

Control systems

Our wide range of control systems is to allow the customers to choose the cost-optimal machine configuration, considering what the customer will produce. Standard machines are supplied with manual bending angle under the name MA, except for the MAXI PLUS machine in which the standard is control system NC1A. Other types are like the options that the customer can choose when ordering the machine.



MA

- manually adjust the angle
- normally on the left side of the machine



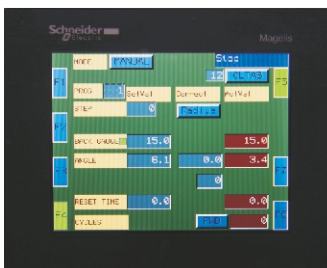
PT-1

- manual angle adjustment via potentiometer
- located on the right side of the machine (convenient for longer machines)



PUD

- one angle adjustment by a potentiometer
- positioning of the back gauge "+", "-" buttons (start-stop)
- set the speed of back gauge by potentiometer
- only for TFM



NC1A

- 5,7'' colour touch screen (for MAXI and MAXI plus 7,5'')
- setting the angle, including the correction for different thickness and quality of the material
- the ability to store the angles in memory
- the names of profiles (in words and figures)

CNC2A

- 5,7'' colour touch screen (for MAXI and MAXI plus 7,5'')
- entering the back gauge position and folding angles
- profiles can be programmed with memory for 100 sections, each with 10 bends
- function of radius
- the names of profiles (in words and figures)
- copy function profile
- the "clean table" - for easy material handling, particularly during rotation

Control systems



CNC3A

- 5,7" colour touch screen (for MAXI and MAXI plus 7,5")
- entering the back gauge position, including folding angle correction, clamping beam stroke
- profiles can be programmed with the memory for 100 sections, each with 10 folds
- control of the clamping beam, i.e. the opportunity to stop at a defined opening position
- function of radius
- function "hemming" closed or open
- the names of profiles (in words and figures)
- copy function profile
- the "clean table" - for easy material handling, particularly during rotation

Control systems NC1A, CNC2A and CNC3A ensure control of induction motors drives by frequency changers.



The standard position of the control panel

- on the right side of machine
- ergonomically placed control touch panel
- fixed position of control system



Position of the control panel on the console

- suitable for lengths over 2 m (optional)
- positioning of control system according to the needs of machine operator
- optional for control systems CNC2 and CNC3 and standard for FF-101



Control foot pedal

- two control pedals
- STOP production function
- bar for keeping the pedal (optional)



Marking of segments

- marking segments with width in mm
- faster and more transparent work with tools

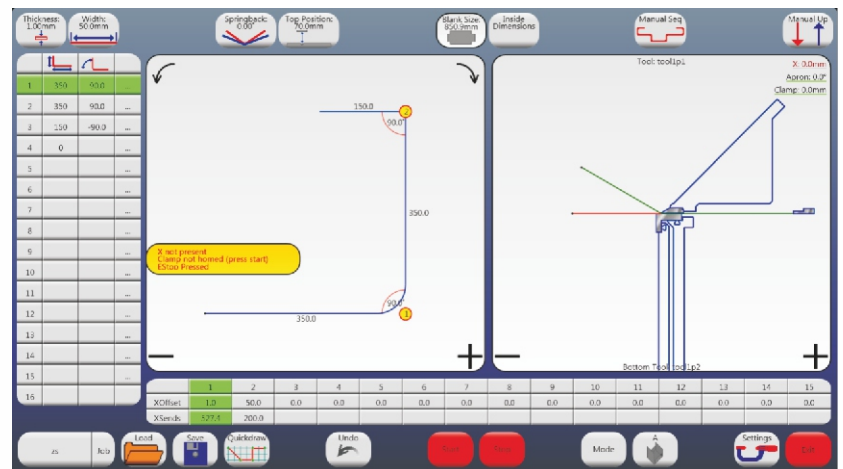
Control systems

Control system FF101

This universal control system can be used for all kinds of motorized bending machines made by company. It uses the latest technology in the field of control, resulting in an easily programmable system controlled via the touch screen.

The advantage is its ease of use, ease of preparation of the programme, while the less qualified person may handle the programming and control of the machine after two hours of instruction learning.

Touch and go



Properties of the FF101 System

- 19"LCD touch screen colour monitor with the best graphics
- WINDOWS 8.1
- graphics mode
- graphical representation of bending sequences for the selected programme
- graphical display of the position of the material before bending
- verbal and graphical display steps
- correction of the profile by direct contact on the desired part of the profile
- each operator can have their own password to enter their library
- powerful diagnostics
- inserting a different angle corrections for various materials
- correction of the bending angle (suspension) for the entire programme or for each bending angle
- control of the size of the opening of the clamping beam for the entire programme or just some steps
- bending radius
- edging
- linked profiles
- extended length of the profile directly on the main screen
- a list of the bending sequence
- a possibility to draw the profile, measure and change angles and lengths, select the points in the line of folding and visual inspection before folding the profile thanks to the split screen
- USB connection to the conservation and loading programmes
- off-line programming from the office
- search profiles by name, sketches profiles
- the ability to save more than 5,000 programmes in Memory
- optional programme names (names of profiles)
- languages: English as a basis (other languages on request)

The FF101 control system provides for the control of d.c.motors.

Manual back gauge

A cost-effective solution for simple applications that do not require frequent readjustment. Hand stops are equipped with the rack - pinion system and the position indicator, which the operator can adjust



MPD

- manual back gauge with the transfer rack - pinion system and counter, complete with thumbs and grooves in the table
- range of motion of 10 mm - 760 mm, or 10mm - 1,000 mm or 10 mm - 1200 mm

MOD

- manual back gauge with the transfer rack - pinion system, counter and stop rail
- range of motion of 80mm - 760mm, or 80mm - 1000mm or 80mm - 1200mm

Motorized back gauge



MZD SP

MZD OP



MZD Motorized back gauge is used for positioning the material in the correct position without being held by the operator. The back gauge drive is provided by one or two ball screws and accurate control. The front abutment surface (fingers) are optional depending on the thickness of bent and customer requirements. They can be supplied as folding fingers or swivel fingers made of spring steel.

The storage area of the back gauge can be equipped as needed by ball nests, side guides left or right. For engine with the MZD control the use of one of controls is required, CNC2A, CNC3A or FF101.

MZD SP

Motorized back gauge with standard folding fingers. Range of motion 6 to 1000mm (1500mm, 2000mm, 2500mm, 3000mm)

MZD OP

Motorized back gauge with turn fingers in steel plate. Range of motion 2 to 1000mm, 1500mm, 2000mm, 2500mm, 3000mm.



For handling large-size products such as panels, cabinets, etc. It is appropriate to use rear stops that allow for easy handling and attendance by the machine operator. There are stops of L, U and J types with multiple sections of pneumatically operated fingers. These special stops are supplied according to the customer requirements in the length of max. 3000mm.

Back gauge J shape, with two sections and motorized folding machine Maxi 30/40 DUO FF-101