

**GALANOS FORM ST16 - TECHNICAL FEATURES**

Automatic forming machine from straight bars, bi-directional, programmable, CNC, designed for the production of reinforced continuity systems for prefabricates, common stirrups as well as the re-bar bending.

Working range (feeding pieces): (Ultimate tensile strength: 650 N/mm <sup>2</sup> )	<b>STRAIGHT BARS</b>	2 Ø6	2 Ø8	2 Ø10	1 Ø12	1 Ø14	1 Ø16
<i>Power consumption :</i>	5Kw						
<i>Re-bar propulsion speed:</i>	70m / min.						
<i>Machine Voltage</i>	400V						
<i>Bending angle speed:</i>	1000° / sec.						
<i>Maximum bending angle :</i>	180°						
<i>Bending directions :</i>	2						
<i>Minimum length :</i>	50 mm						
<i>Angle accuracy :</i>	± 1°						
<i>Length accuracy:</i>	± 1 mm						
<i>Dimensions (L x W x H):</i>	4200 x 1200 x 2000 mm						
<i>Weight :</i>	1950 Kg						

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

**Supplies demanded**  
- **Electric supply: 7 Kw**  
- **Compressed air: 8 Bar**



FORM 16 is provided with main and auxiliary mechanisms necessary for the machine operation:

A) Main mechanisms:

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

B) Auxiliary mechanisms (additional equipment upon request):

1. Stacking unit for straight re-bars

**A.1. Propulsion System**

The Propulsion System consists of six rollers. Three moving rolls (hydraulic powered) and three free ones.

An encoder is moved by the free roller.

**A.2. Bending system**

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

A side bending pin is placed on the disc

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

**A.3. Cutting system**

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

**A.4. Control panel**

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

At the front view of the control panel Buttons for manual operation as well as the touch screen.

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:

- Bar remaining length estimation
- Total quantity (No of pieces) to be produced
- Produced shapes (pieces)
- Remaining pieces (to be executed)
- Rod diameter

Other functions:

- Capacity for various operations and adjustments during production procedure
- Adjustment of angles speed (increase - decrease)

Programming modes (WINDOWS environment):

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

**A.5. Hydraulic unit**

The hydraulic unit bears with one pump, two electric valves and filters.  
All components of the hydraulic unit are supplied by "VICKERS" and "DANFOSS".

**A.6. Electrical/Electronic unit**

All electric/electronic components are supplied by ABB, SCHNEIDER, WEINTEK, PHOENIX.

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