



**GEKA** 

The steel working company

# CNC STEEL PROCESSING MACHINES



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# GAMMA ROLLER SERIES

## CNC PROCESSING OF ANGLES, FLAT BARS AND C-CHANNELS



The **GR series** are machines designed for maximum output and processing quality in the minimum space possible. The material is moved by means of a roller to optimize efficiency in a reduced space. Though the material is moved by a **roller infeed**, the customer can use GEKA's patented **Minimal Waste System** to ensure a minimum waste per bar, **reducing the scrap to virtually zero**.



### INPUT CONVEYOR UNIT

Servo motor-driven tracking roller.  
Independent encoder.  
Feeder tracks at each end of the line.



### PUNCHING UNIT

Up to 3x punches per leg 31mm diameter.  
CNC-controlled backgauge.  
Hydraulic hold-down.



### SHEARING UNIT

Clean cuts without waste.  
Fast and easy access to blades.



### FULL CNC CONTROL

Windows 10 based PC control.  
15" Touch screen.  
Remote assistance as standard.



### MINIMAL WASTE UNIT

Allows processing full length of bars with no scrap.  
Automatically activated from CNC.  
Clamp holds material & pulls it out.  
Fast and easy access to blades.



### C- CHANNEL PROCESSING UNIT

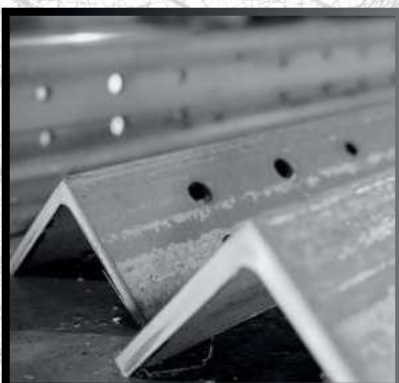
This kit enables the machine to mark, punch (on the web) and shear the following U channels profiles:  
U DIN 1026 – 80x45, 100x50, 120x55.



	GR-80	GR-150	GR-160	GR-180
Min angle processing [mm]	30 x 30 x 3	40 x 40 x 4	40 x 40 x 4	40 x 40 x 4
Max angle processing [mm]	80 x 80 x 8	150 x 150 x 15	160 x 160 x 16	180 x 180 x 18
Max flat bar processing [mm]	-	150 x 15	160 x 16	180 x 18
C-channel processing* [mm]	-		120	
Material infeed			Roller	
Number of punches per leg	1	2	3	3
Max punching Ø [mm]	25		31	
Punching power [tons]	34	55	75	75
Shearing power [tons]	65	150	250	250
Cassette marking*	-	5 holders, 10 characters each		
Wheel marking*	-	40 characters		
Operating software in Windows 10	Std. LinePro Net / Optional LANTEK			

