

Extraordinary Technology

The new generation of high-performance punching machines to meet all production needs.

EUROMAC®

EUROMAC | **Xt** new generation punching machines

Precise, powerful and fast.

EUROMAC ULTRA-HIGH-PERFORMANCE PUNCHING MACHINES

Xt, the new generation of Euromac punching machines, characterized by their **high performance** and production flexibility are suitable to fulfil all production needs.

This is a machine with a **large work area** without the need for any repositioning, which ensures reliability and punching speed.

Each Xt punching machine can be configured in either a hydraulic, a hybrid or an electric version, with either 6 or 12 stations (up to 66 tools and 30 of them are indexed).
In addition, an automatic loading and unloading system with a palletised system can be mounted to further increase the system's production capacity.

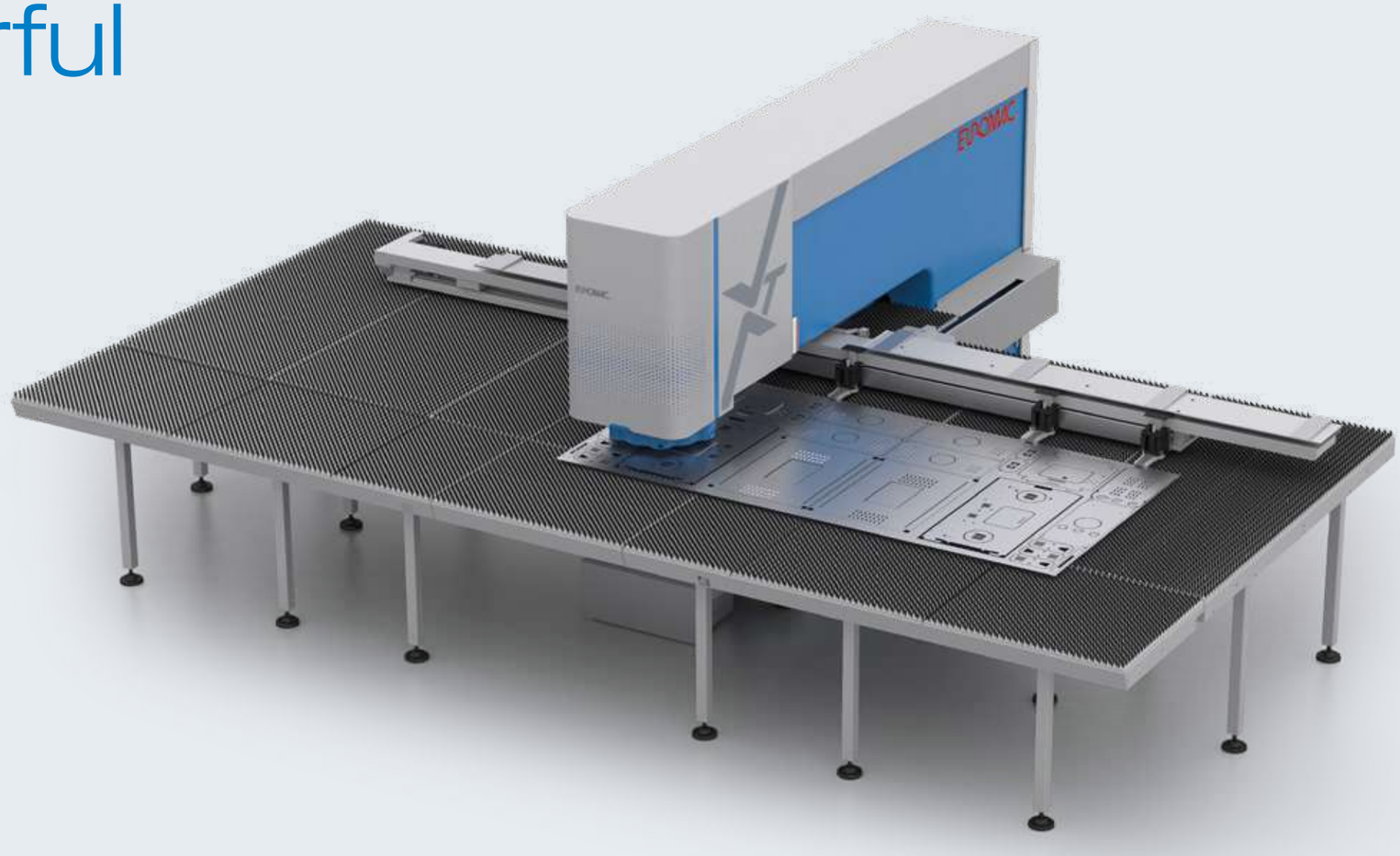
A 3000 x 1500 mm work area without the need for any repositioning

Configuration: hydraulic, hybrid or electric version, with either 6 or 12 stations

Punching speed of up to 1100 strokes/min. per nibbling process, 1 mm pitch.

Combined axis speed of 136 m/min.

