electric press brake

EUROMAC®

general catalogue

Innovation, reliability and productivity.

1023

FXbend 1023

The FX bend 1023 stands out for innovation and high accuracy. The design and attention to detail are combined with high quality standards, with the aim to provide you with a machine that is streamlined, productive and exciting.

Bending length
1020 mm.
Maximum bending force
230 kN.

Innovation, reliability and productivity combined with a stronger power and enlarged bending length.

1547

FXbend 1547

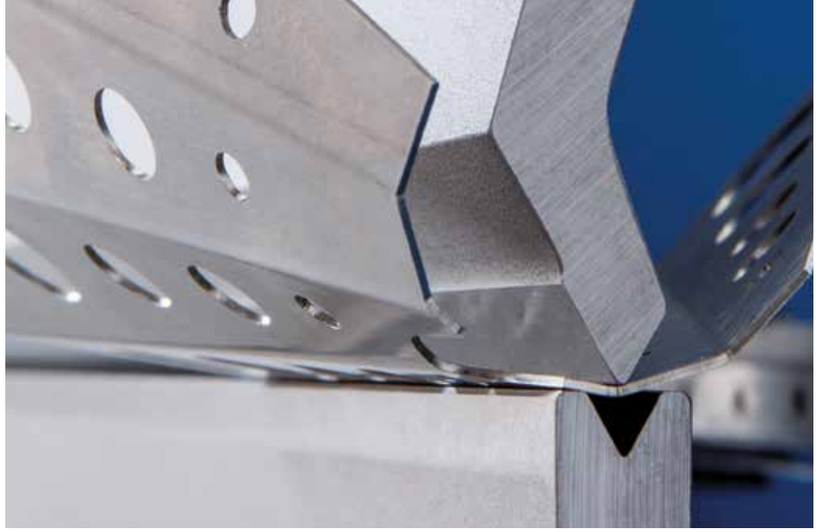
A machine designed to overcome your goals. Thus it was born the FX Bend 1547. A solution for your performance needs that combines the features of the FX Bend range with greater power and an increased bending length.

Bending length
1530 mm.
Maximum bending force
470 kN.

Technology

INNOVATION

Maximum precision
and maximum tonnage during the whole bending length.



Technology

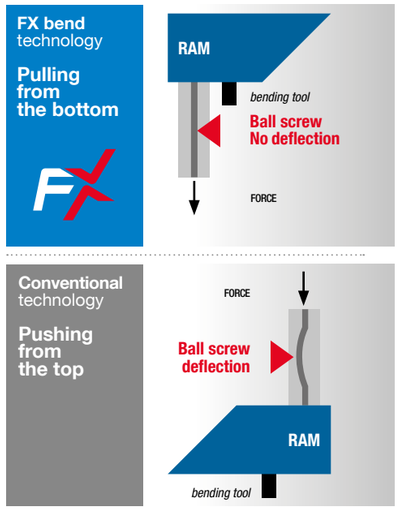
BACKGAUGE

Maximum productivity.
The reduced weight of the indexes, allows to reach a speed of up to 1.100 mm/s.

Direct drive motor and bottom pull.

Maximum efficiency and reliability (no unnecessary links and moving parts), maximum accelerations (low inertia), strength and precision (no deflections on the ball screw while applying force).

Speed of 200 mm/s and deceleration until the mute point.
Thanks to the direct drive, short screw and pull system, the FX bend quickly reaches the top speed and decelerate when the punch reaches the material to a safe bending speed.



4 Axes
X, R, Z1 & Z2.

Fully automatic and programmable X, R, Z1 and Z2 axes.

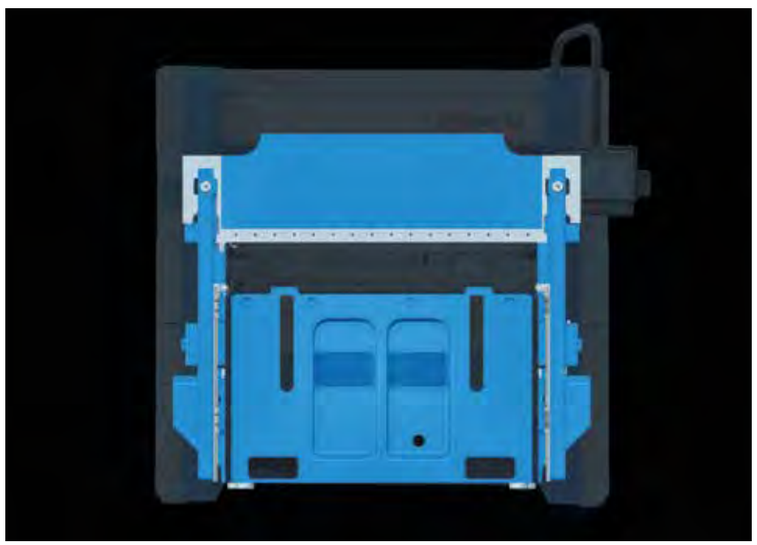
6 Axes
X1, X2, R1, R2, Z1& Z2.