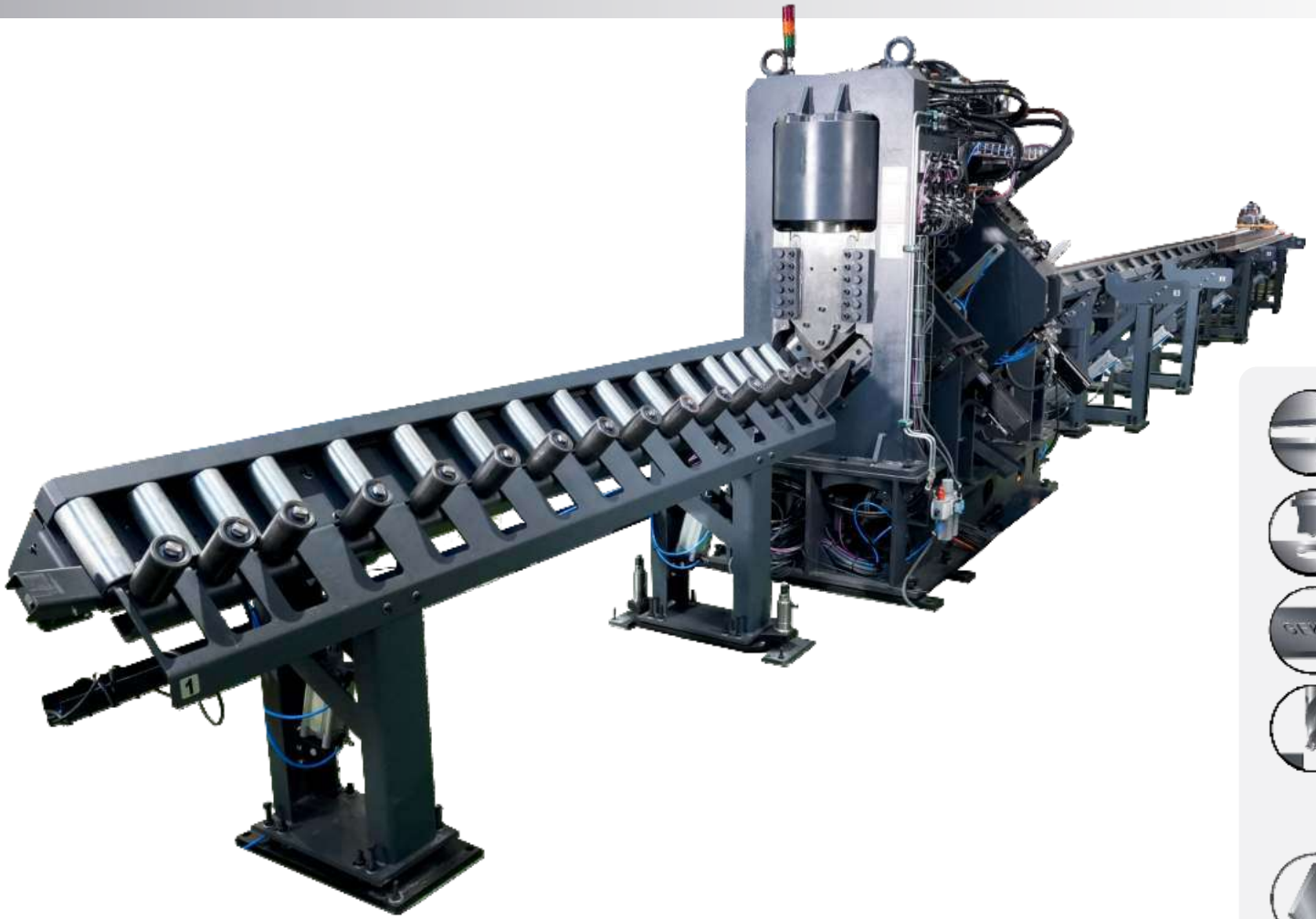
All the capacities described in this offer are based on a strength construction steel 45 Kg/mm<sup>2</sup>

\*Options



# GAMMA TRACTION SERIES

## CNC PROCESSING OF ANGLES, FLAT BARS AND C-CHANNELS



The **GT series** are machines designed for maximum output and processing quality when processing **angle bar, flat bar and C-Channel**. The material is processed by the means of a **pincher + carriage** to optimize efficiency by processing the material with **minimum scrap** to ensure the best results.



### PUNCHING UNIT

6x punches (3x per leg).  
CNC-controlled backmark.  
Hydraulic hold down.



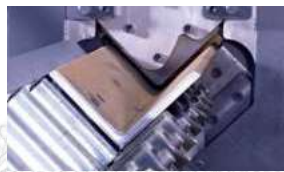
### INPUT CONVEYOR UNIT

Material held and pushed with clamp.  
Rack & pinion system servo motor driven.



### DOUBLE DRILLING UNIT

8 tools (4 per leg).  
Maximum diameter 40mm.



### SHEARING UNIT

Clean cuts without waste.  
Easy and quick access to blades.



### FULL CNC CONTROL

Windows 10 based PC control.  
Standard remote assistance.



### MARKING UNIT

CNC controlled positioning and marking  
selection with adjustable pressure  
valid for galvanizing.