Punching force of up to 30 tons



These are just a few examples of possible tool configurations for the XT



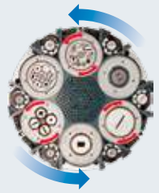
15 TOOLS
12 INDEXED TOOLS
3 FIXED TOOLS



21 TOOLS
12 INDEXED TOOLS
9 FIXED TOOLS



23 TOOLS
20 INDEXED TOOLS
3 FIXED TOOLS



29 TOOLS
15 INDEXED TOOLS
14 FIXED TOOLS



27 TOOLS
24 INDEXED TOOLS
3 FIXED TOOLS



43 TOOLS
20 INDEXED TOOLS
23 FIXED TOOLS

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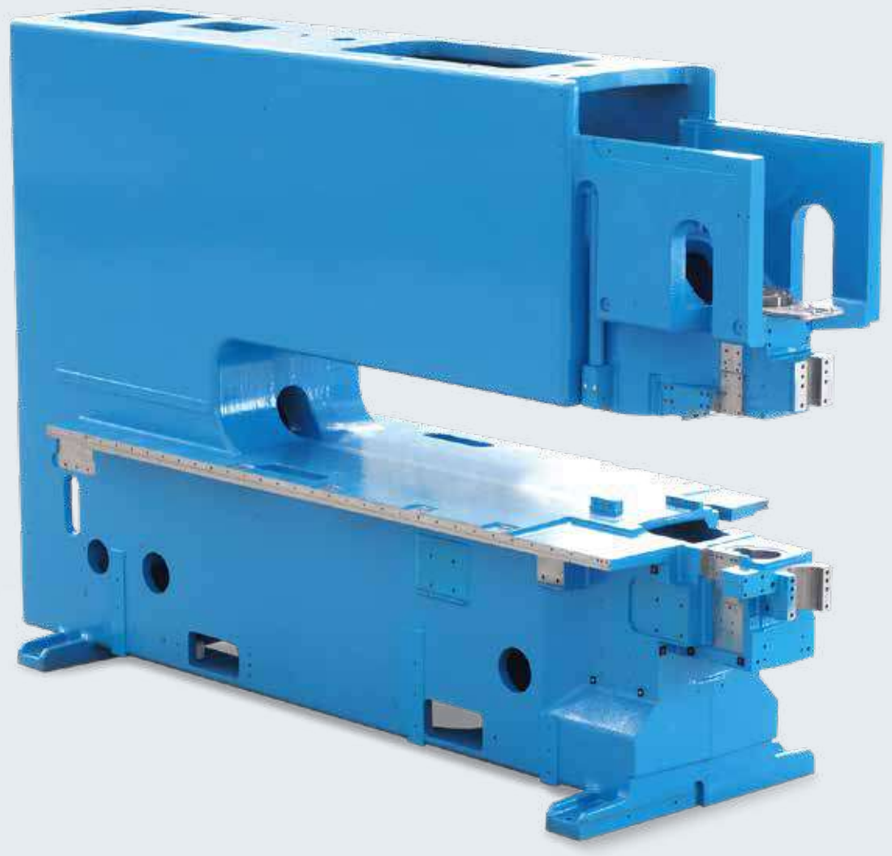
Great structure, strong personality.





The structure consists of a **one-piece standardised Meehanite® spheroidal cast iron casting** with a strength of 700N/mm2, designed using the FEM method (Finite Element Method), the **punching cylinder is inserted directly into the casting**.

IN PRACTICAL TERMS, THIS MEANS IT HAS **A MORE ROBUST STRUCTURE WITH NO WELDING JOINTS**, THEREFORE IT IS STABLE, PRECISE AND RELIABLE. IT ENABLES YOU TO OPTIMISE YOUR SPACE BY PROVIDING VARIOUS OPTIONS TO LOAD SHEETS OF DIFFERENT FORMATS.

- Its structure, open on 3 sides, allows a wide variety of formats to be processed alongside special machining operations that require the sheet metal to be either rotated or tilted
- It has a robust, precise direct-drive Multi Index System capable of punching thicknesses ranging between 0.5 mm and 10 mm
- There is perfect alignment between punch and die also ensured by the temperature difference control system between the lower and upper turrets. This system allows a more precise punching of materials that are less than 1 mm thick
- It has precision ball screws with backlash correction and linear guides, with self-lubrication requiring very low maintenance (up to 25,000 km of work) and reducing noise levels
- It also has tables with ball-compatible brushes
- Its new 3000 X-axis is characterized by its increased rigidity and a 25% higher positioning speed
- It is possible to work with sheets weighing up to 200 kg by working at reduced axis speeds and with combined tables (brushes and balls).
- Automatic positioning of the hydraulic clamps. Floating clamps for the safe clamping of different thicknesses and/or uneven materials, max. aperture 11 mm
- Scrap box with wheels

FLEX 2.0 Hybrid System

MAXIMUM PROCESSING FLEXIBILITY

Electric vs. Hydraulic: which system is the best? Why not have the best of both worlds? Our innovative hybrid system called **FLEX** is patented and **combines the power of hydraulics with the precision and speed of electronic control**. On top of this, it has an extremely low power consumption: only 8.5 kw is required with an average consumption of 4.5 kw during the punching process.

NOT ONLY CAN YOU ADJUST THE STROKE OF EACH PUNCH, WITH THE FLEX SYSTEM, YOU CAN CONTROL IT TOO:

- Punching speed between 10 and 2000 strokes/min
- Punch head acceleration/deceleration
- Dwell time of the punch head under pressure

THANKS TO THE FLEX SYSTEM, EVERY EUROMAC USER HAS FULL **CONTROL OVER FORMING OPERATIONS** WITH ABSOLUTE AND **CONSTANT PRECISION**, AS WELL AS THE ABILITY TO CARRY OUT ALL KINDS OF APPLICATIONS IN AN EFFICIENT, RELIABLE AND ECONOMIC WAY.

The interpolation of the axes synchronised with the ram stroke gives excellent results in ribbing and offset machining, without leaving any marks or deformation.

INNOVATIVE MULTI-INDEX SYSTEM

The Euromac direct-drive rotation system of the **Multi Index** stations has a reduced number of mechanical components to ensure robustness, greater reliability and requires less maintenance. This makes it possible to improve productivity and, at the same time, it reduces costs (patented system).

MULTI INDEX: THE INDEX STATIONS ARE CAPABLE OF ROTATING BOTH SINGLE TOOLS AS WELL AS OUR FMTE 4, FMTE 6 AND FMTE 10 MULTITOOLS.

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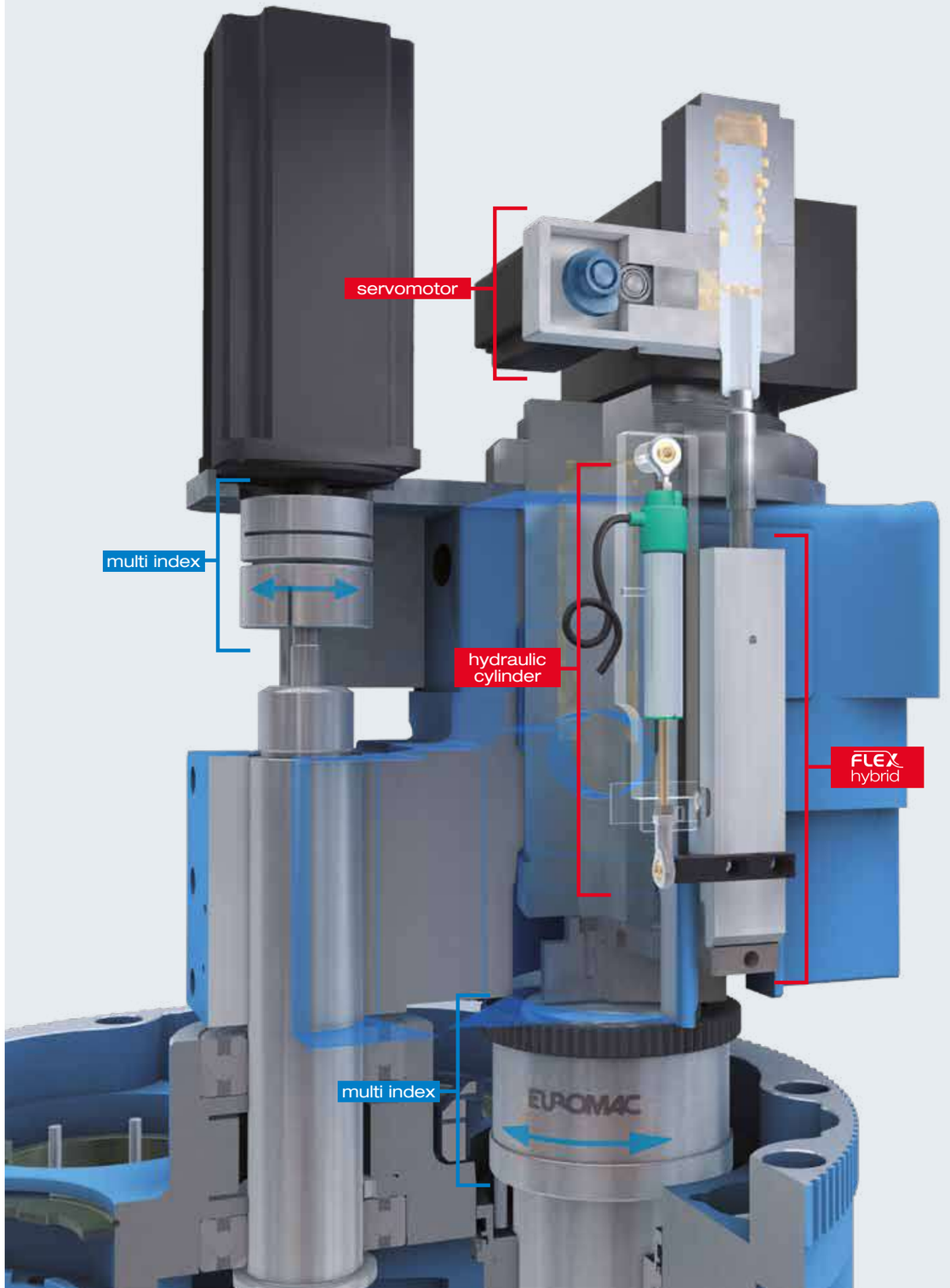
FLEX hybrid 2.0



