



QUOTATION



COMPANY NAME	
COMPANY ADDRESS	
CONTACT PERSON	
TELEPHONE	
QUOTATION NO	
QUOTATION DATE	
VALID UNTIL	



ABOUT ERBEND

Erbend Machinery, located in the heart of sheet metal machinery production of Turkey, in Bursa city, is an oem manufacturer who is specialized in folding machines and shears for thin sheet metal

Thanks to its 25 years of experience in sheet metal processing machinery production and the dedicated squad who only focuses on folding machines and shears, Erbend has become on of the biggest 5 folding machine manufactures in the world by producing more than 200 machines per year and exporting %95 of them to 20 different countries all over the world like USA,Canada,EU,Russia and Oceania.



MFB

CNC MOTORIZED FOLDER SERIES



MODEL	MAX SHEET LENGTH	MILD STEEL	STAINLESS	ALUMINIUM	MACHINE DIMENSIONS (W / L / H)	WEIGHT
MFB 3220	3200 mm 126"	2 mm 14g	1.2 mm 18g	3 mm	2200 x 4500 x 1900 mm 86.6" x 177" x 75"	4500 kg 9,921 lbs.
MFB 4215	4200 mm 165.5"	1.5 mm 16g	1 mm 19g	2 mm	2200 x 5500 x 1900 mm 86.6" x 216.5" x 75"	5400 kg 11,905 lbs.



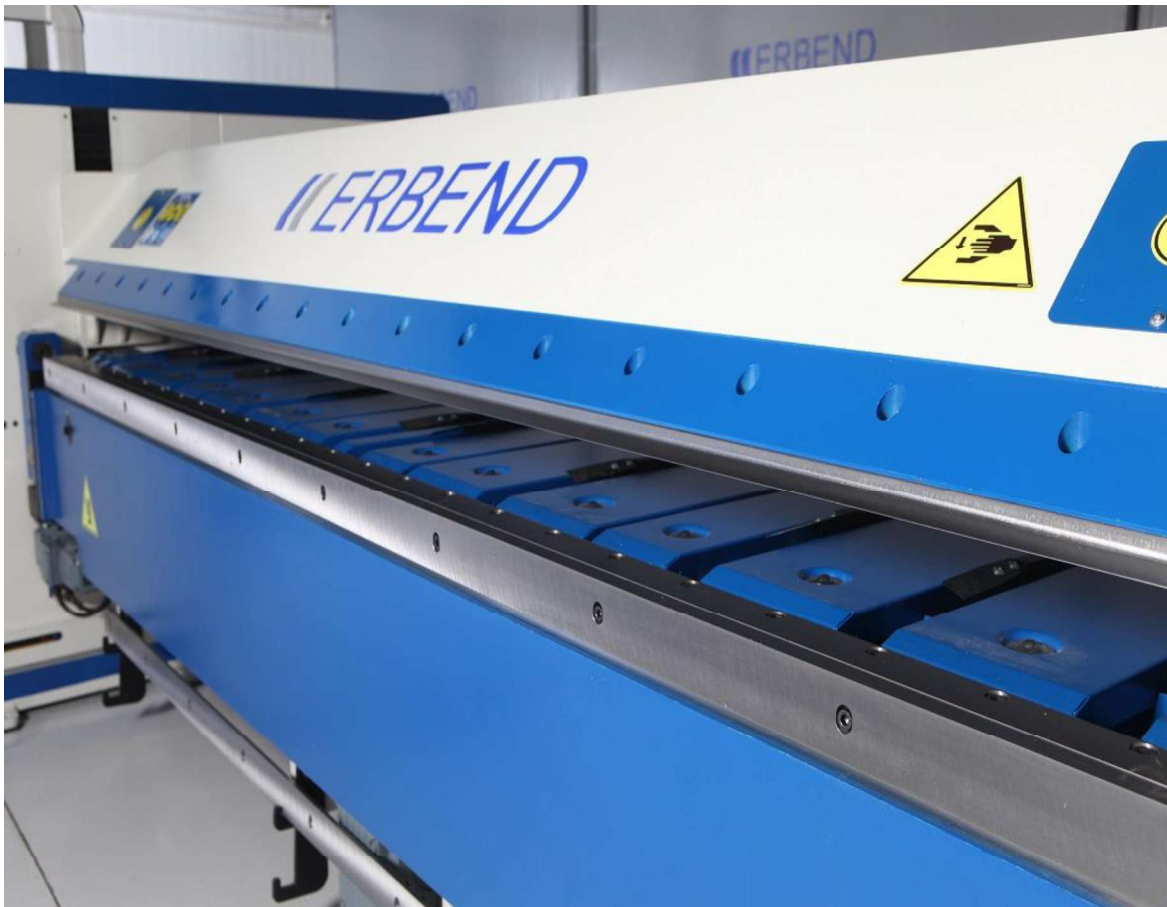
STANDARD TECHNICAL DETAILS

Upper Beam (Z axis)	
Opening height (without tools)	160 mm
Motor Power (Sew Eurodrive AC)	1.5 kW
Transmission system	Eccentric
Clamping speed	90 mm/sec
Folding Beam (Y axis)	
Folding angle	0 - 150°
Motor Power (Sew Eurodrive AC)	2.2 kW
Folding Speed	80°/sec
Folding Beam Height Adjustment (A1-A2 axis)	
Adjustment height	0 / -35 mm
Control	Manual
Back gauge system (X axis)	
Movement speed	300 mm/sec
Motor Power (Servo)	400 W
Positioning / repeatability accuracy	+/- 0.1 mm

STANDARD SPECS AND ACCESSORIES

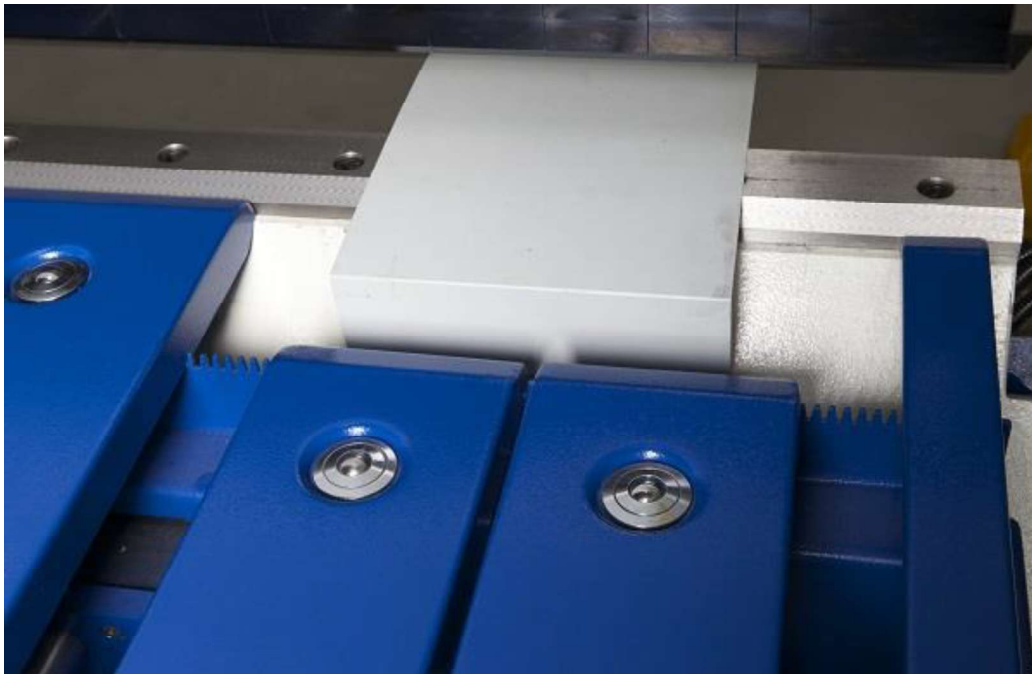
UPPER BEAM

- Clamping beam with 160 mm opening height without tools and 45° beam geometry
- With optional 90 mm goat foot tools, you can bend up to 90 mm deep box/pan parts
- Thanks to its brass and oil-free friction plates on the linear guides, you can work for years without any lubrication or maintenance
- Also thanks to the protective bellows, no dirt or dust is allowed in the swivel parts of this axis