	GT-100	GT-160	GT-200	GT-250
Min Angle processing [mm]	35 x 35 x 4	40 x 40 x 4	50 x 50 x 5	50 x 50 x 5
Max angle processing [mm]	100 x 100 x 10	160 x 160 x 16	200 x 200 x 20	250 x 250 x 25
Max flats processing [mm]	100 x 10	160 x 16	200 x 20	250 x 25
C-channel processing* [mm]	-	120	140	180
Material infeed	Via pincher			
Number of punches per leg	1	2	3	3
Max Punching Ø [mm]	31	31	31	31
Punching power [tons]	65	75	75	75
Shearing power [tons]	100	250	300	540
Pressure marking*	5 holders, 10 characters each			
Wheel marking*	40 characters			
Drilling station*	1 per leg w/4 tools			
Operating software in Windows 10	Std. LinePro Net / Optional LANTEK			

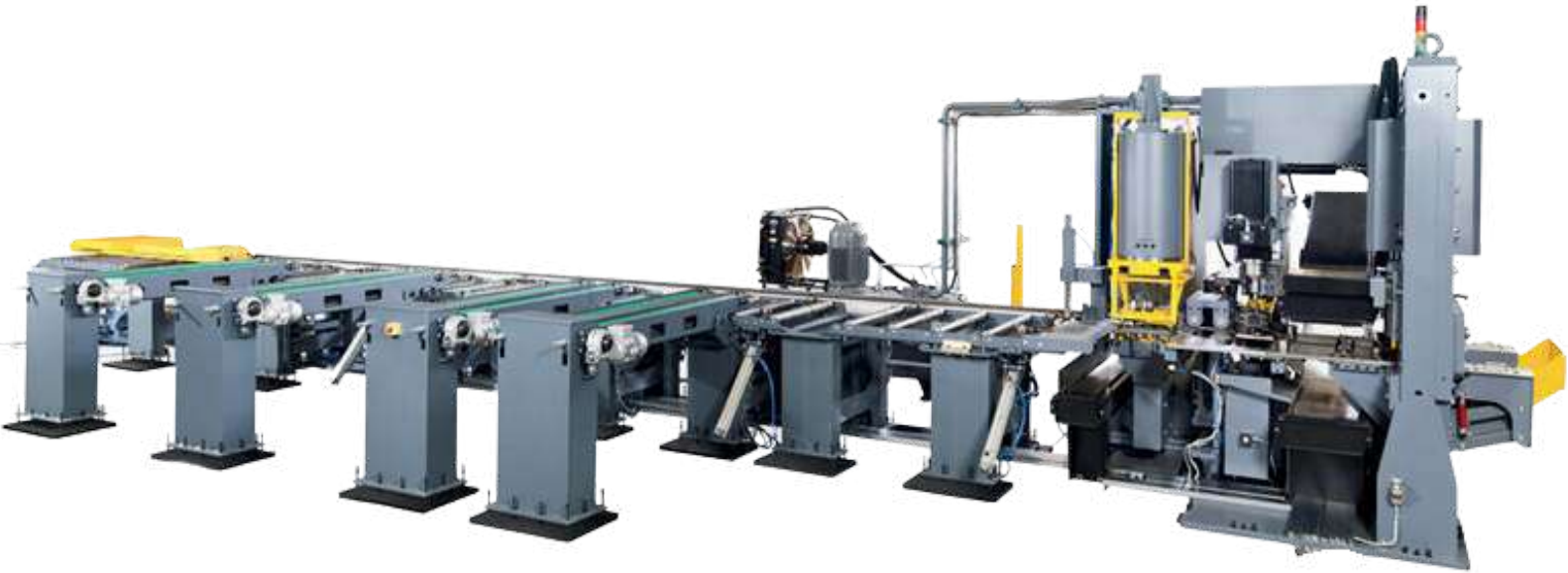
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\*Options



# ALFA SERIES

## CNC PROCESSING OF FLAT BARS AND ANGLES



The **ALFA series** is a CNC **punching and shearing** machine, has been designed to meet the needs of steel manufacturers seeking to optimize their production. This series has the capability to process both **flat and angle bars**, spanning **lengths from 6 to 12 meters**. With versatile options such as **marking, drilling, mitre shearing, and automatic loading/unloading**, the ALFA series optimizes production, offering steel manufacturers a comprehensive solution to enhance their efficiency and performance.



### INPUT CONVEYOR UNIT

Rack & Pinion with Servo Driven carriage + pincher.  
Flat Bars are pushed and clamped by the carriage.  
Material guided by side rollers.



### PUNCHING UNIT

3x different, independently selectable punches.  
Up to 40mm diameter.  
Hydraulic hold-down.  
Servo motor and spindle-driven horizontal positioning along Y-Axis.