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XT electric

THE XT **ELECTRICAL SYSTEM** HAS BEEN DESIGNED TO ACHIEVE BOTH **MAXIMUM EFFICIENCY** AND THE LOWEST POSSIBLE CONSUMPTION:

- Low maintenance
- Reliability in a wide range of environments
- Excellent efficiency
- Silent operation
- No lubricants or other contaminants
- A low consumption of only 8.5 kw and on average only 3.5 kw during the punching process

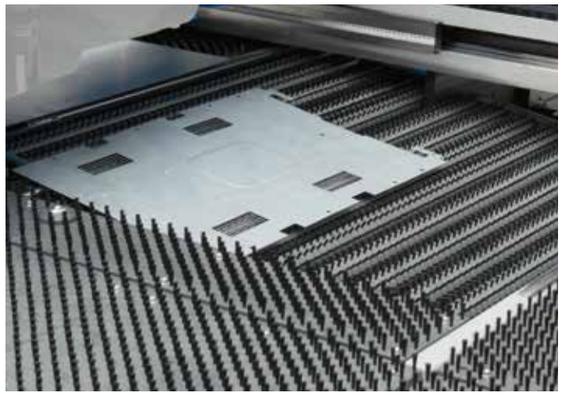
AS WELL AS BEING ABLE TO SET THE TOOL STROKE LENGTH, THE ELECTRIC SYSTEM ALLOWS TO SET:

- Punching speed between 10 and 2000 strokes/min
- RAM acceleration / deceleration
- Dwell time under pressure

OUR ELECTRICAL SYSTEM ALLOWS **UNLIMITED FORMING CAPACITIES** AS WELL AS THE TOOLS TO PROCESS ANY APPLICATION QUICKLY, RELIABLY AND ECONOMICALLY:

- The stand-by mode during idle time further reduces power consumption
- The electrical system allows the speed and acceleration to be adjusted and the RAM to be held at stroke height, thus enabling special functions such as continuous forming, engraving, bending, marking, and threading. It also allows the use of wheel technology to make ribbing and offsets with both inbound and outbound ramp movements
- Speed and acceleration control also improves punch quality when working with thin, thick or hard material due to the 0.05 mm position accuracy

Optional



Chute door

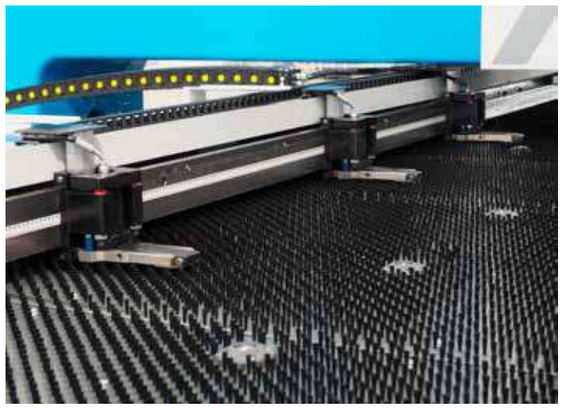
A SIDE CHUTE DOOR WITH A WORK PIECE DETECTION SENSOR **AVOIDS THE NEED FOR MICRO-JOINTS AND REDUCES LABOUR COSTS** AS WELL AS ANY SECONDARY OPERATIONS TO BE CARRIED OUT WITH THE AUTOMATIC UNLOADING HATCH.

By means of this innovative unloading system, finished work pieces measuring up to 1500x1000 mm can be **unloaded without the need for the operator to intervene**.

Vacuum system

OUR VACUUM SYSTEM **PREVENTS SMALL SLUGS BEING DEPOSITED ON THE SHEET METAL**, WHICH CAN MARK THE SURFACE AND SOMETIMES EVEN DAMAGE THE PUNCH DIE ITSELF.

It is strongly recommended when processing thin materials, with protective film or aluminium in general. (Optional on all models).



Independent clamps

EACH CLAMP HAS A PRESSURE OF 50 BAR; HOWEVER, THE THIRD CLAMP CAN HELP GIVE STABILITY TO THE SHEET WHEN PROCESSING LARGE FORMATS.

The positioning of our three clamps is both automatic and independent. Through the use of software, the work area of the clamps is expanded, increasing their flexibility.

Scrap conveyor

This makes it possible for scrap to be automatically and directly unloaded into a discharge container. Perfect for high output machining processes.