1000 MM SERVO BACK GAUGE WITH RECTANGULAR SHEET SUPPORT TABLE

- 1000 mm servo driven back gauge system with feather grooves only
- 1000 mm long rectangular sheet support table with stainless ball-casters
- Sliders can be pulled back to create space for down flanges at the back of the bottom tool



SOLID LOWER BEAM (WITHOUT CHANNELS) AND FEATHER GROOVES

- To avoid unwanted scratches and cracks on the painted sheets caused by lower beam channels, we can build the lower beam without channel and also with special design gauging arms produced by flexible feather steel (0,5 mm thick) so that the arms can approach until the end of the lower beam to the edge and can be clamped between the upper beam tool and lower beam tool together with the sheet.



FOOT PEDAL WITH 3 SWITCHES

3 switch foot pedal with panic button function on two steps.

(Sudden step on left pedal = clamping beam goes up immediately)

(Sudden step on middle pedal = folding beam and all axis stops immediately)



VERTICAL OR HORIZONTAL FRONT LIGHT BARRIERS

For operator safety, front light barriers are located at the left and right front side of the machine, managed by safety plc and prevent unwanted interventions to avoid accidents. You can choose as horizontal or vertical or you can completely remove the light barriers from your configuration.



TOOL HOLDERS

- 2 stacks of tool holders that can carry 2 single piece folding tool or clamping beam sharpnose tool



ERFOLD BASIC NUMERIC (LINE BY LINE) CONTROLLER SOFTWARE



- Very user friendly, iconic screen layout
- 15.6 " tft panel touchscreen controller on swivel arm
- Windows based Erfold software that allows you to store and reload back ups of the factory settings or saves programmes easily
- 128 gb memory for unlimited receipt storage
- Line by line part programming by entering numerical values of the axes for each step
- Creating,saving,loading parts with different names,materials and sheet thicknesses
- Open or drop hemming function
- Multi radius bending function as by pressing or by bending
- Backgauge finger pause and on/off functions
- Material database control for springback correction and folding beam height correction regarding material type,thickness and length
- Piece counter for lot production
- Manual axis controls, alarm and error indications, machine detailed parameter pages
- Remote service connection via wireless internet
- User authorization with special passwords.

ERFOLD BASIC NUMERIC CONTROLLER SOFTWARE



LANGUAGE: English
 Deutsch
 English
 Français
 Svenska
 Türkçe

USER: User Report

PASSWORD: Users

C
RESTART

⏻
SHUT DOWN

🖱️
REMOTE CONTROL

12.08.2022 12:39:23
Z : 0 Y : 0 X : 0
ALARM

HOME
REFERENCE
PRODUCTION
MANUAL
SETTING

			2.500,00	750,00	0,60		
Step	Z Axis Tool	Bend Type	Back Gauge Position (mm)	Folding Angle (°)	Clamp Beam Up (mm)	Clamp Beam Down (mm)	Finger On/Off
1			730,00	100,00	15,00	0,60	OFF
2			700,00	150,00	15,00	1,00	ON
3			500,00	90,00	15,00	0,60	OFF
4			450,00	30,00	15,00	0,60	ON
5			300,00	25,00	15,00	0,60	ON

ADD STEP

ADD STEP IN BETWEEN

DELETE STEP

DELETE ALL STEPS

PRESS

SAVE PART

LOAD PART

DELETE PART

NEW PART

Bend Angle Correction

(°)

STOP

START

PIECE COUNTER

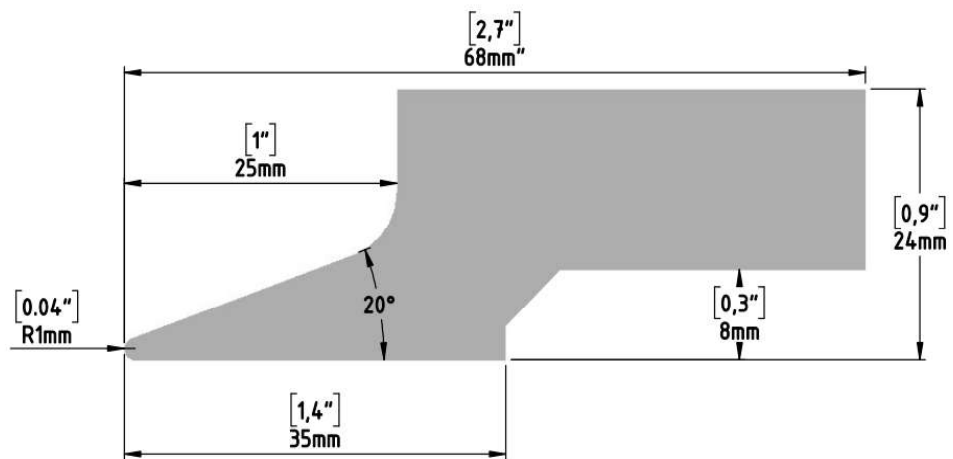
1000

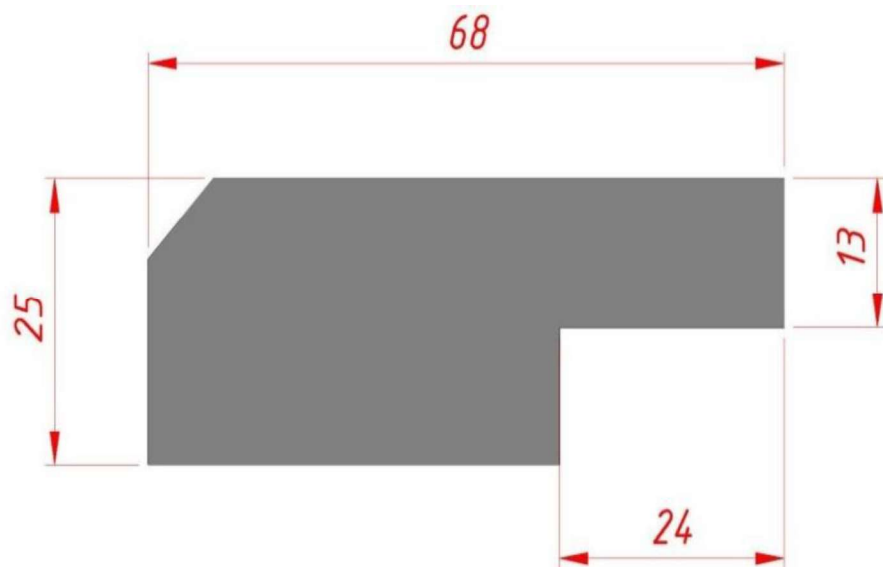
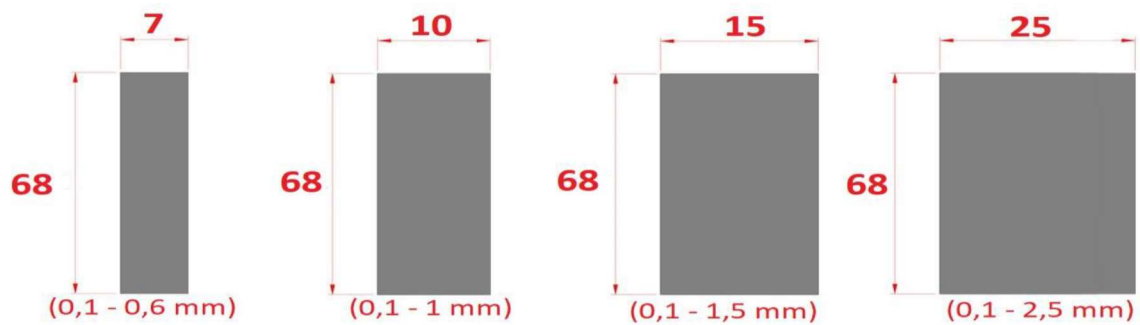
17:47:53 | 19.01.2021
Z : 0 Y : 0 X : 0 A1: 0 A2: 0