### SHEARING UNIT

Flat Bar single cut.  
Hydraulic hold-down and clamping squaring guides.



### MARKING UNIT

Wheel marking unit.  
Selected from the CNC.  
Dimensions: 14x10x19mm (LxWxH)  
Marking power 80kN.



### DRILLING UNIT

9kW Drilling unit up to 40mm diameter.



### MITRE SHEARING FOR FLATS

Maximum turning capacity +/- 45°.

	ALFA 150	ALFA 500/150-110	ALFA 500/150-165	ALFA 500/150-220
Min flat processing [mm]	25 x 4	50 x 5	50 x 5	50 x 5
Max flat processing [mm]	150 x 12	500 x 20	500 x 25	500 x 30
Min angle processing [mm]	-	50 x 50 x 5	50 x 50 x 5	50 x 50 x 5
Max angle processing [mm]	-	150 x 150 x 15	150 x 150 x 15	150 x 150 x 15
Material infeed	Roller		Via pincher	
Maximum Ø [mm]	31	40	40	40
Number of punches	2	3	3	3
Center punching power [tons]	64	110	165	220
Sides punching power [tons]	-	82	123	165
Vertical leg punching power* [tons]	-	50	50	50
Wheel marking*	-	40 characters		
Cross transfer system for automatic loading*	As per customer request			
Cross transfer system for automatic unloading*	As per customer request			
Drilling unit* [kW]	-	9	9	9
Mitre shearing*	-	± 45°	± 45°	± 45°
Operating software in Windows 10	Std. LinePro Net / Optional LANTEK			

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\*Options

# SIGMA SERIES

## PROCESSING OF BEAMS, FLAT BARS, PROFILES AND TUBES

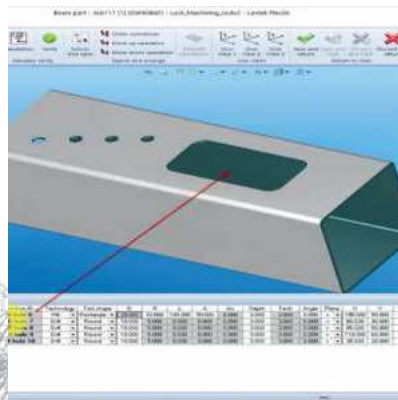


The **SIGMA** is a CNC numerically controlled production line for **drilling, tapping, and milling** of steel **beam profiles** which can be supported on two flat surfaces and programmable from the PC. **Angle profiles** can be processed and, optionally, the line can be adapted to process flat profiles using a magnetic fixing square set. The machine is designed to process profiles loaded on the **fixed and levelable table** of the machine and **automatically carries** out operations with the drilling unit to programmed points in selected faces.



### AUTOMATIC TOOL CHANGER

Number of tools: 5.  
Pneumatic drive.  
Built on a double linear guide.



### ADVANCED SOFTWARE

Full CNC with multiple nesting options.  
Accepts TEKLA, DSTV, DSTV+, ...  
Remote connection for troubleshooting.



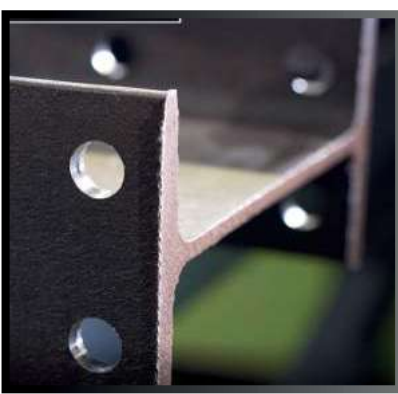
### PROFILE ROTATING SYSTEM

Automatic turning system for profiles up to 600mm.  
5 rotators placed along the worktable to enable the profile turning.