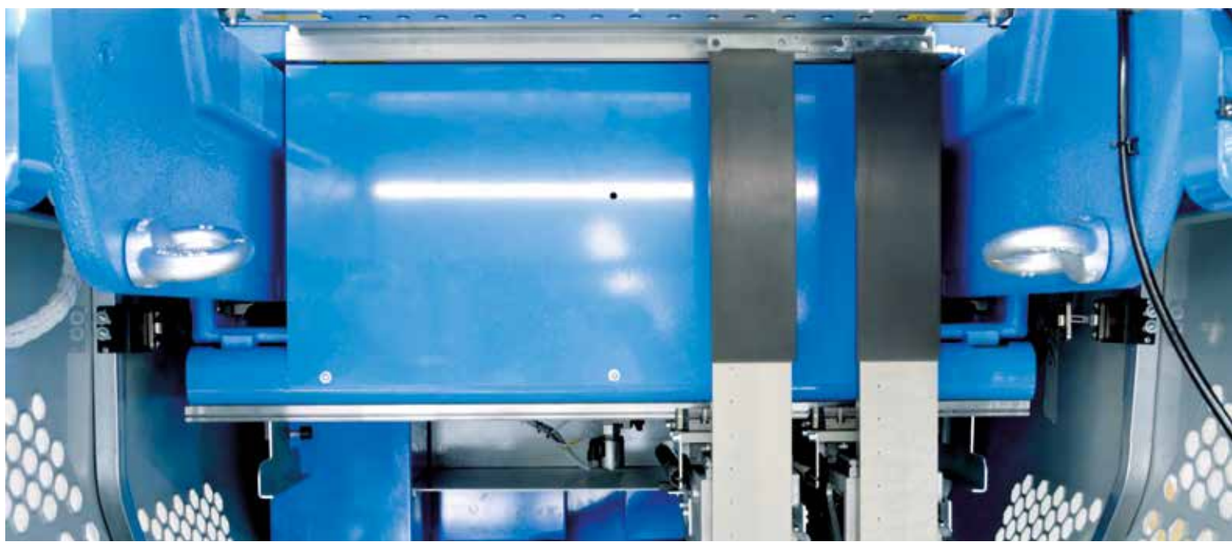
Fully automatic and independent movements. The reduced weight of the indexes, allows to reach a speed up to 1.100 mm/s which, together with high acceleration (200 mm/s^2), ensure a maximum productivity.

Maximum reliability.
Monoblock frame.

The frame is made out of interconnected Meehanite (700 N/mm^2 resistance) monoblock frames. This delivers maximum rigidity, reliability and accuracy for your parts.
Thanks to the ergonomic frame design the user works in a comfortable position, the machine allows bends up to the maximum length and tools are easily removed from the side.

Patent Pending.





Configuration

TOOL TYPE

Easy to use.
Compatible with the best quality tools.

Wila clamping tooling system.

- Top tool holder with automatic hydraulic clamping system.
- Bottom tool holder with automatic hydraulic clamping system and multi section manual crowning.

Promecam fast punch clamping system.

Quick and easy top tool holder fast clamping system which allows the frontal tool ejection and the automatic punch alignment in order to reduce the machine set up!

Promecam fast clamping system with manual crowning system table.

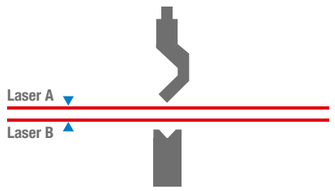
Quick and easy top and bottom tool holders fast clamping system which allows the frontal tool ejection and the automatic alignment in order to reduce the machine set up time! The table has multi section manual crowning system which is a fast and precise way to ensure a steady angle through the bending length.

Safety

GUARDING SYSTEM

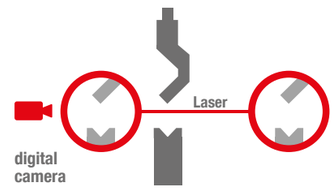
Highly effective solutions for
operator security and machine productivity.