HOME
REFERENCE
PRODUCTION
MANUAL
SETTINGS

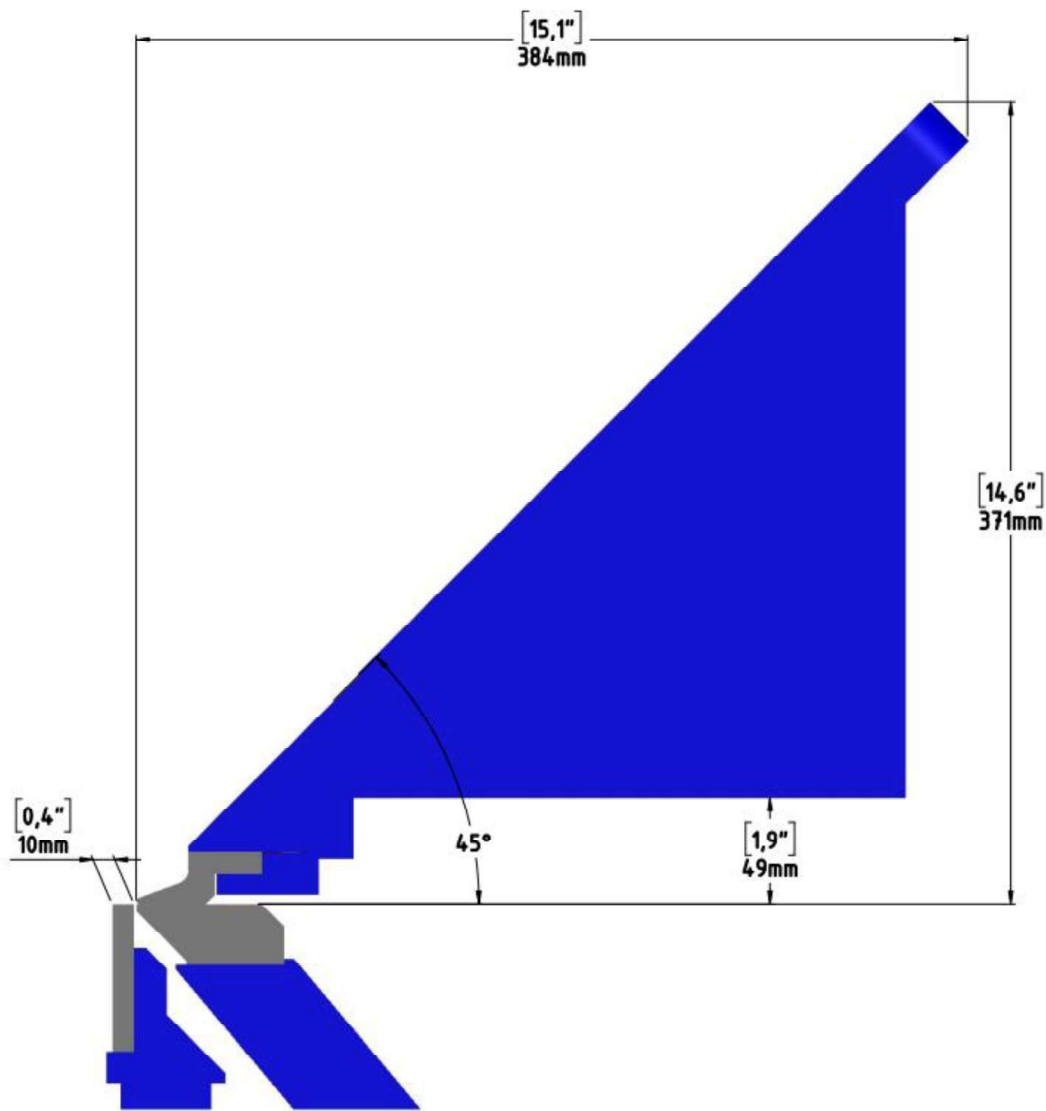
UPPER BEAM SINGLE PIECE SHARP NOSE TOOL

- Grinded material, single piece, 20° nose angle.



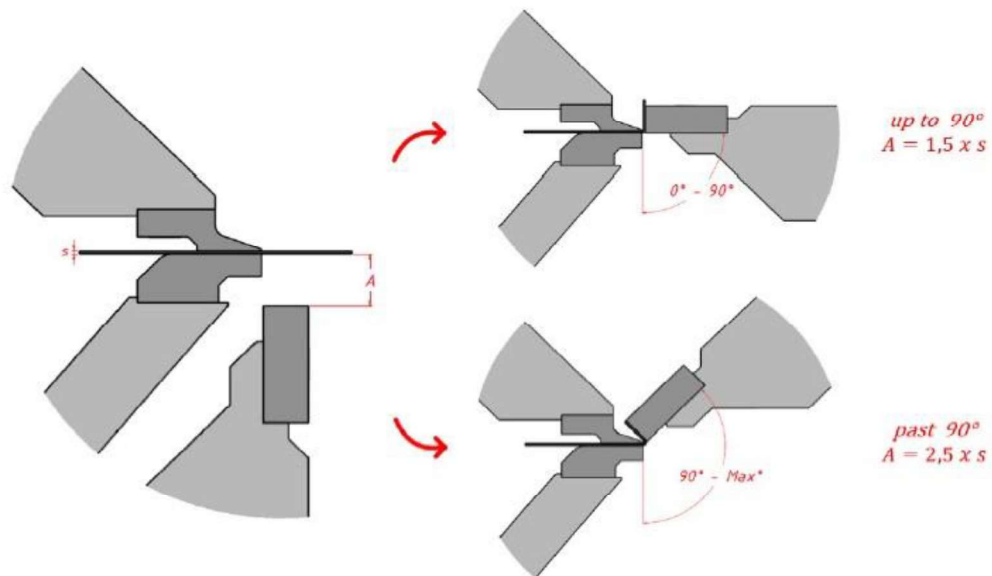


BEAM GEOMETRY



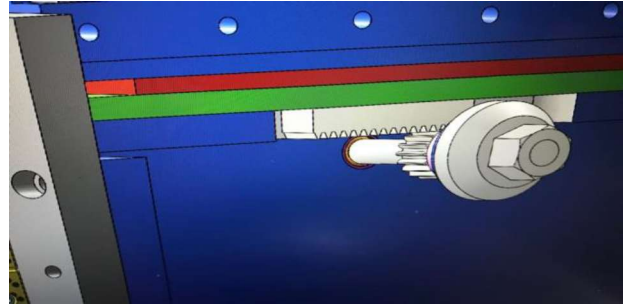
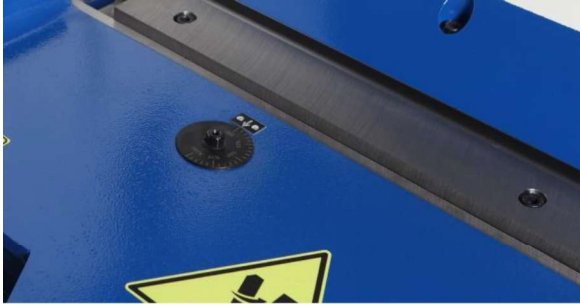
MANUAL FOLDING BEAM ADJUSTMENT