	SIGMA 600	SIGMA 1000
Section volume [min - max]	70 - 600	70 - 1000
Std bar length [m]	12	
Max processable length [m]	14	
Drill heads	1	
Spindles per vertical drill head	1	
Drilling Ø [mm]	40	
Drilling unit [kW]	13	
Program controlled spindle rotation speed [rpm]	300 - 3000	
Automatic tool changer capacity	5	
Tool holder	ISO DIN 69871 (SK40/ISO40)	
Complementary stroke to the X axis for the vertical head (U-Axis)	± 250	
X axis positioning speed (portal) [mm/s]	100	
Y axis positioning speed (drill head) [mm/s]	162	
Laser sensor for quick profile detection & machine positioning	Included as std	
Internal lubrication	Included as std	
External lubrication	Included as std	
Light security	Included as std	
Operating system	Windows 10	
Ethernet connection and remote service for troubleshooting	Included as std	
Rotating system for beams*	Up to 600mm	
Cross transfer system for automatic beam positioning*	As per customer request	
Marking unit*	Scribing	



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 \*Options

# PUMA 2HI + PAX

## PROCESSING OF BEAMS FOR SOLAR TRACKERS



The **PUMA 2HI + PAX** is specifically designed for **punching I-beams** and H-beams for solar trackers. Fabricators will be able to process up to **14-meter beams** in a very fast process with high accuracy, and short fabrication times per beam.



### DOUBLE PUNCHING SYSTEM

Double punching in one stroke on the flanges of the profile in the form of a "T", double "T" or "H" at the same time.



### AUTOMATIC POSITIONING

Automatic material unlocking and carriage retraction to process the next beam.



### DIE BASE WITH DOUBLE OR QUADRUPLE PUNCHING

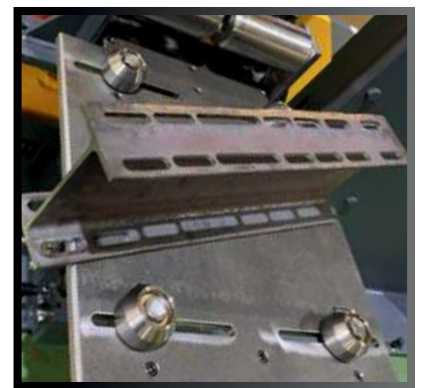
Aligned and referenced in profile by the beam web.



## PUMA 2HI + PAX

Min flange length [mm]	50
Max flange length [mm]	400
Punches per head	2
Punching power [tons]	165
Max punching Ø	As per customer request
Max punching thickness [mm]	19
Operating software in Windows 10	Std. LinePro Net / Optional LANTEK
Max feeding speed [m/min]	24
Repeability [mm/m]	± 0,2

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\*Options



### STANDARD EQUIPMENT

- Puma 2HI special design
- Special tooling for beams punching
- Double punching per cycle stroke
- Web/flange alignment system
- Emergency stop buttons
- Servo motorized positioning gripper
- CNC/PC Touch Screen Monitor
- Manually adjustable stroke of the punching cylinder
- Basic punches & dies package

### OPTIONAL EQUIPMENT

- Manually height adjustable infeed/outfeed conveyors
- A/C for the electrical control
- Safety light barriers
- Hydraulic group oil cooler
- Extended punch & dies package

# PAXY SERIES PROCESSING OF PLATES



The **PAXY series** machines are designed for processing **plates**, for **punching, marking, and drilling** plates. These machines have up to **3 punches** and can process a **maximum thickness and diameter of 40 mm**. Custom sizes are available on request.



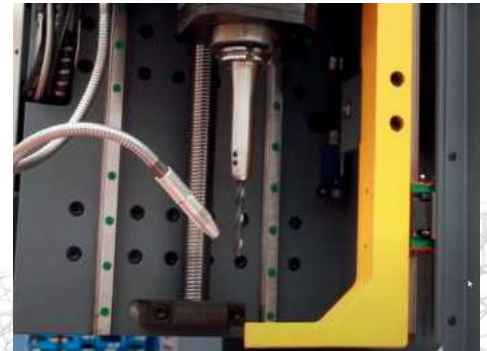
## Double Gripper Unit

Material clamping guides.  
Set of independent servo drives in each axis.  
Fast and easy loading and unloading of material.



## Punching Unit

3 different punches independently selectable.  
Horizontal movement driven by servomotor and ball screw.



## Drilling Unit

Hydraulic support.  
Maximum diameter 40mm.  
Detection of material thickness and tool length by automatic contact.