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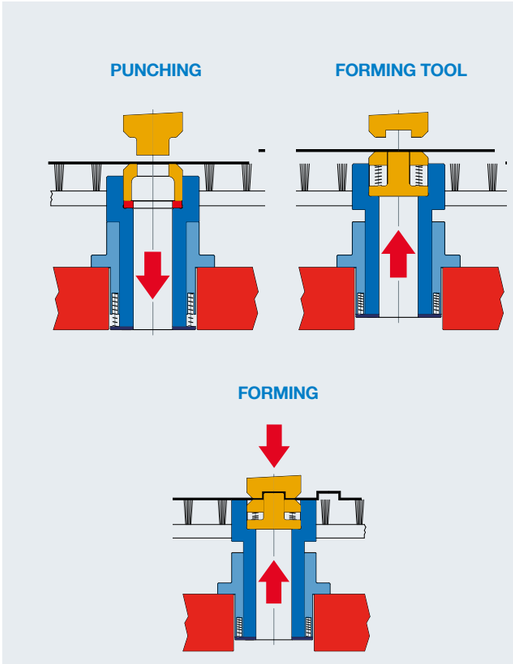


Active matrix system

The 6 B-stations of the XT series model have a **die lift system for maximum forming flexibility**. Standard high-turret type forming tools typically have a die that is a few mm taller than a punching die.

Particular care must be taken in their use, programming and location inside the turret.

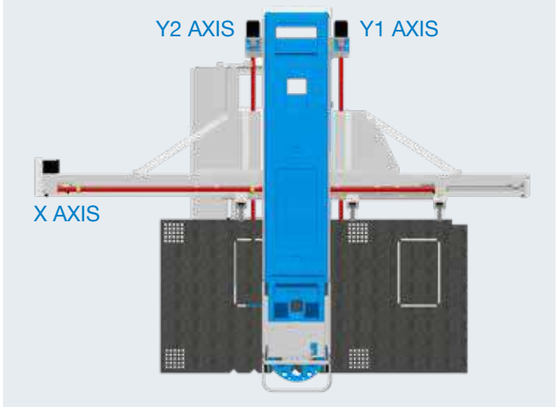
IN THE XT 12 MODEL, **ALL THE 6 B-STATIONS CAN LOWER THE FORMING DIES BY 6 MM** WHEN NOT IN USE AND CAN BRING THEM BACK TO A NORMAL LEVEL ONLY WHEN NECESSARY, **THUS REMOVING ANY RESTRICTIONS**.

XT series models

XT (standard) 1 motor in the Y-axis

XT S 2 motors in the Y-axes

With the two motors in the Y-axes, greater speed, precision and stability is achieved during the production stages, especially when machining heavy, large formats of sheet metal.



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OPTIONAL

Automatic loading and unloading system

Thanks to its unique, compact and robust design, the Euromac automatic loading/unloading system, compatible with all models of punching machines, can be shipped fully assembled: installation on the customer's premises is simple and in a few hours the system will be ready for production.

LOADING AND UNLOADING CAPACITY

The ease of loading the material to be processed and unloading the work pieces produced can result in significantly increasing your productivity.

TECHNICAL DATA

Max. sheet size (mm)	3000 x 1500
Min. sheet size (mm)	500 x 200
Thickness (mm)	0.5-6
Sheet metal weight (kg)	up to 200

DOUBLE LOADING PREVENTION

Magnetic block	Yes
Shake system	Yes
Air blow feature	Yes
Automatic thickness measuring system of the sheet metal picked up	Yes
Separation brushes for non-magnetic materials	Yes

MANAGEMENT AND CONTROL

Thanks to a single console, the programming and operation of the Xt punching machine with automatic loading and unloading is quick and easy.

MATERIAL MANAGEMENT

As with all Euromac products, the key word is flexibility: one machine can process a wide variety of formats.
From minimum to maximum size and all sizes in between.

- Maximum loading and unloading flexibility for different formats
- Movable unloading table
- Loading table with 26 adjustable suction cups on aluminium profiles with load control
- 3 magnetic separators
- Sheet metal shake system
- Sheet metal thickness control system
- Air blowing between the layers of sheet metal
- Sheet metal presence check on suction cups
- Sheet metal presence check on clamps
- 4 cylinders on the table for sheet metal detection
- Load handling, lifting, lowering and translation driven by brushless motors
- Integrated programming and control on Toppunch®
- Single console for machine programming and loading/unloading unit control
- Quick and easy installation



EUROMAC | **Xt** new generation punching machines

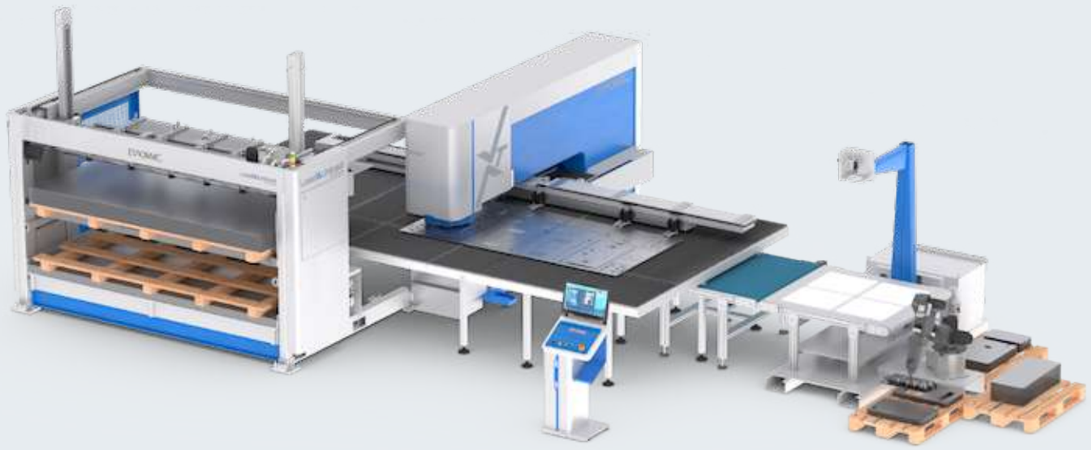
Sorting Cell

Euromac is specialised in the manufacturing of products and technological solutions aimed at optimizing production processes in the sheet metal working sector.
The **Sorting Cell is a loading and unloading system for fully automated sorting processes** that can be integrated with all Euromac punching machines.

Sorting Cell Standard

The tool that completes the automation process of sheet metal working machines. Thanks to the Sorting Cell, the Euromac Punching Machine becomes a **complete, automated workstation that streamlines processing and storage times.**

- Speeds up productivity
- No need for micro-joints and secondary operations
- Finished and palletised work pieces, ready for further processing
- It has a display system for workpiece recognition
- It is capable of unloading 3 Euro pallets at a time
- Possibility to rotate the work piece to save space
- Possibility to download small and medium-sized work pieces
- The stand-by mode during idle time further reduces power consumption
- Sheet metal load of up to 3000×1500 mm



Sorting Cell Max

Thanks to the **large capacity robot, the loading of the work pieces is carried out directly on the table**. No micro-joints are needed, the finished part is automatically stacked onto the pallet.

Automated loading and unloading with a palletising system for up to 11 Euro pallets, extendable to modules with rail extensions. Rotation of work pieces for better space optimisation.