LZS-LG-HS



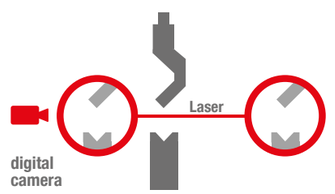
Allows the operator to work safely close to the tools even as the RAM and backgauge moves at high speed.
The maximum speed holds up to 6 mm distance from the part.
The system continuously monitors the speed performance of the pressing beam.

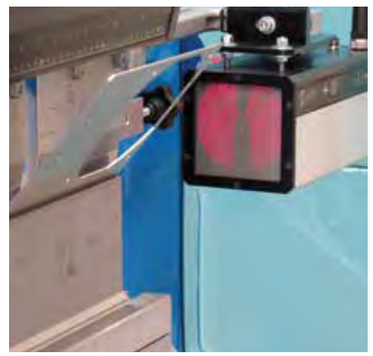
IRIS



RapidBend Ultimate minimizes the “slow” speed movements of the machine. The punch reaches the max speed up to the material contact to make the most of the machine performance. RapidBend is the innovative technology that reduces the normal machine cycle up to 2 seconds reducing significantly the operation time and costs saving.

IRIS PLUS





The “Active Angle Control” controls and adjusts in real time the angle throughout the bending process. The “Active Angle Control” ensures angular accuracy regardless of material variations and forming conditions as it eliminates the influence of bend length, bending force and off center loads. The result is maximum precision, absolute repeatability. No material setting, no sheet length setting, no bending force setting, no sampling test, no manual correction: you just set the desired angle and you get it, no matter which material, dimension bending force.

Configuration

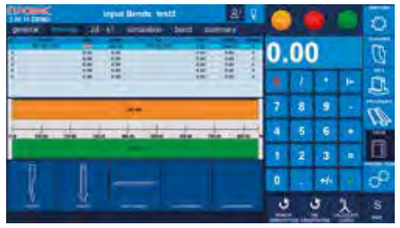
CONTROL UNIT

FX touch software
user friendly
interface.

The control unit is a PANASONIC Toughbook.
- Anti glare touch-screen LCD.
- Water and dust resistant (IP65).
- Up to 9 hours battery power backup.
- Impact resistant*.

- Windows® 7 Professional.
- USB and WiFi connection.
- DXF import files.
- 2,5 D Graphic visualization.

** impact force same as the one received from a drop of 90cm, tested in Panasonic factory.*



Design

INNOVATION

A unique design that perfectly combines **aesthetic and functionality.**

Ergonomics.

Machine specifications such as speed and productivity would be meaningless without keeping in account the human interaction. The Euromac FX bend is designed to be user friendly and have ergonomic features.
The machine allows the operator to work in a comfortable position wether he is stand or sit. The support table can be moved to the sides from the folding area. Solutions designed to maximize productivity and facilitate the operators work.

Easy transportability.

Fork lift ready and optimized weight distribution for easy transportability: quickly rearrange your shop floor allowing a maximized and lean productivity.

Quick and easy.
The first automated bending cell ready to use.

Fxbend cell

automated electric press brake

With already operative predisposed parametrized programs.