- Manual height adjustment of folding beam according to the sheet thickness or bending point radius
- Located in left and right side and should be adjusted equally on both sides as thickness x 1 for sharp bending radius or thickness x 1.5 /2.5 for more oval radius.
- More you lower the folding beam,more you have to increase the bending angle in the programme to be able to catch the right bending angle.



MANUAL CROWNING SYSTEM

- On long and thin sheets, in order to prevent the banana shape bends, you just need to adjust the crowning between %25 and %100 to give more support from the middle side of the folding beam



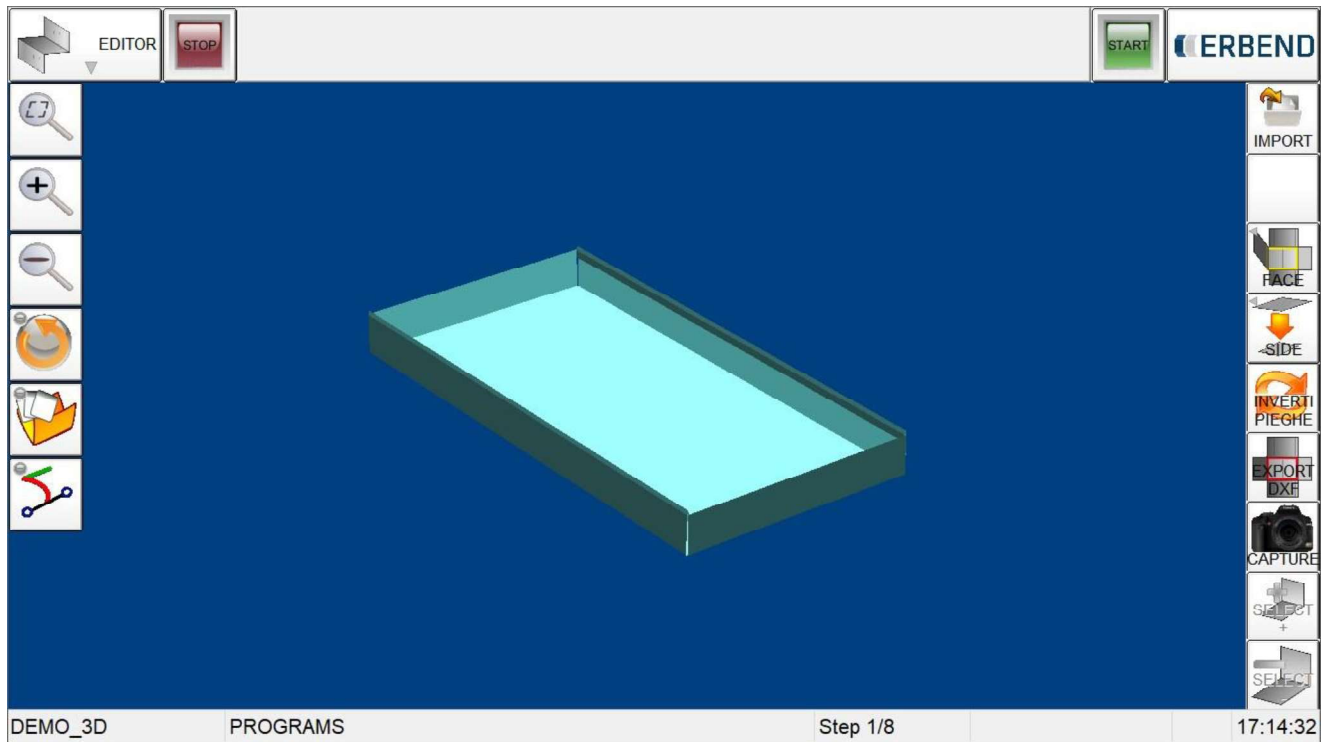
OPTIONAL SPECS AND ACCESSORIES

ERFOLD ADVANCED 2D/ 3D CNC GRAPHICAL CONTROL SOFTWARE

- 15.6" touchscreen all-in one industrial pc controller on swivel arm
- 2D part editor: you can create a new bending programme by drawing or line by line and and visualize in 2D
- 3D editor: You can draw the parts in 3D or you can import 3D step/igs files over your offline software
- You can determine and change the bending sequence on the created part
- 3D simulation of bending to check for collisions and intervene if needed
- Capability of choosing material type,thickness,springback,shortening,bending correction and creating data base for every type of material or lot
- Tool library and edit: You can import, create by drawing and define new tools, save, recall or delete in the library
- Authorization with password
- Real time simulated production page in which you can monitor all axes movements on 3D graphic view of the machine and also numerical values of the axes
- 16 GB hard disk space which allows you to save unlimited bending receipt or tool data
- Detailed alarm and parameters page



3D EDITOR



2D EDITOR

EDITOR

STOP

Quick Drawing Mode Enabled

START

MENU

	Type	Len/Rad	Angle	Step
1	L	73.0		
2	L	104.0	90.0	
3	L	340.0	90.0	
4	C	80.0	120.0	4.9
5				

ERFOLD

PROGRAMS

INSERT BEND

DELETE

EXPORT DXF

13:28:03

SIMULATION

STOP

START

ERBEND

SEARCH

SEQUENCE

DATA

FINGERS

PIECE POSITION

VIEW

WIZARD

BEGINNING

CENTER

END

FIRST

PREV.

