

MACHINES FOR FLOW-FORMED COMPONENTS AHD 1500 L

AUTOMATIC HYDRAULIC FLOW FORMING MACHINE

WF



Flow forming machine for production of rotationally symmetrical flow-formed components, consisting particularly of steel, stainless steel, aluminium and a range of other metals, such as copper and niobium

End products:

- Tank and vessel heads
- Separator components
- Ventilation-system components
- Cones and funnels
- ... and much, much more.

Applications:

- Aerospace
- Lighting industry
- Ventilation and air-conditioning (HVAC)
- Medical and chemicals industry
- Automotive engineering, etc.

Benefits

- Extremely robust and highly durable machine concept exerting high forming forces
- Highly precise forming even of soft/thin-walled rounds with no sacrifice of surface quality, for instance
- Automatic detection of support positions on the machine bed
- Centring mechanism can be positioned via control system without mechanical adjustment
- Also suitable for trimming and deburring

A machine of the AHD series is part of our R&D Center. We make it available to our customers for development and testing purposes. You can also benefit from the immediately subsequent analysis of results in our measurement laboratory.

RECENT INNOVATIONS

- > Newly developed roller-changing mechanism providing shorter changing times in any support position, even for changers carrying more than two rollers
- > Newly defined blank counter holder to assure short setting-up times and featuring extremely sensitive counter force, adjustable using control system
- > New tailstock design permitting installation of eccentric-rollers instead of a pressure head, eg.

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TECHNICAL SPEZIFICATION: AHD 1500 L

Feed material/blank disc diameter	max.	1500 mm
Material thickness steel sheet/plate (dependent on type of steel)	max.	12 mm
Workpiece height	max.	450 mm
Drive rating- main spindle	ca.	120 kW
Main spindle speed - First Gear 1	ca.	50 - 300 min ⁻¹
Main spindle speed - Second Gear 2	ca.	200 - 1200 min ⁻¹
Tool mounting main spindle	DIN 55027	size 11
Axial support stroke		800 mm
Advance force - axial support		100 kN
Rapid traverse speed - axial support	max.	8 m/min.
Working speed - axial support		0- 1,5 m/min.
Radial support stroke		400 mm
Advance force - radial support		100 kN
Rapid traverse speed - radial support	max.	4 m/min.
Working speed - radial support		0 - 1 m/min.
Tailstock stroke		800 mm
Tailstock thrust force		100 kN
Tailstock tool mounting	DIN 55027	size 6

The AHD machine can also be equipped, for example, with the following automation solutions:

Industry 4.0 components, e.g.:

- SMART FORMING assistant
- SMART FORMING viewer
- SMART FORMING cam
- SMART FORMING inspector
- SMART FORMING diagnostics

Automation solutions, e.g.:

- Feed/discharge systems
- Robots
- Transfer systems
- Gripper systems

Individual solutions, e.g.:

- Double tool changer / four-fold tool changer
- Safety-relevant components
- Trimming unit
- Electrically moveable centering system
- Ejectors

AHD machines are available in many different sizes and designs. Contact us for your individual offer.