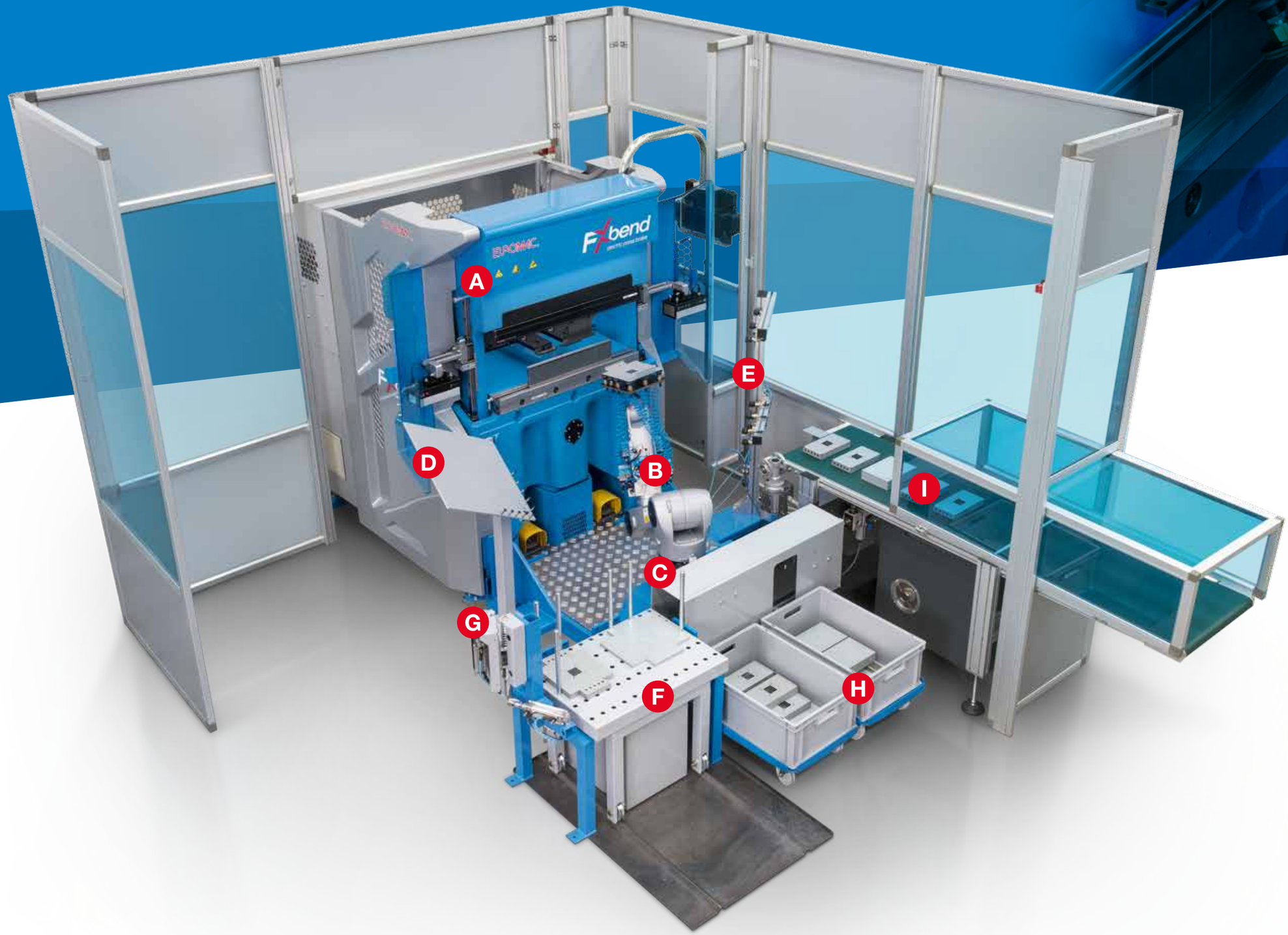
FX bend cell offers different already set up production programs for the most common parts. **The parametrized programs bypass the teaching stage, permitting to save time by using the control panel of the machine.**

Integrated structure between machine and robot.

The system originates as unique element, with integrated robot on the structure of the FX bend. A robotized production cell is already operative in just 15 sq.m. of space.

System completely realized by Euromac.

Euromac provides a complete solution, designing and developing every single element of the structure, from the machine and the robot integration, to the software that runs the production. **A complete, reliable and friendly-use system.**



STRUCTURE

All FX bend cell elements are **connected between them and to the cell structure,** guaranting a long-life duration.

FX bend cell is integrated by:

- A Fx bend with 6 axes backgauge.
- B Robot Kuka KR cybertech nano.
- C Robot base.
- D Centering table unit.
- E Turnover support.
- F Loading tables (2 units).
- G Thickness measurement control (second unit optional).
- H Unloading position for boxes area.
- I Unloading position on the belt.

Other standard equipments:
3 Grippers with 3 different sizes to better fit the size of the piece.
Standard software integrated on control panel.

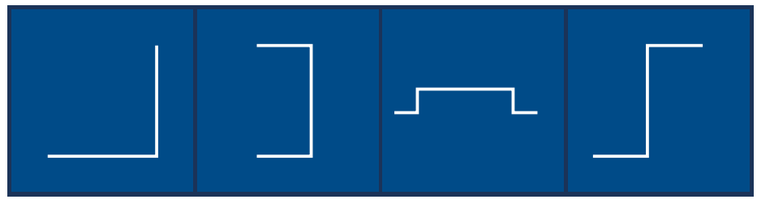
SOFTWARE

ON LINE
Standard software
with parametrized
programs.