CLOSE

LAST

CAPTURE

ROTATE

BEND CHANGE

CHANGE STATION

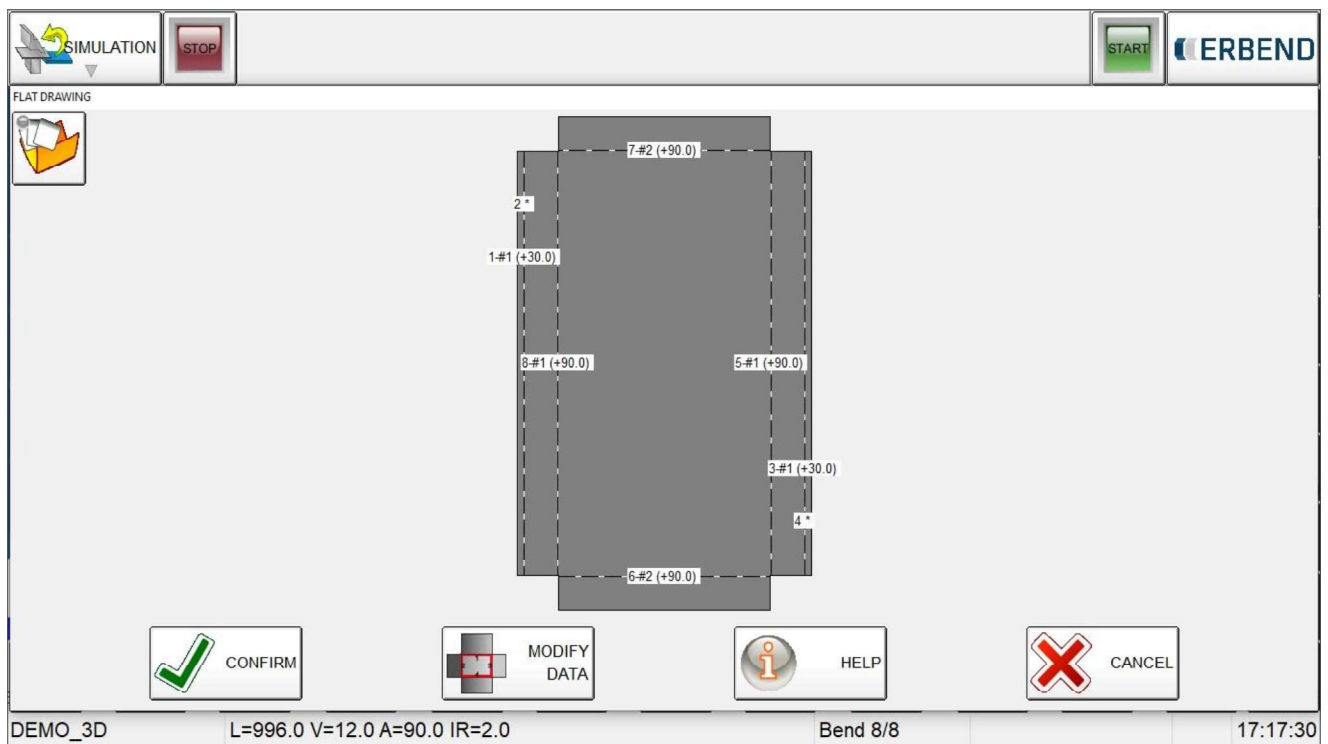
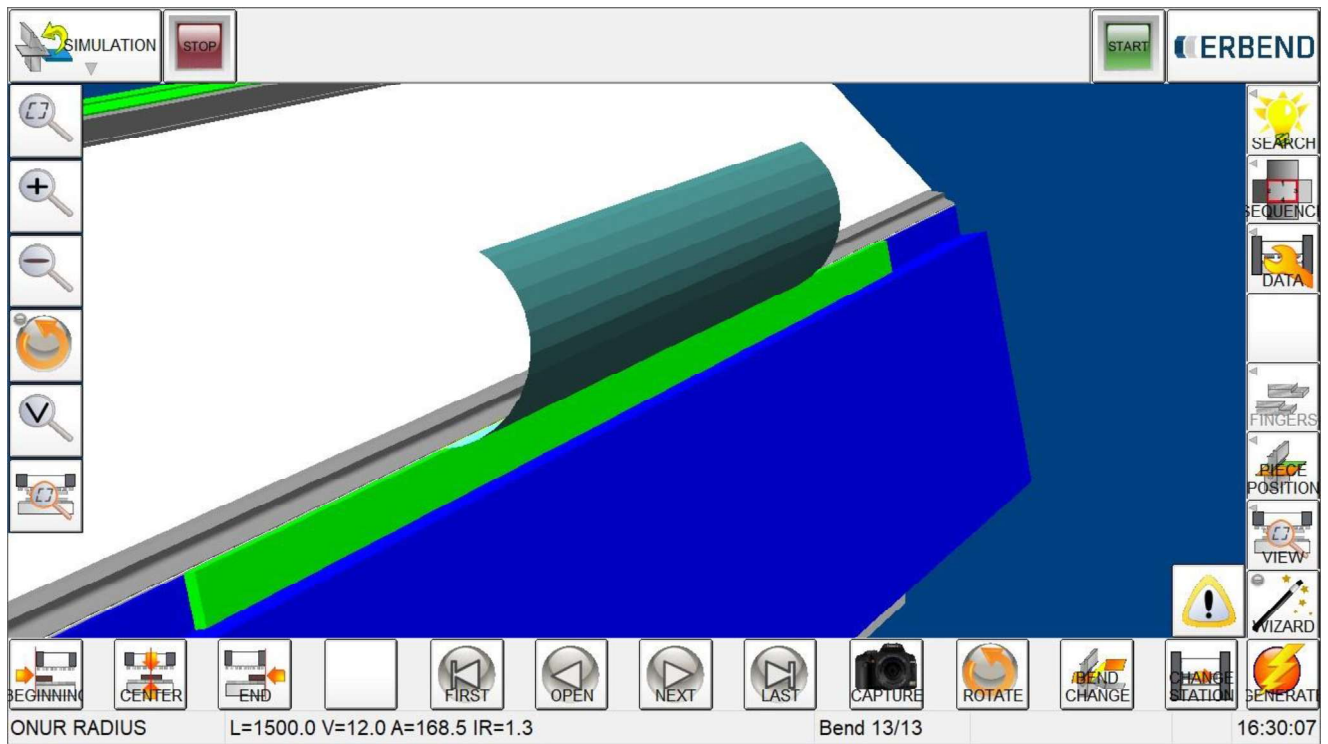
GENERAT