Great flexibility and multiple configurations.
Can be connected to a Euromac FX Bend Cell automated press brake.

- Speeds up productivity
- No need for micro-joints and secondary operations
- Finished and palletised work pieces, ready for further processing
- 13 unloading Europallets
- Possibility to rotate the work piece to save space
- Possibility to download large-sized work pieces
- The stand-by mode during idle time further reduces power consumption
- Sheet metal load of up to 3000×1500 mm
- Telescopic gripper



EUROMAC | **Xt** new generation punching machines

An entirely configurable automated punching, forming, marking, ribbing and bending line.

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OPTIONAL

Automatic line

An entirely configurable automated punching, forming, marking, ribbing and bending line.

Euromac provides the market with a fully automated line, capable of optimizing production times, where the punching, sorting and bending operations are carried out with the aid of a loading - unloading system with the option of being combined with both an automatic storage facility and with two robots in action. This solution makes it possible to start with the loaded pallet of sheet metal and to end with the pallet of punched and bent work pieces, without the need for the operator to perform any manual intervention.

There is human intervention, but only in the initial phase, where the designer works on the drawing (either 2D or 3D) in order to program the punching and bending phases, assigning production sequences and the tools to be used.

TECHNICAL SPECIFICATIONS

Automated Sorting Cell loading up to a 3000×1500 mm sheet metal format

Euromac XT punching machine available in three versions (hybrid, electric or hydraulic) with 6 or 12 stations and storage for up to 66 punches

A 3000 x 1500 mm work area without the need for any repositioning

PUNCHING SPEED

A speed of up to 1100 strokes/min. per nibbling process, 1 mm pitch

FINISHED AND STACKED WORK PIECES WITHOUT ANY MICRO-JOINTS

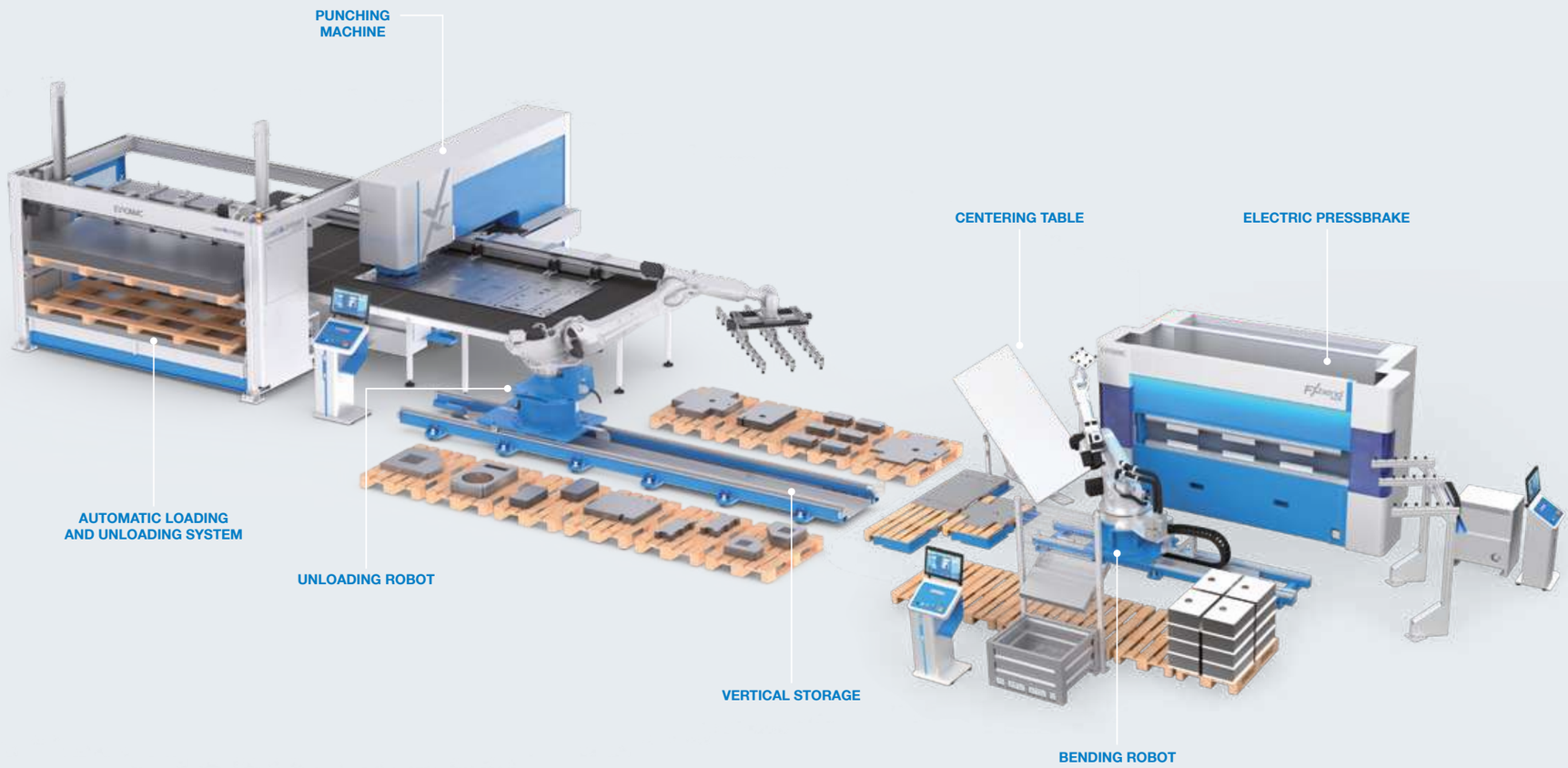
Automated robot unloading of up to 11 Europallets of work pieces per manual bending process or directly on the centring device or 2 loading zones per bending process.

Euromac FX Bend 2550 press brake

SOFTWARE

The Euromac software platform is able to interact with other systems connected to the company network, such as the ERP, thus ensuring total control of the entire production process.