With our parametrized programs module is possible **to produce parts by-passing the teaching stage.**

- The operator interface is the same as on FX bend, launching the parametrized programs in production with robot movement, avoiding the teaching stage.
- General view of profiles directly from the control interface.
- Possibility to create any profile, using the traditional teaching system with Kuka interface (as optional using Obelisk external software).
- Remarkable reduction of production times.

Parametric shapes can be optionally implemented according to customer's request.



Possibility to put the robot in parking mode to work in manual mode inside the cell.

SOFTWARE

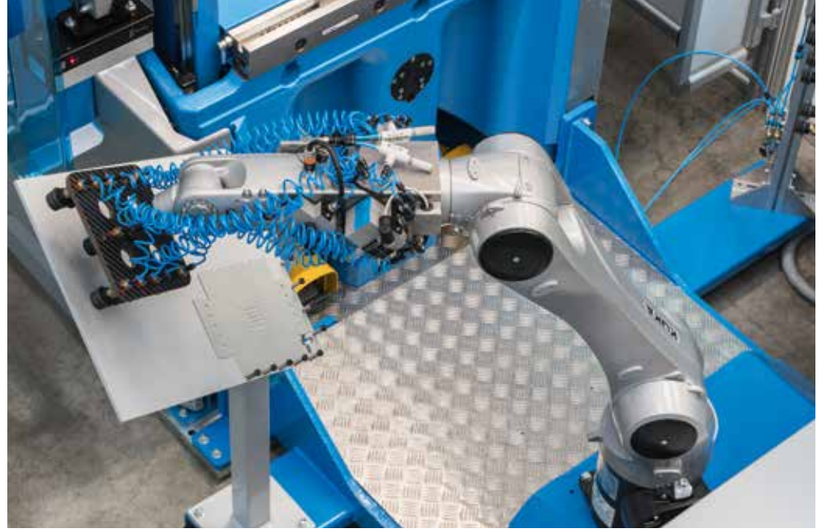
OFF LINE
Software optional
Obelisk.

Fast and simplified programming even for more complex requirements.

The offline programming software works in perfect cohesion with the FX bend cell, becoming a complementary optional item allowing to quickly anticipate the movements, the processing efficiency and eventually acting to optimize it. Thanks to a 3D graphic display and the management of the palletization data, it's possible to have a complete operation vision and reduce production times.

- Reduce production stops due to programming time to a minimum.
- Predict the efficiency of the workcell for any particular product and take action to improve it if necessary.
- Simplify robot programming task.
- Easily visualize and setup palletizing data.

LOADING & UNLOADING

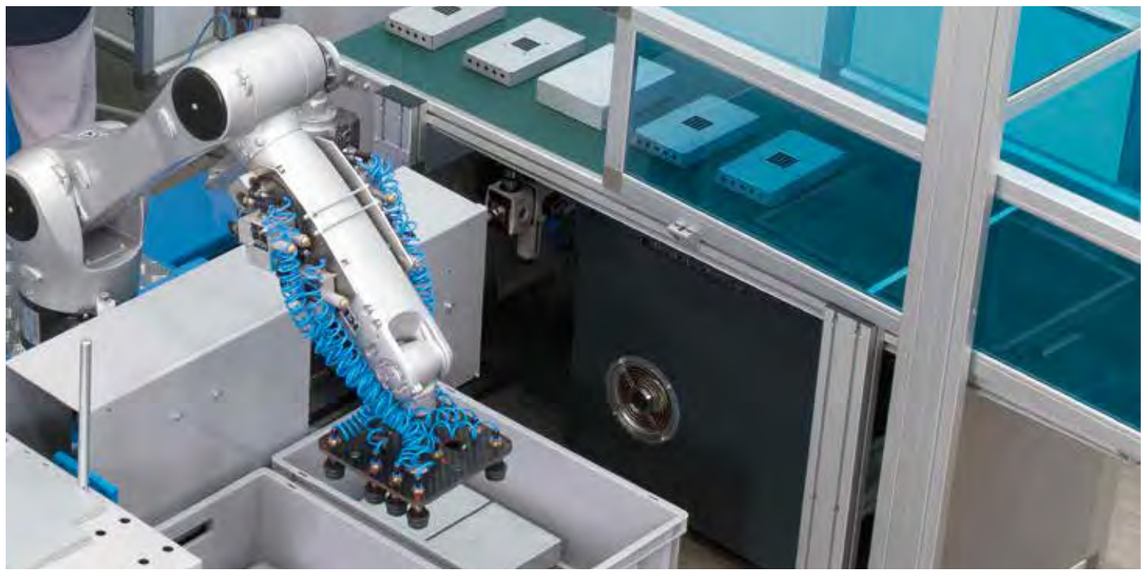


Efficiency and great solution versatility
dedicated to loading-unloading of the processed parts.