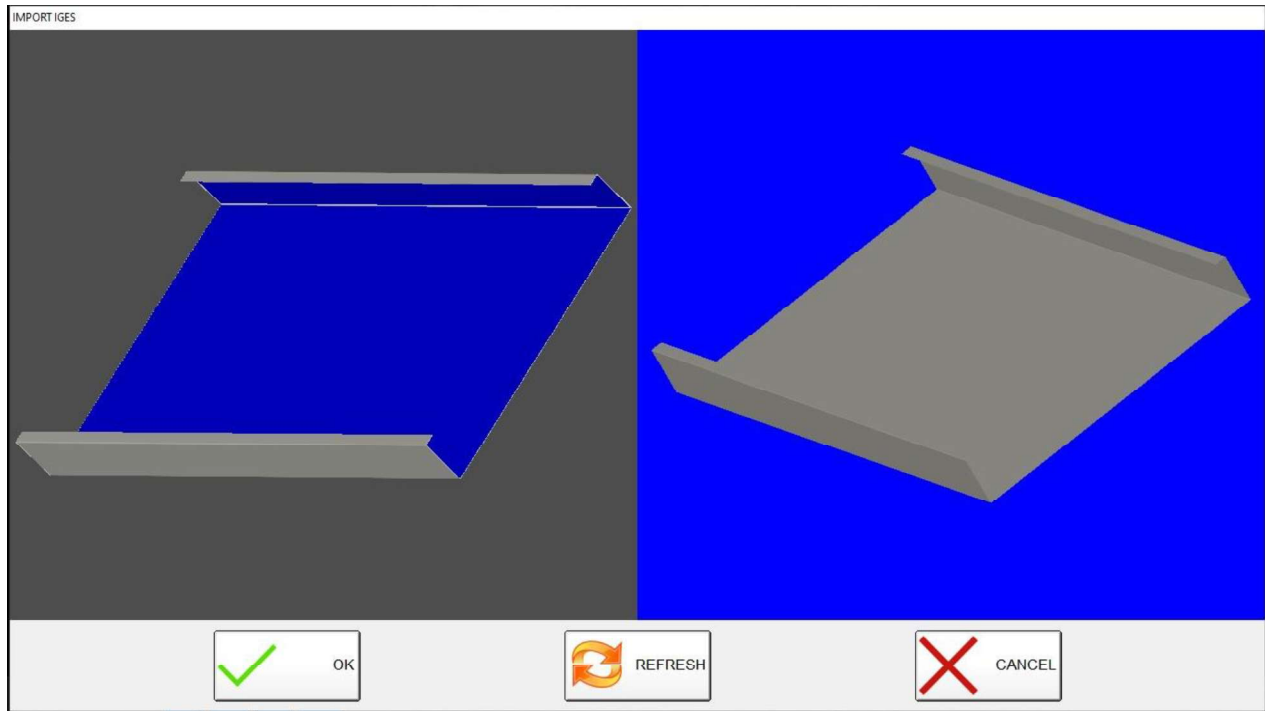
DEMO_3D

L=996.0 V=12.0 A=90.0 IR=2.0

Bend 7/8

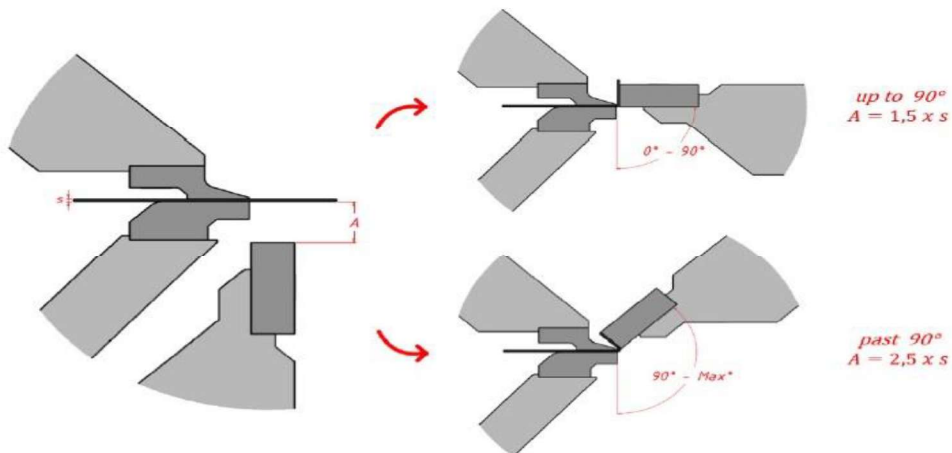
16:16:56





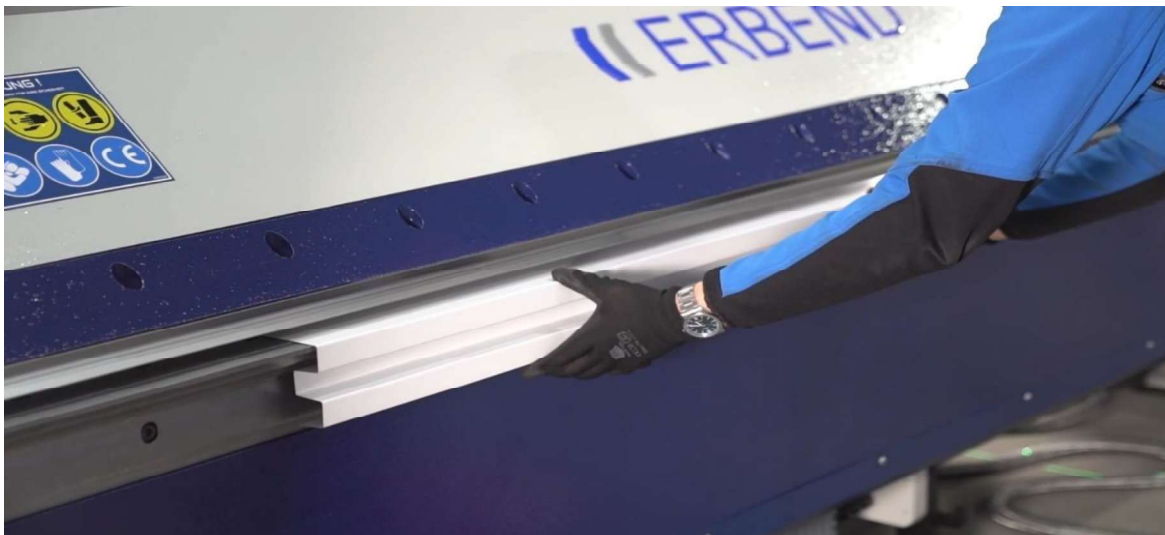
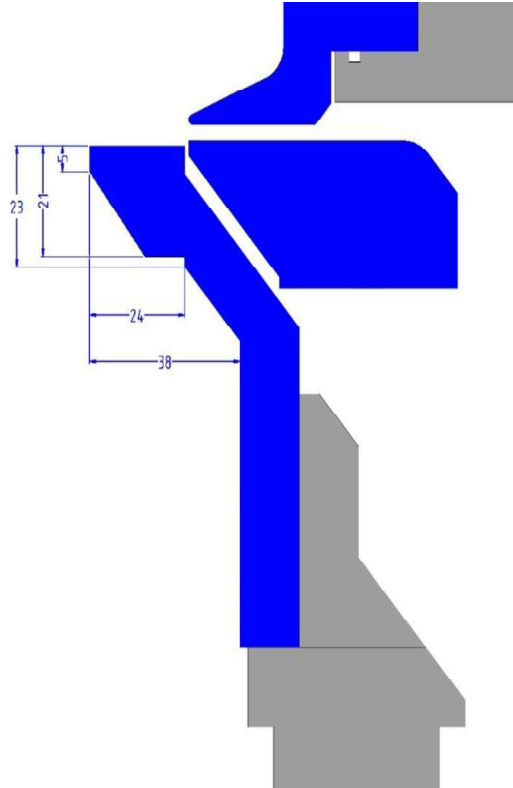
MOTORIZED FOLDING BEAM ADJUSTMENT (A1-A2 AXIS)

- Motorized and cnc controlled of the folding beam height. Your bending height is calculated automatically according to the parameters and set just before the bend.