- A 3000 x1500 work area without the need for any repositioning
- Euromac XT punch press
- Bending length 2550 mm
- Maximum bending power 500 kN
- It is possible to machine directly or by making stock or kits according to the type of finish the work piece requires
- Automated robot unloading of up to 11 Europallets of work pieces per bending process manually or directly on the centring device or 2 loading zones per fold
- Euromac FX Bend 2550 press brake
- Simple and intuitive software programming



Sheet metal working manager

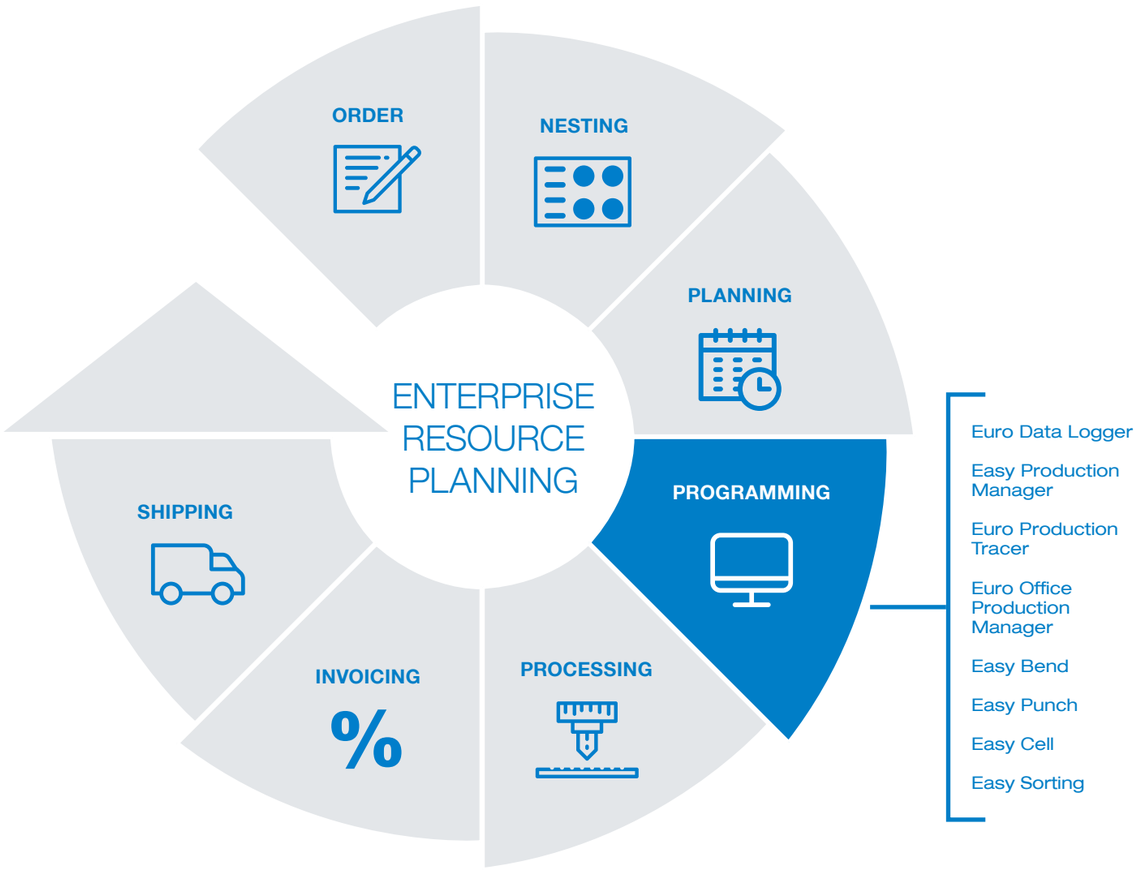
INDUSTRY **4.0**

SOFTWARE FOR OPTIMISED PRODUCTION MANAGEMENT

Euromac has a complete solution for companies working within the sheet metal working sector, which allows optimised work management.

Data sharing allows the total traceability of the production process: from quotation to order, from nesting to work planning, from inventory to assembly, right up to shipping and invoicing, all in one information flow.

Planning work easily, quickly and efficiently increases your company's profitability.



EUROMAC | **Xt** new generation punching machines

SOFTWARE

TopPunchTouch®

EUROMAC HAS PAID PAINSTAKING ATTENTION TO THE DEVELOPMENT OF THE CONSOLE SOFTWARE TO ENABLE SIMPLE, INTUITIVE YET PRODUCTIVE PROGRAMMING. **TOPPUNCH® IS THE SPECIAL CONTROL PROGRAM USED ON THE MACHINE**.

SOME OF THE TOPPUNCH® FEATURES INCLUDE:

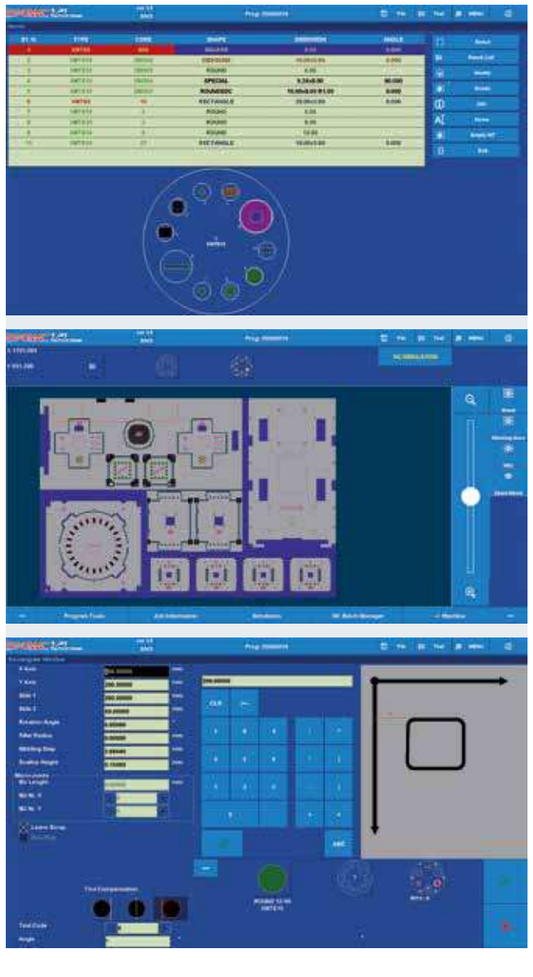
- A simple and intuitive user **interface** that enables you to **produce work pieces within a short space of time**
- **Total control of the punch storage facility** providing the opportunity of programming for each tool: stroke, speed, acceleration and dwell time under pressure. In addition, the software manages the automatic compensation of sheet thickness. Alerts regarding the wear and tear/sharpening status can also be activated
- **Graphical turret management** and the automatic control of compatibility between the current tool configuration and the tools required by the program currently running
- **Multitasking**: programming, checking, simulation of the next work piece, all operations are possible even while the machine is working
- **Configuration according to material**: different lubrication, axis acceleration and ideal die clearance can be customised according to the material used
- **Batch production**: not only is it possible, it is also easy to schedule work for the whole day, week or even beyond

CONSOLE:
The Euromac console is fitted with an UPS unit (Uninterruptible Power Supply) to prevent data loss in the event of a power failure. TopPunch® also makes it possible **to recover an interrupted programme and resume machining from any desired point**.

FLEXIBILITY:
Moreover, TopPunch® can also be installed on any office computer, allowing not only simultaneous programming, but also the ability to operate the machine in the event of a console failure.

