# CNC

#### PLATES AND BEAMS





## **GEKA CNC**

Against a background of growing international competition, automation and innovation in production processes are key factors in guaranteeing a company's competitive edge.

With a view to achieving more precision and productivity, GEKA has included automated mechanisms in its equipment.

GEKA combines the latest in CNC technology for the automated processing of angles and profiles, decades of experience in shearing and punching, and state-of-the-art automation. Our products are technically superior, possessing a natural advantage in the market place. GEKA is a premium quality brand.

## **GEKA Worldwide**

Know-how and market share characterize our GEKA success story since our humble beginnings almost a century ago. In the first ninety years, the GEKA Group has forged for itself a proven track record of excellence and performance.

- Over 80% of our production is exported
- Our global network consisting of 60 local distributors all over the world
- Worldwide sales in over 85 countries
- On-demand customer care offering superior service and maintenance

On any given day, more than 80,000 GEKA machines are pounding away on five different continents. Now that's customer satisfaction!

### PLATE PROCESSING

GEKA's PAXY product line offers CNC solutions for automated punching of steel plates.

The PAXY line automates tedious and time-consuming preliminary tasks, such as center marking and manual positioning. These solutions maximize productivity, reduce costs and increase accuracy.



|                     |    | PAXY 1000 | PAXY 1500 | PAXY 2000 | PAXY X PLUS |
|---------------------|----|-----------|-----------|-----------|-------------|
| Max. Length         | mm | 1000      | 1500      | 2000      | 3000-18000  |
| Max. Width          | mm | 500       | 750       | 750       | 750         |
| Max. Thickness      | mm | 40        | 40        | 40        | 40          |
| Max. Diameter       | mm | 40        | 40        | 40        | 40          |
| Nº Punches          | -  | Up to 3   | Up to 3   | Up to 3   | Up to 3     |
| Max. Drilling Diam. | mm | 40        | 40        | 40        | 40          |

## **BEAM PROCESSING**

Complete processing system for drilling, tapping, milling and marking of beams and profiles, numerically controlled and programmable by means of the CNC - PC based control.



| FEATURES                   |    |   |  |
|----------------------------|----|---|--|
| Maximum height of profiles | mm | 1000  |  |
| Max.lenght profiles        | m  | 12  |  |
| Type of profiles           | -  | Beams, angles, U<br>channels, square and<br>rectangular tubes, plates |  |
| Spindle power              | kW | 15 (peak power)<br>11 (nominal)                                       |  |
| Number of tools            | -  | 5   |  |
| Maximum diameter           | mm | 32  |  |
| Tool holder                | -  | SK 40   |  |
| Profile rotating system    | -  | √   |  |
| Operations                 | -  | drilling, tapping, milling<br>and marking                             |  |

Capacities based on a material resistance of 45 Kg/mm<sup>2</sup>. Technical characteristics valid except for typographical errors or omissions. Geka group, committed to continuous product improvement, may without notice change technical specifications, equipment and photographs of models, as well as any other information contained herein.







DOUBLE WING CUT (one of wich is at 45°)





SPOTTING





FLAT BAR





















STEEL BAR



PUNCHING



## PAXY 1000/1500/2000

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PAXY 1000/1500/2000 is a fully-automated system for punching thick steel plates (4-40 mm), up to a size of 2000x750 mm. By automating the feeding and positioning process, steel plate punching becomes fast and easy.



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EKA





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



#### **PUNCHING UNIT**

- Proven quality and performance of the PUMA Model
- Variable punching force (800-2200 kN)
- Hydraulic hold down



#### **USER-INTERFACE**

- Touch Screen
- Easy and intuitive programming
- Compact Flash memory card

## PAXY LINE OPTIONAL EQUIPMENT



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#### TRIPLE-PUNCHING HEAD

- Variable three different punches
- Independently selectable from user-interface

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Maximum diameter 40 mm

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#### **VERTICAL DRILLING UNIT**

- 40 mm maximum diameter
- Cutting speed 20 m / min
- MK4 Tool Holder

The PAXY X PLUS product line is designed for automated punching of long steel plates up to a length of 18.000 mm and thicknesses up to 40 mm. The plate is firmly heldin place by clamping guides which control movement along the X-Axis.

The punching unit mounted on a carriage controls movement along the Y-Axis.



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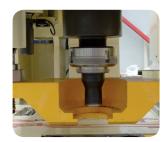


- along each axis
- Fast and easy loading and unloading of material



#### **USER-INTERFACE**

- Touch Screen
- Easy and intuitive programming
- Compact Flash memory card



#### **PUNCHING UNIT**

- Proven quality and performance of the PUMA Model
- Variable punching force (800-2200 kN)
- Hydraulic hold down
- Servo motor and spindle-controlled horizontal positioning



#### **MARKING UNIT**

- Marking force (700 kN)
- Accommodates up to 10 digits

• 10x6 mm-size typeface



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#### **GEKA PRO PC CONTROL**

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- Touch screen, industrial PC operating on Windows XP platform
- Network connectivity and USB
- Compatible with leading design applications
- Remote assistance via internet

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### SIGMA 110

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SIGMA 110 represents the latest novelty in technology development by GEKA AUTOMATION.

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It is a system that allows you to drill (but also tap, mill and mark) beams and profiles up to 1m high and which also includes the possibility of rotating the profile itself along 4 axis. SIGMA is fast (40 m/min and 3 m/s acceleration), powerful (with a 15 kW drill) and versatile (automatic tool changer for 5 tools).

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#### **DRILLING UNIT**

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- Powerful and reliable drilling head
- 15 kW power
- Extra strong double column guided movement
- Spindle and rack and pinion X axis travelling
- Ultra fast X axis acceleration
- Double X axis system



#### **HOLD DOWN**

- The profile is clamped to the table by means of a vertical clamp.
- For guidance of the clamp, two vertical lineal guides are mounted



#### **USER-INTERFACE**

- Windows based PC control
- Touch screen
- Remote assistance over the internet
- USB Port



#### **TOOL CHANGER**

• 5 tools automatic changer







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## Peripherals Available



#### **SOFTWARE LINE PRO**

- Importing of .dxf and .dstv format files
- Nesting optimizes material use



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#### **ROTATING UNIT**

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- Simple and unique material handling solution for rotating and positioning beams,
- It rotates large and heavy beams (up to 600 mm height), and position them up to the zero reference.
- No need for an overhead crane or other lifting device.
- Fully controlled from the Sigma 110 control unit and is hydraulic driven.



### GEKA GROUP Quality Know-how Service



World leader in punching and shearing solutions

With more than 80000 happy and satisfied customers worldwide and more than 90 years experience.



Proven quality, design and craftsmanship

ISO 9001 and OHSAS certifications besides 90 years experience and a continuous benchmarking policy.



Complete after sales service

Permanent stock and next day delivery of consumables, accessories and parts. After sales assistance by GEKA's qualified engineers.



**Great versatility** 

More than 50 different machine models and over 8000 different accessories. GEKA offers the highest range in accessories and optional equipment in the market.



Produced & manufactured in the European Union

Conversely other manufacturers, GEKA is the only ironworker fully produced by Geka in the UE.



Continuous innovation

New Bendicrop 85, C2PL, Alfa 500, Alfa 150, Gamma Traction, Sigma110...



Worldwide distribution network

With more than 60 distributors and present in more than 85 countries in 5 continents.



All GEKA machines are special order

Every new GEKA machine is one of a kind. Our designers develop solutions suited to your specific needs. We manufacture each GEKA in our own facilities according to precisely defined standards.



www.geka-group.com