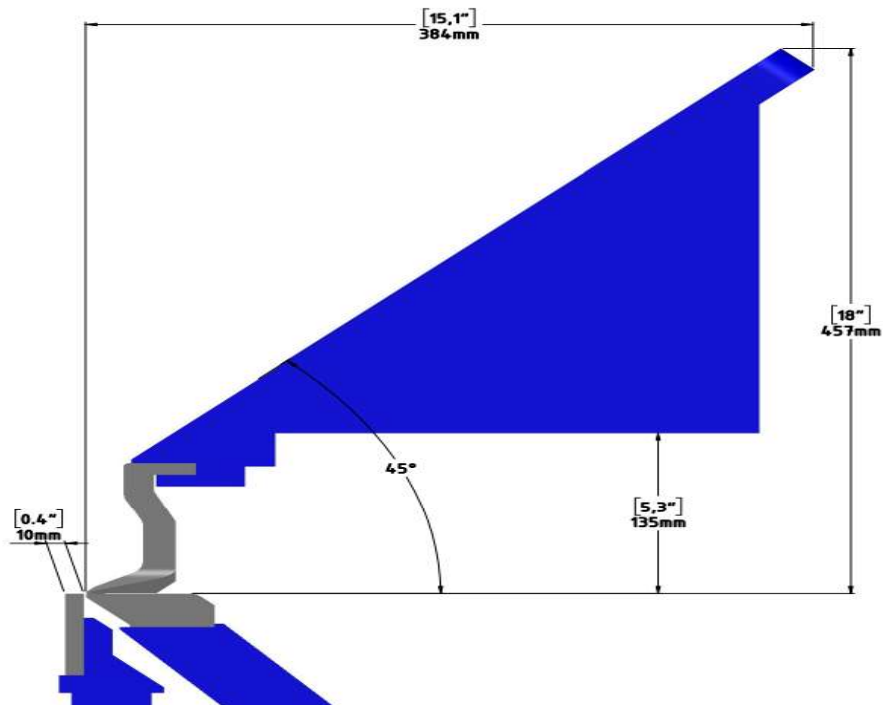
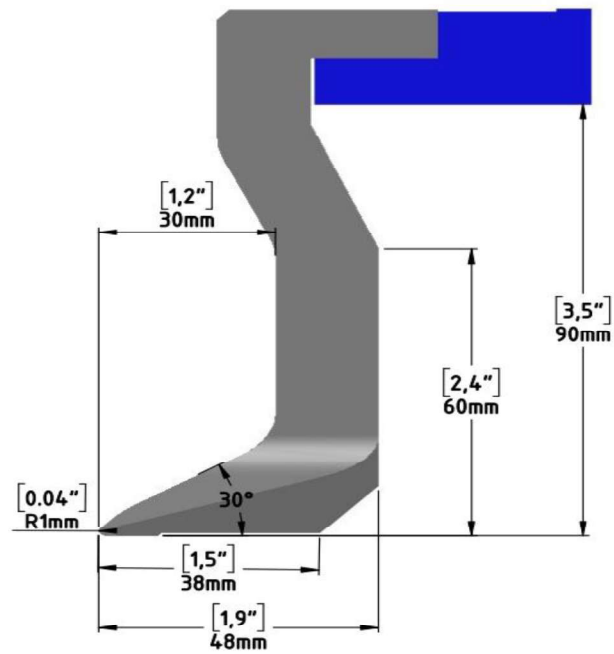


LOWER AND FOLDING BEAM WITH OMEGA GEOMETRY

- Thanks to the special design and more clearance with omega beam geometry of lower beam and folding beam, the parts with downwards flanges, like omega profiles, trapezoidal profiles can be executed more easily.



90 MM HIGH SEGMENTED GOAT FOOT TOOL SET



LONGER SHEET SUPPORT TABLE (TO WORK FROM THE FRONT SIDE)

- 1500/ 2500 / 3000 / 4000 mm rectangular sheet support table and back gauges
- Front side gauging arms + middle and back side triangle fingers up to 6 sectors
- Movable sliders for down flanges + steady side gauge



2000/2500/3200/4200



1500 2500

2000/2500/3200/4200



2500

3200 / 4200



3000 4000

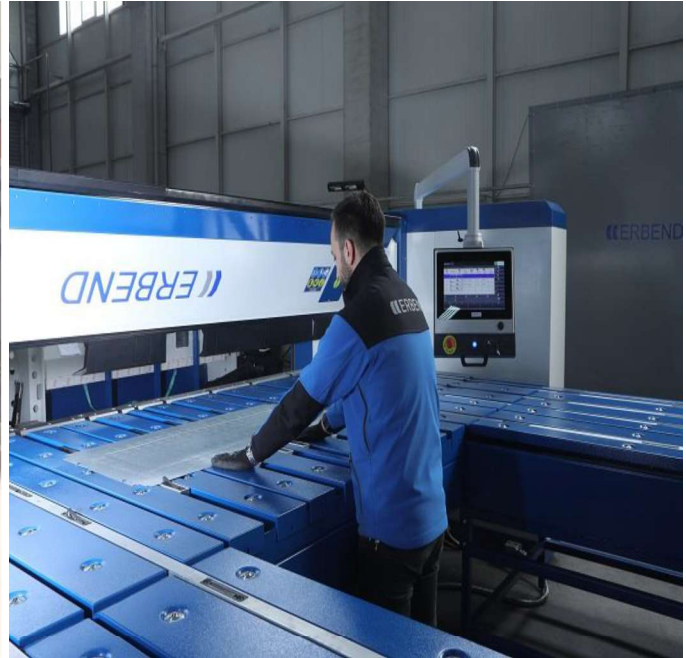
3200 / 4200



4000

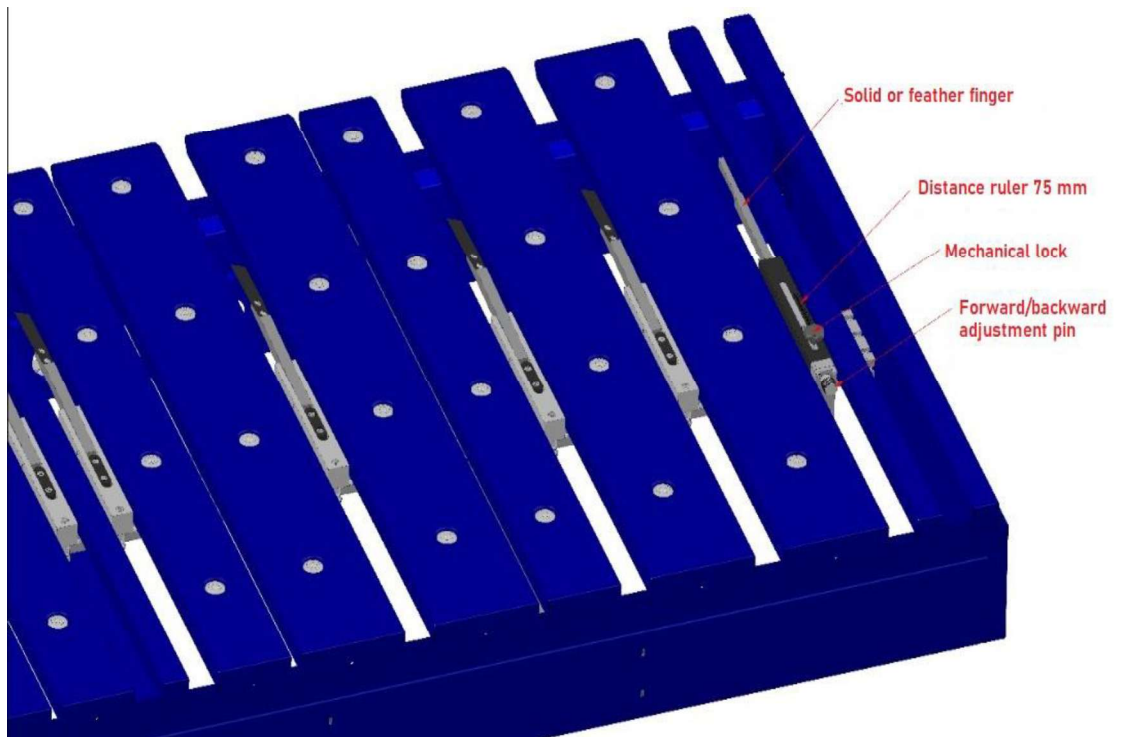
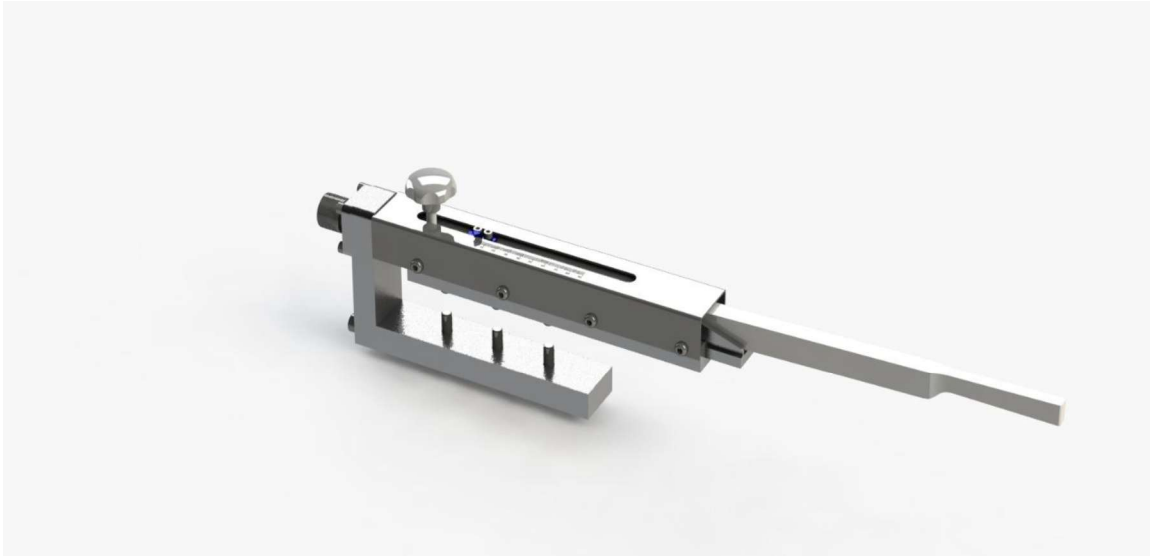
L / T or U SHAPE SHEET SUPPORT TABLE (TO WORK FROM THE BACK SIDE)