When designing a complete system, Euromac also paid great attention to the in-and outbound parts flow, to ensure a fast and reliable production.
By anticipating multiple production needs, the FX bend cell offers a wide range of solutions for the loading-unloading operation.

Loading
Pieces up to 1000 x 600 mm are piled on the loading table. The hole pattern of the table surface is used to pin the easy square supports, so parts can be pre aligned in seconds. A second loading table can be used to stack pieces next to a punching or a laser machine, and the easily moved to the cell with a forklift. Placing the table inside the cell requires no effort thanks to the guiding rails which ensures a perfect alignment. Optional magnetic support can be added to minimize the setup time.

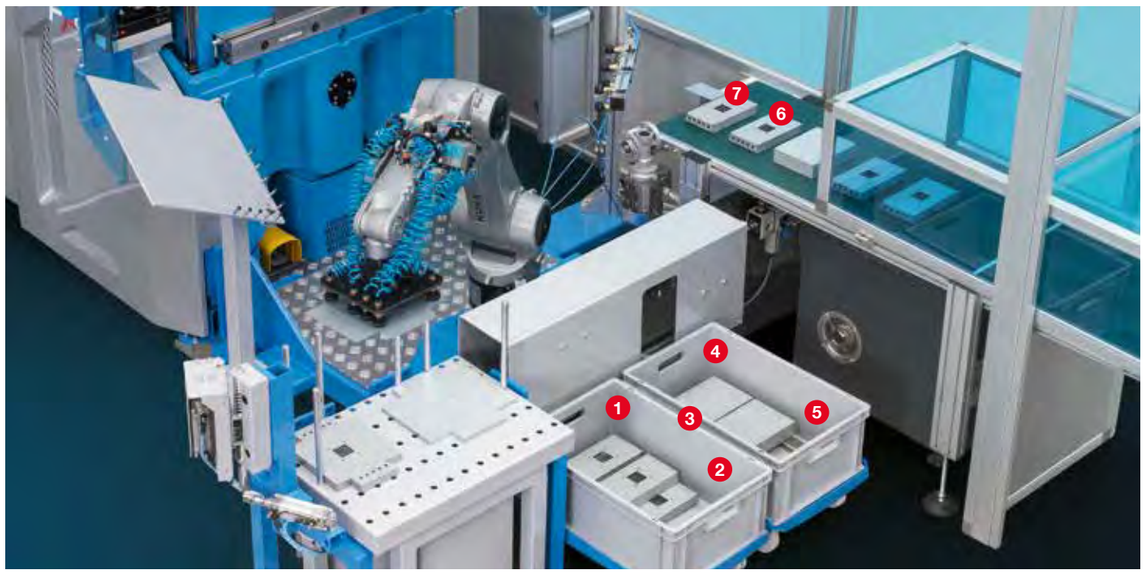
Unloading
We offer several unload positions in a large area where you can store the parts within one or two boxes, in addition to place the pieces on the conveyor belt.



COMBINATION OF UNLOADING

Big box	
Big box full filling	
Small box 1	
Small box 1 full filling	
Small box 2	
Small box 2 full filling	
Conveyor out	
Conveyor buffering	
Conveyor buffering	

pos. 3	check every n … part pos. 6
pos. 1-2-3-4-5-1-2-3…	check every n … part pos. 6
pos. 1	check every n … part pos. 6
pos. 1-2 1-2….	check every n … part pos. 6
pos. 4	check every n …. part pos. 6
pos. 4-5 4-5...	check every n …. part pos. 6
pos. 6	each part goes out through the conveyour
pos. 7 with stop	buffering on the belt conveyor with stop position
pos. 7 out	buffering on the belt conveyor and goes out



GRIPPERS

Three standard gripper.
Additional gripper to make special customer parts on request.

Gripper* with vacuum for big format parts, external dimension 430x280 with the possibility to insert up to 8 suction cups.

Max nominal part weight: 1.5 Kg (centered position).

Gripper* with vacuum for medium format parts, external dimension 230x230 with the possibility to insert up to 10 suction cups.

Max nominal part weight: 5 Kg (centered position).

Gripper* with vacuum for small parts, with the possibility to insert from 3 up to 20 suction cups divided to maximum 8 independent zones.