	PAXY 1000x500	PAXY 2000x750
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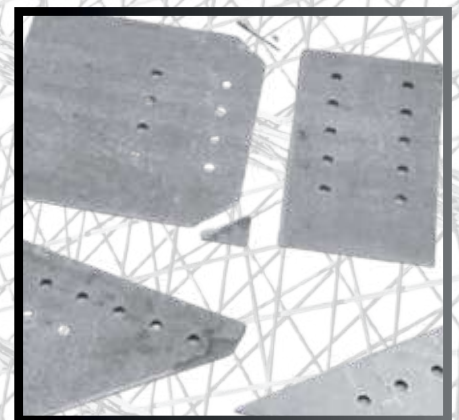
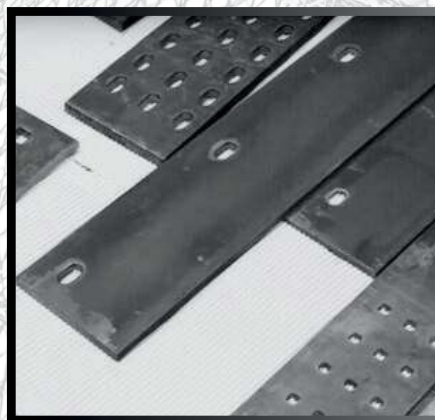
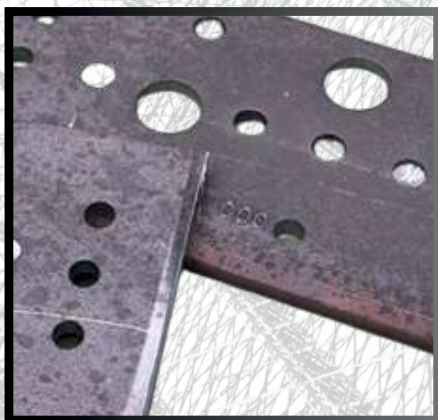
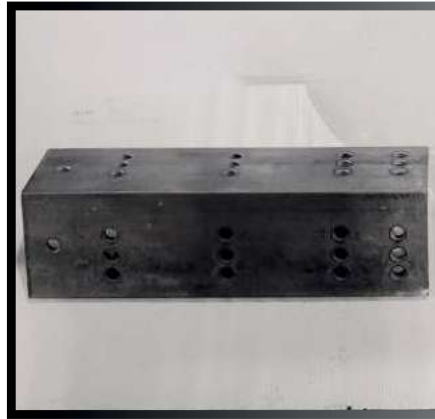
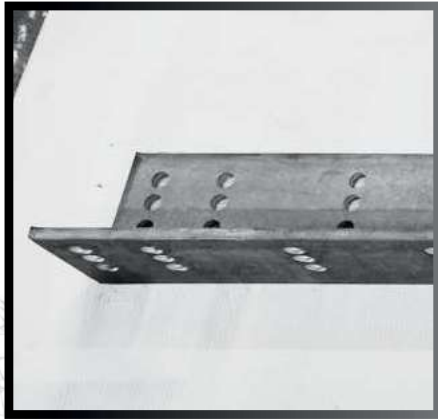
Max length of sheet X Axis [mm]	1000	2000
Max length of sheet Y Axis [mm]	500	700
Punching force [kN]	80, 110, 165 or 220	
Max traverse speed per axis [m/min]	24	
Max combined traverse speed [m/min]	34	
Positioning tolerance [mm]	0,1	
Number of punches	3	
Max central punch Ø [mm]	40	
Max lateral punches Ø [mm]	31	
Max through thickness central punch Ø [mm]	40 x 40	
Drilling unit* [kW]	11	
Tool holder*	ISO 40	
Spindle speed range* [rpm]	120 to 1500	
Max [mm]	40	
Max plate thickness [mm]	40	
Marking unit*	10 characters	