- 3000 / 1500 mm or 4000/1500 mm long L or U shape sheet support table with ball casters.
- Front side gauging arms + middle and back side triangle fingers up to 6 sectors.



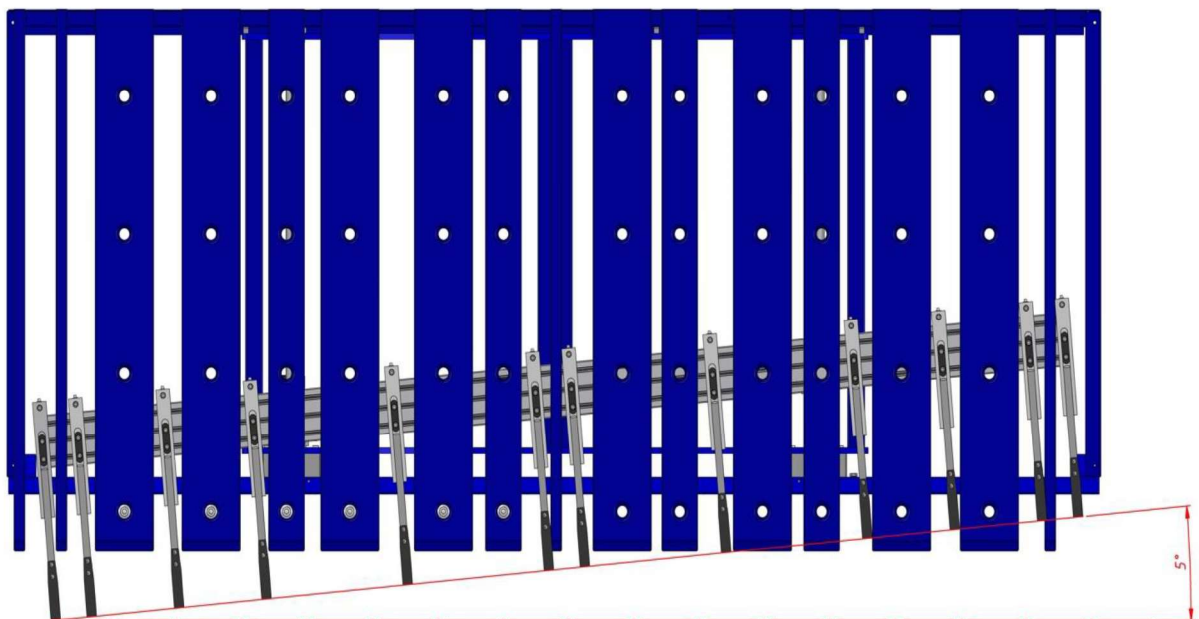
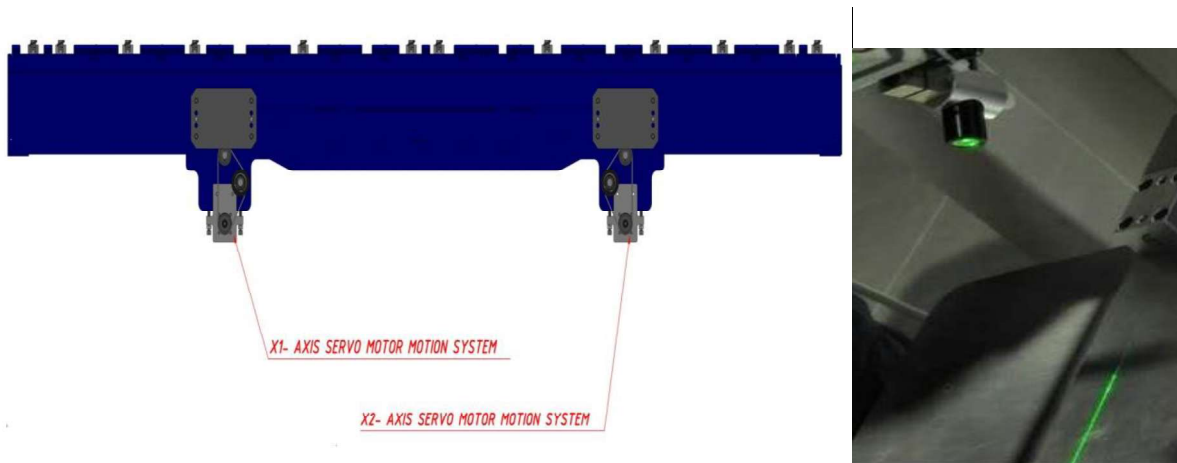
MECHANICAL CONICAL BACKGAUGE FINGER

- Independent and adjustable finger on the controller side of the support table
- Forward/backward movable to create around 3° conical angle
- Can be pulled forward between 0 and 75 mm and locked at any point



MOTORIZED CONICAL BACKGAUGE SYSTEM

- Dual axis CNC servo motorized control of the backgauge as X1 and X2 axis
- X1 remains fixed, X2 moves forward to create max 5° conical angle
- Laser beam indicator for the reference line of the sheet edge on the lower beam



PNEUMATIC GOAT FOOT QUICK CLAMPING SYSTEM (GOAT FOOT TOOLS NEEDED)

- Eliminates the time for tool-setup. No time spent for screwing or unsecrewing, just by turning one key, all tools are clamped or unclamped so that you can slide,remove or mount all goat foot tools just in seconds

