, presses for such materials require very high press forces in relation to the strip thickness.
In 2021 we decided to further develop this completely new mechanical press based on the principles of the ToP-Line 2000. Together with several customers, we are already building several machines of this type for different locations.

SPECIAL REQUIREMENTS FOR THIS PRESS SERIES:

- Controlled, slow slide movement using servo torque motors
- Full press force, even with slow movements
- Rigid structure of the press body with a deflection <0.04mm/m
- Design of the press as a cutting press with self-supporting installation profiles (decoupled from the press body)
- Precise force control and process monitoring
- Reduction of noise emissions due to noise-insulated cladding
- SCR (smart connect ready) system for easy connection of the press to the customer's PDA system.
- Environmental protection and sustainability using a biological lubricating and hydraulic oil and use of energy-optimized drives.

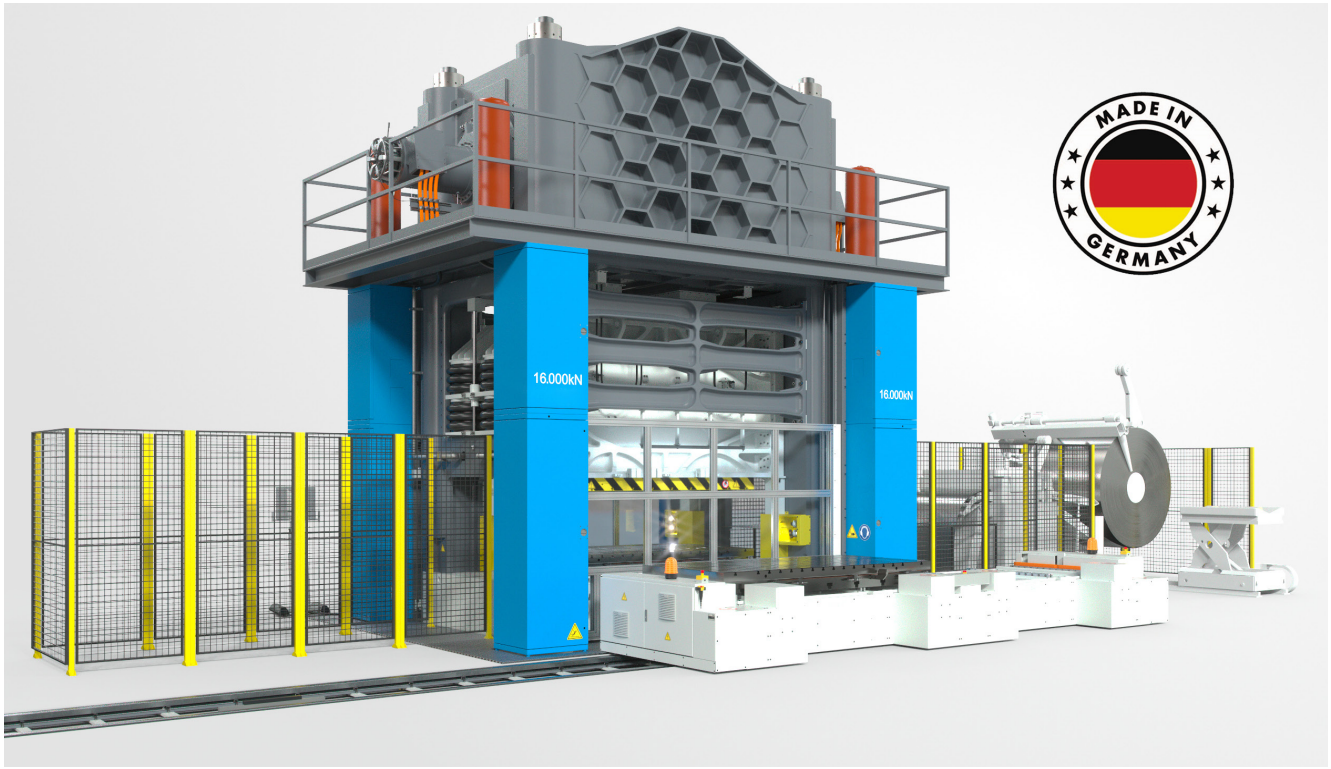


At a glance

Precision and quality - Made in Germany

Only a perfect combination of subsystems, like press, feed, transfer, lubrication, tool, belt system and process monitoring systems, can ensure outstanding performance and economic efficiency for this special forming system. The extraordinary design of the press is inspired by the proven forms of nature.

Type	KSH2 9.000	KSH2 13.000	KSH2 16.000	KSH2 19.000
Press Force kN	9.000	13.000	16.000	19.000
Stroke Height mm	160	160	160	160
Slide adjustment mm	150	200	200	200
Shut height mm	600	600	600	600
Table dimensions mm	2.500 x 1.200	3.000 x 1.200	3.000 x 1.400	3.000 x 1.400
Speed 1/min	1-100	1-80	1-60	1-50



ANDRITZ KAISER

ANDRITZ Kaiser stands for highest quality in metal forming technology. Decades of experience and the technical specifications of our automatic stamping and metal forming presses guarantee customers high precision, productivity, and reliability.

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