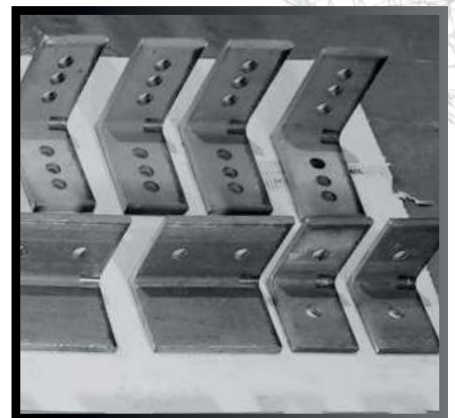
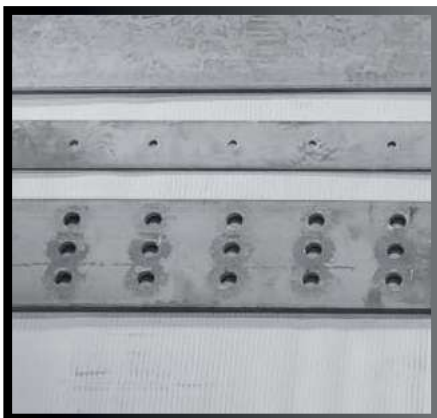
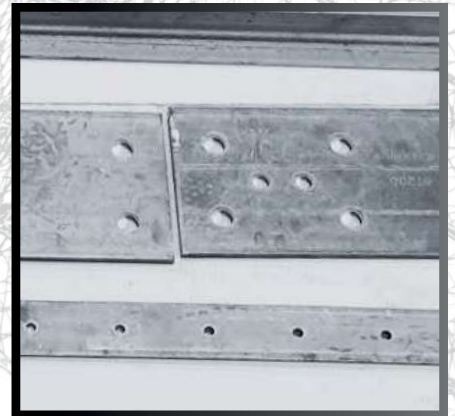
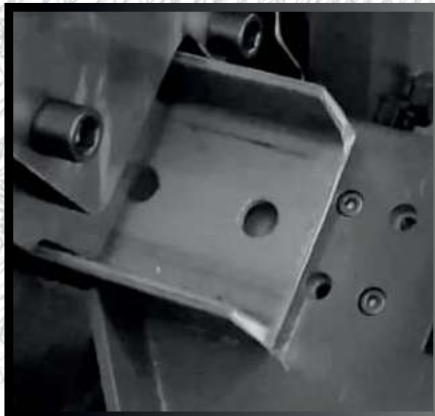
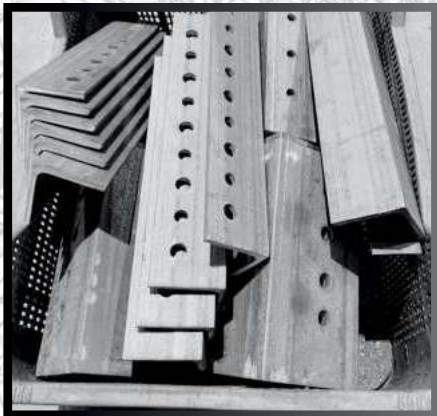
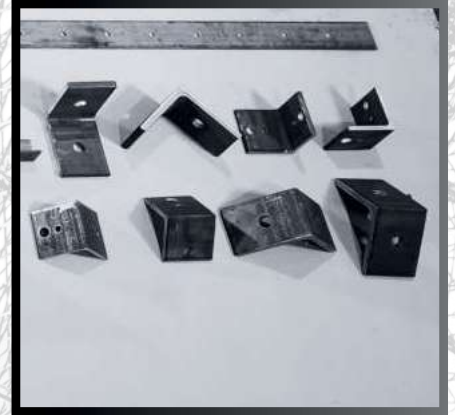
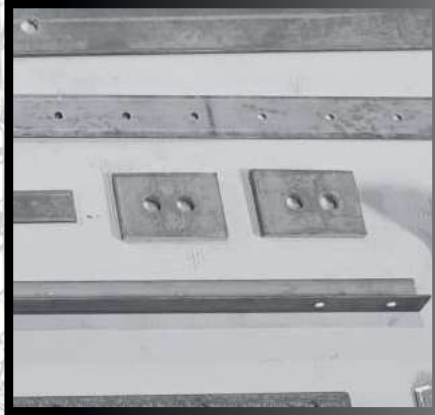


All the capacities described in this offer are based on a strength construction steel 45 Kg/mm 2

\*Options  
Custom sizes on request

# SAMPLE PARTS PRODUCED BY OUR MACHINES





## SAMPLE PARTS



STEEL SERVICE CENTERS



STEEL MANUFACTURERS



METAL WORKSHOP



STRUCTURAL STEEL CONSTRUCTION



TRANSMISSION TOWERS MANUFACTURES



ENGINEERING CONSTRUCTIONS



SOLAR AND WIND TURBINE



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