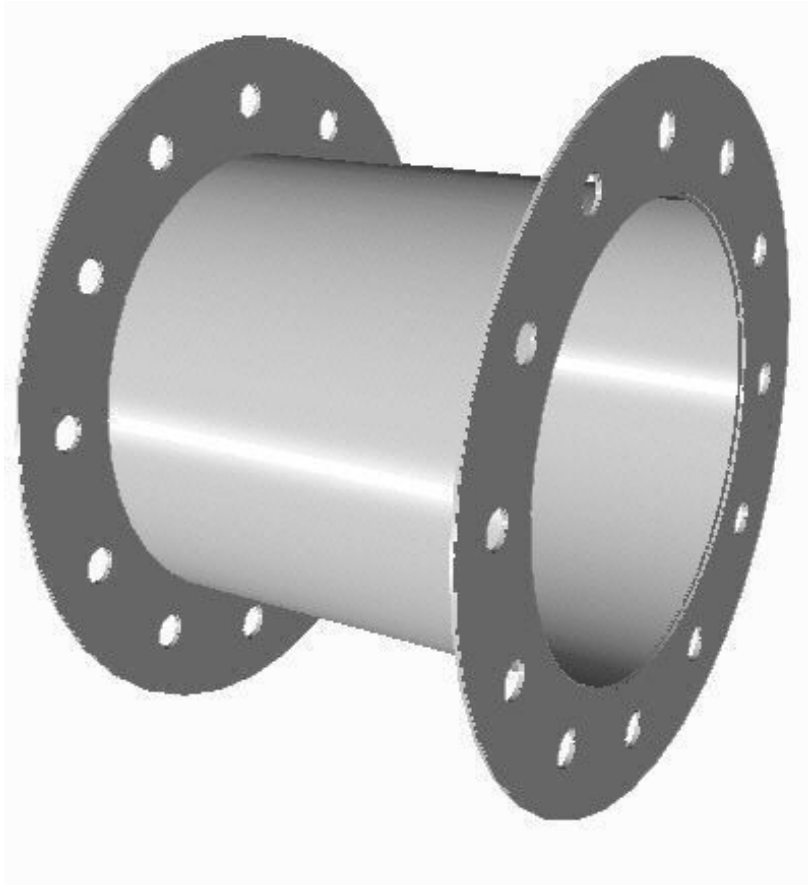


Hydraulic, Automatic Forming Machine (Bellmouth, Flange, Punch)



Model	AFM-2000
Motor	19 kW
Voltage	400V-50 Hz
Weight	6100 KG



Technical specifications

Weight of machine without expander segment: 6.500 Kg

Size of the machine:

Length:(apprx.) 2900 mm

Width:..... (apprx.) 1400 mm

Height:(apprx.) 1500 mm

Electrical connection:

3 x 400 V - 50 Hz + earth (63 A)

(Optionally changeable)

Flanging system 11Kw,
with bellmouth system 13 kW



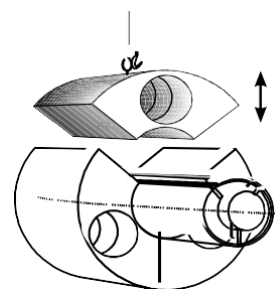
Machine description

Expander:

Double-acting expander:

- Can expand, so it can hold cylindrical ducts and flanges.
- Can become smaller, so it can hold plane plates and conic ducts.
Fast change.
- Possible to mount holding device for square plates.

- Expander works with forces up to 800 kN.
- Heavy special-built expander segments.
- Easy mounting of expander segments.