DIAGNOSTICS AND TELESERVICE:
Using an Internet connection and special Euromac software, an authorised technician can **remotely log on** and safely update, check, diagnose a problem or control the console

GRAPHIC DIAGNOSTIC SYSTEM:
This enables the operator to **check the status of sensors, signals or the machine** in order to quickly identify the cause of any malfunction



EUROMAC | **Xt** new generation punching machines

SOFTWARE

Easypunch®

EASYPUNCH IS **NESTING CAD/CAM SOFTWARE** SPECIFICALLY DESIGNED TO **AUTOMATE THE PROGRAMMING OF CNC PUNCHING MACHINES**.

This provides an advanced, intuitive and easy-to-use interface that **improves efficiency during the programming process**.

It handles auto-indexed tools, multi-tool stations and all types of tools, from standard tools to forming, offset, drilling, threading, stamping, and more.

Easypunch offers the possibility to **choose between automatic and semi-automatic nesting** in addition to manual nesting, providing high flexibility and optimal performance. The combination of automatic and manual nesting functions (torque, displacement and grid rotation) makes this an extremely powerful tool.

Easypunch PLUS is an automatic nesting tool that optimises the arrangement of components on the sheet metal, offering several options for common punching on regular and irregular work pieces (optional).

TEAMWORK:
This system is capable of operating independently or as part of a network. Thanks to the floating licence option, several users can access the system.

PARAMETRIC COMPONENT LIBRARY:
The Easypunch solution has an extensive parametric component library to which the user can add their own designs.

OPEN DATABASE:
This is an open database that enables the user to access it to find components, production orders, sheets, etc. using criteria such as: material, thickness, customer, date, etc.

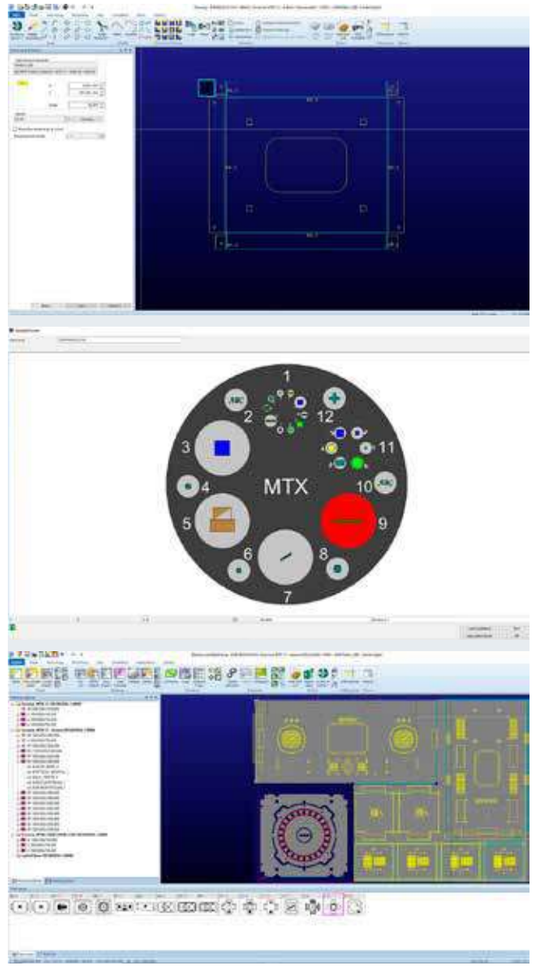


2D DESIGN:
Thanks to the advanced geometry options, the user can draw any 2D graphics quickly and easily. The CAD system includes functions for copying, mirroring, scale, geometry verification and correction of drawing discrepancies.

INTELLIGENT IMPORT/EXPORT:
Easypunch can be connected to the main CAD systems on the market (DXF, DWG, IGES, DSTV, etc.).

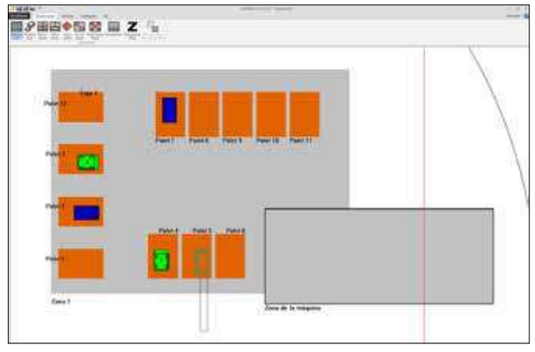
INTEGRATION:
Easypunch works with the most popular 3D design systems (SolidWorks®, Autodesk Inventor®, Solid Edge®, Catia®, and many others)

CALCULATION OF REAL TIME AND COSTS:
Easypunch calculates times and costs per work piece and per metal sheet. With this information, the user can prepare quotes, check the volume of work for each machine and print all necessary reports.



Easysorting®

This easy-to-use and straightforward software, which allows you to manage and optimise the storage of different unloading pallets from the comfort of your office.



Range of machines

All Euromac machines comply with the latest EC regulations



12 electric — 6 electric



technical data

	xt electric 1500/24-2500	xt electric S* 1500/24-2500	xt electric S* 1500/24-3000
Max. punching force (kN)	240	240	240
Y-axis with Multi-tool/Monop. (mm)			
Y = 1500	1550 / 1500	1550 / 1500	1550 / 1500
Y-axis motors	1	2	2
X-axis (mm)	2500	2500	3000
Automatic repositioning in X (mm)	up to 10000	up to 10000	up to 10000
Punch stroke control (mm)	from 0.1 to 31	from 0.1 to 31	from 0.1 to 31
Servomotor-driven hydraulic system	standard	standard	standard
Positioning accuracy (mm)	+/- 0.05	+/- 0.05	+/- 0.05
Repeatability in forming (mm)	+/- 0.1	+/- 0.1	+/- 0.1
Bi-directional Auto-index Stations	3	3	3
Clamp aperture (mm)	11	11	11
Std. automatic clamps.	2	2	3
Max. number of strokes (1/min):			
Nibbling pitch 1 mm	780	780	780
Marking	2000	2000	2000
Thicknesses (mm)	0.6 - 6.5	0.6 - 6.5	0.6 - 6.5
Max. sheet metal weight at reduced axle speed (kg)	180*	180*	180*
USB ports	6	6	6
Power required (kW)	13	13	13
Average power consumption (kW/h)	3.5	3.5	3.5
Approximate weight (kg)	9100	9100	9300
Dimensions (mm)	5400 x 4600	5400 x 4600	6200 x 4600