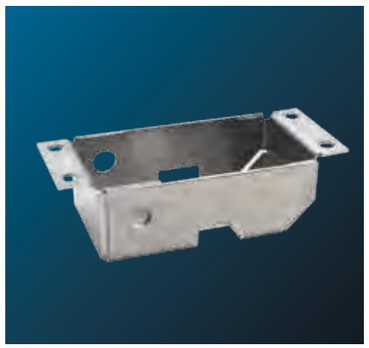
Max nominal part weight: 3 Kg (centered position).

**For a real feasibility is necessary to make a supplementary part inertia study where the part geometry is provided by the customer.*

APPLICATIONS

Accuracy and reliability for a fast and high quality production.

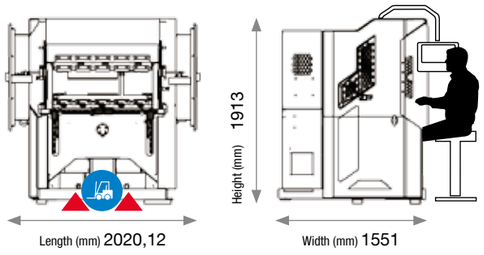
FX bend cell is an automated bending cell combining production speed with high processing quality.
The system guarantees a high standard of bending precision on any type of part, large or small.



FXbend 1023

technical data

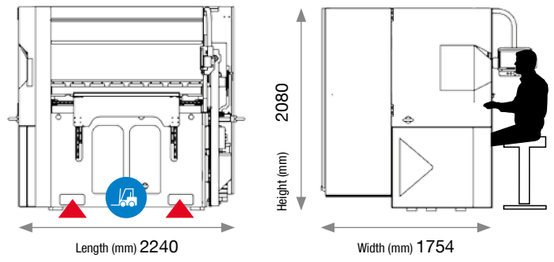
	1023
Max. bending force (kN)	230
Bending length (mm)	1020
Y axis stroke (mm)	196
Y axis speed (mm/sec)	200
Inclination (mm) (Y1-Y2)	-
Opening (mm) (table to ram)	470 (395)
X axes stroke (mm) (4 axes X-R-Z1-Z2)	375 + 400
R axes stroke (mm) (4 axes X-R-Z1-Z2)	180
Z axes stroke (mm) (4 axes X-R-Z1-Z2)	850 - 85x2
X axes speed (mm/sec) (4 axes X-R-Z1-Z2)	250
R axes speed (mm/sec) (4 axes X-R-Z1-Z2)	600
Z axes speed (mm/sec) (4 axes X-R-Z1-Z2)	1100
X axes stroke (mm) (6 axes X1-X2-R1-R2-Z1-Z2)	375 + 230
R axis stroke (mm) (6 axes X1-X2-R1-R2-Z1-Z2)	180
Z axis stroke (mm) (6 axes X1-X2-R1-R2-Z1-Z2)	744
X axis speed (mm/sec) (6 axes X1-X2-R1-R2-Z1-Z2)	1000
R axis speed (mm/sec) (6 axes X1-X2-R1-R2-Z1-Z2)	650
Z axis speed (mm/sec) (6 axes X1-X2-R1-R2-Z1-Z2)	800
Connections wireless/USB port	YES/2
Motor power (kW)	1x5,2
Connected load (kWa)	5
Approx. weight (kg)	2260



FXbend 1547

technical data

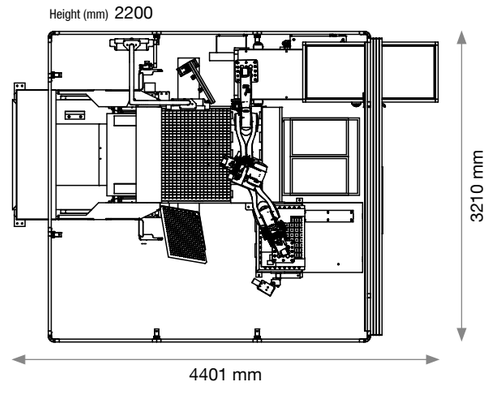
	1547
Max. bending force (kN)	470
Bending length (mm)	1530
Y axis stroke (mm)	250
Y axis speed (mm/sec)	200
Inclination (mm) (Y1-Y2)	-
Opening (mm) (table to ram)	470 (395)
X axes stroke (mm) (4 axes X-R-Z1-Z2)	375 + 400
R axes stroke (mm) (4 axes X-R-Z1-Z2)	180
Z axes stroke (mm) (4 axes X-R-Z1-Z2)	1500 - 85x2
X axes speed (mm/sec) (4 axes X-R-Z1-Z2)	250
R axes speed (mm/sec) (4 axes X-R-Z1-Z2)	600
Z axes speed (mm/sec) (4 axes X-R-Z1-Z2)	1100
X axes stroke (mm) (6 axes X1-X2-R1-R2-Z1-Z2)	375 + 230
R axis stroke (mm) (6 axes X1-X2-R1-R2-Z1-Z2)	180
Z axis stroke (mm) (6 axes X1-X2-R1-R2-Z1-Z2)	1350
X axis speed (mm/sec) (6 axes X1-X2-R1-R2-Z1-Z2)	1000
R axis speed (mm/sec) (6 axes X1-X2-R1-R2-Z1-Z2)	650
Z axis speed (mm/sec) (6 axes X1-X2-R1-R2-Z1-Z2)	800
Connections wireless/USB port	YES/2
Motor power (kW)	1x5,2
Connected load (kWa)	5
Approx. weight (kg)	4400



