

STIRRUP type MIKTO 1016 - TECHNICAL FEATURES

Automatic stirrup machine from coil and straight bars, bi-directional, programmable, CNC, designed for re-bar straightening and bending as well as the production of stirrups.

Working range (feeding pieces): (Ultimate tensile strength: 650 N/mm ²)	COILS	2 Ø6	2 Ø8	2 Ø10			
	BARS	2 Ø6	1 Ø8	1 Ø10			
Installed Power :	11Kw						
Re-bar propulsion speed::	80m / min.						
Machine Voltage	400V						
Bending angle speed:	1000° / sec.						
Maximum bending angle :	180°						
Maximum length :	14000 mm						
Minimum length :	50 mm						
Angle accuracy :	± 1°						
Length accuracy:	± 1 mm						
Dimensions (L x W x H):	4700 x 1200 x 2000 mm						
Weight :	2200 Kg						

***"GALANOS SA" reserves the right to modify the above-mentioned data without previous notice*

Supplies demanded

- **Electric supply: 11 Kw**
- **Compressed air: 8 Bar**



MIKTO 1016 is provided with main and auxiliary mechanisms necessary for the machine operation:

A) Main mechanisms:

1. Propulsion System
2. Straightening system
3. Bending system
4. Cutting system
5. Control panel
6. Hydraulic unit
7. Electric/Electronic board

B) Auxiliary mechanisms (additional equipment upon request):

1. Pay-off (wire coil support)
2. Tilting Working surface
3. Bench for the support of the straight re-bars

A.1. Propulsion System

The Propulsion System consists of two rollers. One moving roller (hydraulic powered) and a free one.

The rollers are installed in such a way, so that the produced shapes are not «distorted».

An encoder is moved by the free roll.

Pneumatic rod straighten adjustment.

A.2. Straightening system

The straightening system consists of two groups of rollers, placed at 90° to each other. By this way the complete straightening of the rod on both planes is achieved (up-down and right-left).

The system consists of moving and fixed rollers. The first ones are moved upwards-downwards manually. Thus, the rod diameter changing as well as the straightening adjustment towards all directions is achieved.

A.3. Bending system

The bending system is hydraulic powered and equipped with a rotating disk which rotates clockwise and counterclockwise.

A side bending pin is placed on the disc

The fixed bending unit is placed at the center of the disk

A.4. Cutting system

The cutting system is hydraulic powered and carries out lateral cutting, while the cutting plates bear with two shearing sights.

A.5. Control panel

The control panel is placed on the machine and the industrial PC is placed at its inner part.

At the front view of the control panel are placed the buttons for manual operation and the touch screen as well.

During programming phase the figure is exactly developed on the screen as it will be executed during the production procedure and the operator can select its storage directly in the computer's memory in case he wishes to recall it for future production execution.

Moreover, additional data are indicated on the screen. The following data about the daily production are seen, such as:-

- Total rod length for each figure
- Total quantity (No of pieces) to be produced
- Total weight of pieces
- Produced shapes (pieces)
- Produced shapes (Kg)
- Remaining pieces (to be executed)
- Rod diameter
- Function indication for option of production by use of single/double wire

Other functions:

- Option for production of continuous stirrups
- Option for production of stirrups alternately
- Capacity for various operations and adjustments during production procedure
- Adjustment of angles speed (increase - decrease)
- Adjustment of advance speed (increase - decrease)
- Angles correction (open - close)

Programming modes (WINDOWS environment):

- a) via keyboard
- b) via screen
- c) by use of USB memory stick
- d) recall directly from computer's memory

A.6. Hydraulic unit

The hydraulic unit bears with one piston pump of special construction (for such types of machinery), one pre-heater as well as an air-cooled oil system.

In addition, it bears with servo-valves PC driven; the servo-valves control both the rod advance and the bending plate movement.

All components of the hydraulic units are supplied by "VICKERS", "DANFOSS" and "YUNKEN".

A.7. Electrical/Electronic unit

All electrical/electronic components are supplied by "Schneider Electric".

Together with the main equipment, «GALANOS SA» delivers one set of tools, as well as some consumable spare parts.