* S models have 2 motors in the Y axes

FLEX 12 hybrid — FLEX 6 hybrid



technical data

	xt Hybrid 1500/30-2500	xt hybrid S* 1500/30-2500	xt hybrid S* 1500/30-3000
Max. punching force (kN)	300	300	300
Y-axis with Multi-tool/Monop. (mm)			
Y = 1500	1550 / 1500	1550 / 1500	1550 / 1500
Y-axis motors	1	2	2
X-axis (mm)	2500	2500	3000
Automatic repositioning in X (mm)	up to 10000	up to 10000	up to 10000
Punch stroke control (mm)	from 0.1 to 31	from 0.1 to 31	from 0.1 to 31
Servomotor-driven hydraulic system	standard	standard	standard
Positioning accuracy (mm)	+/- 0.05	+/- 0.05	+/- 0.05
Repeatability in forming (mm)	+/- 0.1	+/- 0.1	+/- 0.1
Bi-directional Auto-index Stations	3	3	3
Clamp aperture (mm)	11	11	11
Std. automatic clamps.	2	2	3
Max. number of strokes (1/min):			
Nibbling pitch 1 mm	1080	1100	1100
Marking	2000	2000	2000
Thicknesses (mm)	0.6 - 6.5	0.6 - 6.5	0.6 - 6.5
Max. sheet metal weight at reduced axle speed (kg)	180*	180*	180*
USB ports	6	6	6
Power required (kW)	8,5	8,5	8,5
Average power consumption (kW/h)	5	5	5
Approximate weight (kg)	9100	9100	9300
Dimensions (mm)	5400 x 4600	5400 x 4600	6200 x 4600

* S models have 2 motors in the Y axes

6 hydraulic



technical data

	xt hydraulic 1500/30-2500	xt hydraulic S* 1500/30-3000
Max. punching force (kN)	300	300
Y-axis with Multi-tool/Monop. (mm)		
Y = 1500	-1550 / 1500	1550 / 1500
Y-axis motors	1	2
X-axis (mm)	2500	3000
Automatic repositioning in X (mm)	up to 10000	up to 10000
Punch stroke control (mm)	from 0.1 to 31	from 0.1 to 31
Servomotor-driven hydraulic system	standard	standard
Positioning accuracy (mm)	+/- 0.05	+/- 0.05
Repeatability in forming (mm)	+/- 0.1	+/- 0.1
Bi-directional Auto-index Stations	3	3
Clamp aperture (mm)	11	11
Std. automatic clamps.	2	3
Max. number of strokes (1/min):		
Nibbling pitch 1 mm	600	600
Marking	-	-
Thicknesses (mm)	0.6 - 6.5	0.6 - 6.5
Max. sheet metal weight at reduced axle speed (kg)	180*	180*
USB ports	6	6
Power required (kW)	8,5	8,5
Average power consumption (kW/h)	5	5
Approximate weight (kg)	9100	9300
Dimensions (mm)	5400 x 4600	6200 x 4600

* S models have 2 motors in the Y axes

EUROMAC | **Xt** new generation punching machines

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XT is a complete sheet metal processing centre.

Don’t call it a punching machine.
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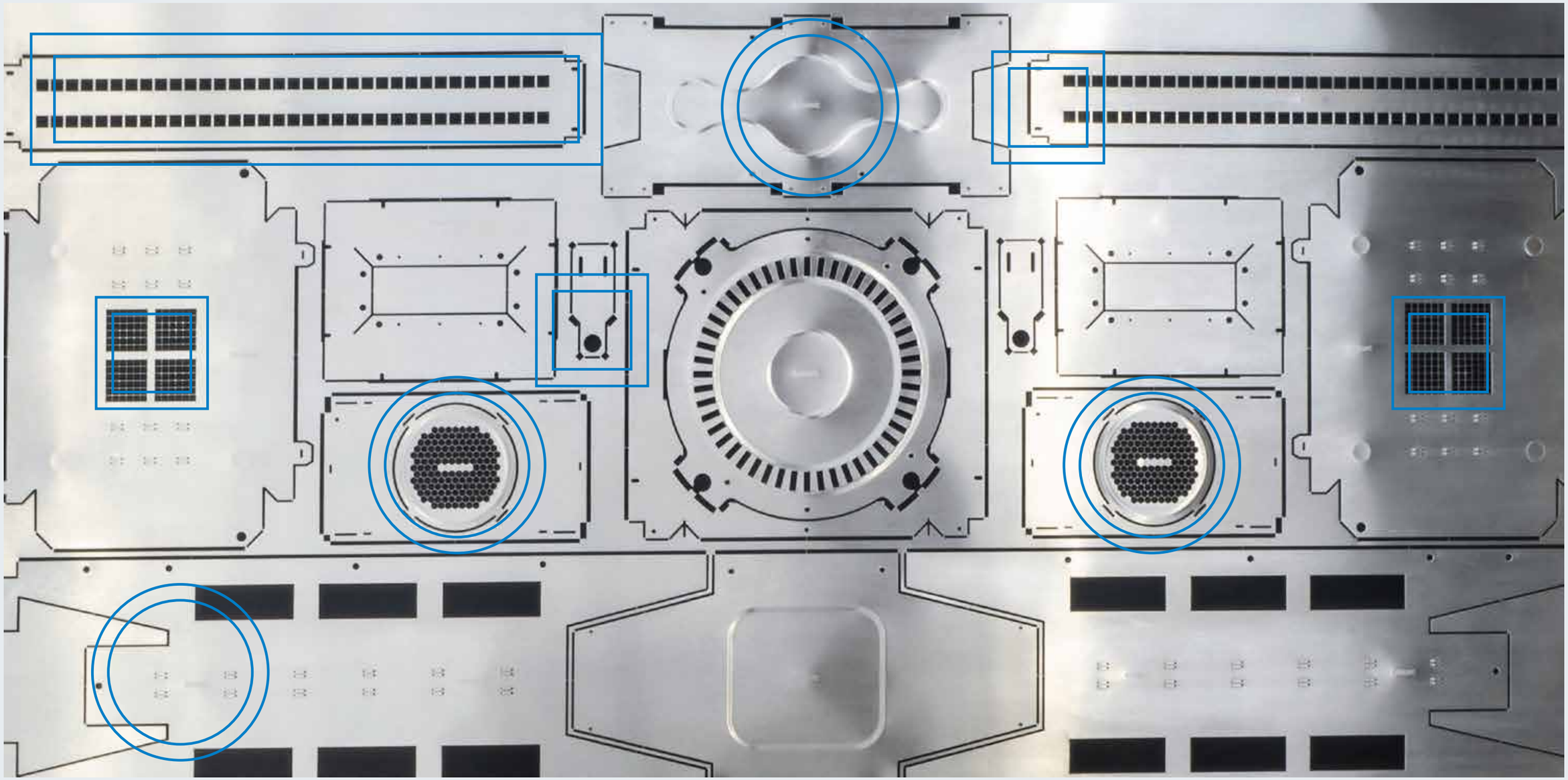

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