FXbend cell 1023

technical data

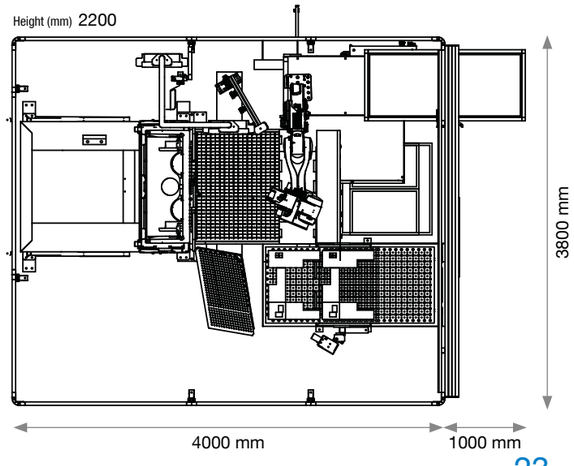
	cell 1023
Max. bending force (kN)	230
Bending length (mm)	1020
Daylight opening	
Wila clamping (die holder - to punch holder) (mm)	315
Promecam clamping (die holder - to ram) (mm)	395
Y axis stroke (mm)	196
Y axis speed (mm/sec)	200
Max. bending speed automatic mode (mm/sec)	36
Max. bending speed manual mode (mm/sec)	10
Robot	
Max. reach (mm)	1420
Max. payload with gripper (kg)	10
Number of axes	6
Pose repeability (mm)	+-0.03
FX Cell	
Loading	
Maximum parts dimension 1 stack (mm)	1000 x 600
Maximum parts dimension 2 stacks (mm)	1000 x 295
Minimum parts dimension (mm)	50 x 100
Maximum stack height (mm)	300
Maximum thicknes (mm)	5
Minimum thicknes (mm)	0,7
Maximum part weight (kg)	5
Unloading	
Belt conveyor Max. parts dimension (mm)	1000 x 600 x h 300
Belt conveyor buffer length (mm)	600 unloading + 600
Area for gravity unloading (mm)	800 x 800
Connected load (kWa)	5
Approx. weight (kg)	3000



FXbend cell 1547

technical data

	cell 1547
Max. bending force (kN)	470
Bending length (mm)	1530
Daylight	
Wila clamping (die holder - to punch holder) (mm)	360
Promecam clamping (die holder - to ram) (mm)	440
Y axes stroke (mm)	240
Y axes speed (mm/sec)	200
Max. bending speed automatic mode (mm/sec)	36
Max. bending speed manual mode (mm/sec)	10
Robot	
Max. reach (mm)	1420
Max. payload (kg)	10
Number of axes	6
Pose repeability (mm)	+-0.03
FX Cell	
Loading	
Maximum parts dimension 1 stack (mm)	1000 x 600
Maximum parts dimension 2 stacks (mm)	1000 x 295
Minimum parts dimension (mm)	50 x 100
Maximum stack height (mm)	300
Maximum thicknes (mm)	5
Minimum thicknes (mm)	0,7
Maximum part weight (kg)	5
Unloading	
Belt conveyor Max. parts dimension (mm)	1000 x 600 x h 300
Belt conveyor buffer length (mm)	600 unloading + 600
Area for gravity unloading (mm)	800 x 800
Connected load (kWa)	6
Approx. weight (kg)	5000



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sheet metal working center

automated electric press brake

electric press brake

horizontal bending machines

notching machines

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