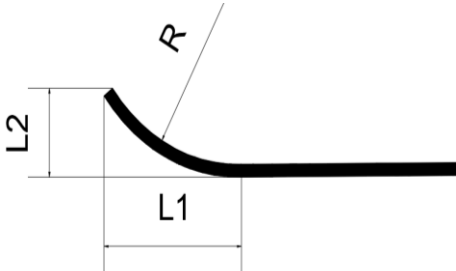
Controlling:

Machine type **FBM** is:

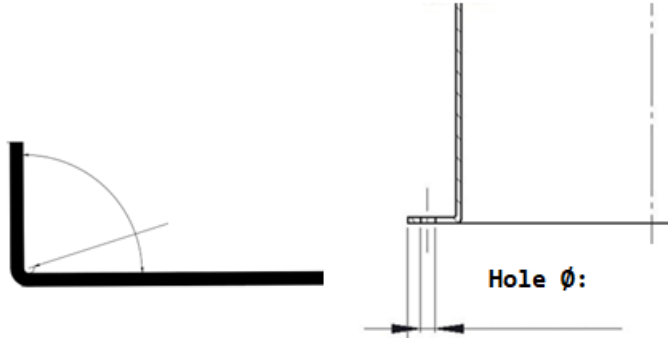
- fully automatic and hydraulic.
- controlled by a PLC (Programmed Logic Controller) connected to a PC.
- equipped with an absolute encoder.

Machine & Product description

II	R	Product Bellmouth Description	
1	Length	L1min	10 mm
2		L1max	120
3		L2min	10 mm
4		L2max	120mm
5	Radius	Rmin	3 mm
6		Rmax	120mm
7	Material Thickness	SS400/A36/	1,5 – 6 mm
		SUS304	1,5 – 6 mm
8	Diameter	SS400/A36/	Min 400 mm
		SUS304	Max 1850 mm



The diagram illustrates a bellmouth flange profile. It shows a curved transition from a vertical section of height L2 to a horizontal section of length L1. The radius of this curve is denoted as R.

Flanging			
1	Angle	min	90 °
2		max	180 °
			

The diagram shows two views of a flange. On the left, a 90-degree angle is indicated. On the right, a 180-degree angle is shown, and a hole with diameter ϕ is depicted.

Machine Description

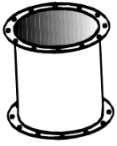
Standard Specifications & Equipments

- Automatic operation with NC automation.
- Siemens PLC.
- Siemens 7" touch screen.
- Memory.
- 11 kW motor.
- Bellmouth system supported by Servo-motor.
- Automatic flange forming.
- Automatic bellmouth forming.
- Hydraulic punching system for changeable hole pieces and diameters.
- Adjustable flanging speed according material diameter.

- Rotation of flange rolls powered by hydraulic motor and gear rotation.
- Induction hardened flange rolls.
- Material squaring system.
- Steel construction frame.
- Mobile control panel.
- Servo motor: Siemens
- CE Norm

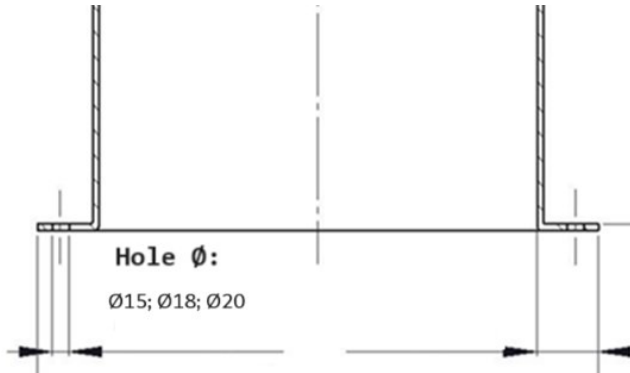
Optional Specifications & Equipments

- Changeable material holder dies for different diameters.



Technical specifications for punch holes

Hole diameters (min-max)



- **Punch holes diameters : Ø15; Ø18; Ø20 mm**
- The distance between flanger edge can be adjusted according to the basis of the hole diameter.

Equal & Inequal hole gaps

- The distance between the holes can be adjusted as many as required, and as in the required distance.
- The holes can be opened in **equal** distances and also **inequal** different distances, as shown in the drawings below.

