

***MicroStep***<sup>®</sup>



## **Press Brakes**

The right solution for your bending tasks

# High precision from every angle

Built to the highest quality standards, functionality and exceptional durability – MSBend series press brakes offer the complete lineup to suit your bending demands. Combined with support and advanced production management tools by MicroStep, they represent an optimal choice for your fabrication needs.

- Optimal size & versatile bending force setup
- Reliable bending performance
- Advanced bending technology & smart accessories
- Robotic integration for full automation

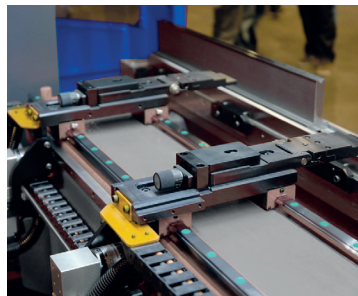


High-end **DELEM CNC control unit** with a touch screen provides direct navigation between programming and production. The UI is optimized for ergonomics with functions exactly where the operator needs them. The panel can be integrated into the cabinet or on a fully adjustable arm.

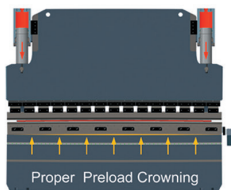
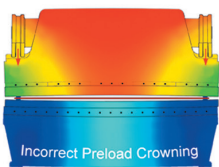
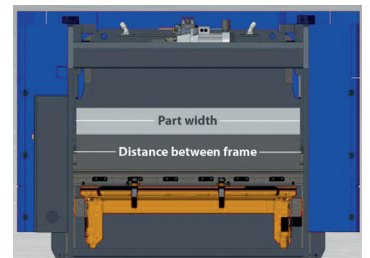


Press brakes feature a **rigid mono-block machine frame** for minimum deflection under load. The steel frame is checked by ultrasound and is stress-relieved after welding. All reference surfaces and connection holes are machined.

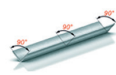
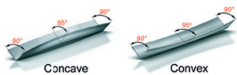
**CNC-controlled** and servo-driven **backgauge** that automatically adjusts position to ensure the material is positioned accurately, resulting in high quality finished parts.



The **large space** facilitates versatile production of parts requiring increased clearance. Ram housing is outside of the machine frame leaving the space between columns free.



Crowning eliminates the need for time consuming shimming by creating an adjustable crown in the middle of the table. All press brakes come with manual or a **CNC-controlled crowning** system. In the latter, the position and setting is automatically calculated from part data and set via CNC control.

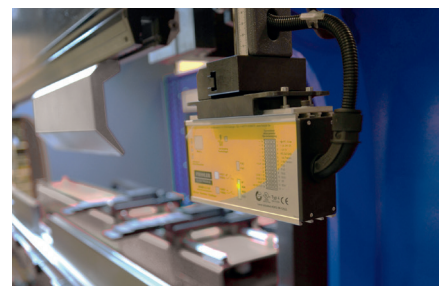
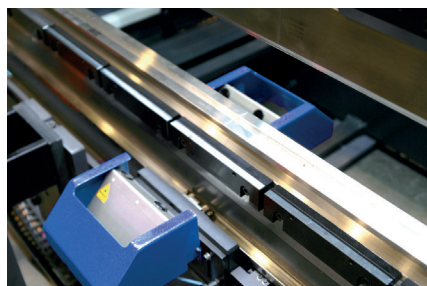


Concave

Convex

Angle measurement **cameras**

Advanced **work safety** elements





## MSBend-R series

Designed for simple use, strong performance and precision, the **MSBend-R** series offers high bend accuracy and a repeatability at least five-fold higher than conventional press brakes.

- Models from **1.2 m x 40 tons** up to **4 m x 300 tons**
- **CNC X axis backgauge system**
- **Mechanical crowning system on bottom table**
- Delem CNC touch screen control unit
- Robust safety features

### Options

- CNC X1-X2, R1-R2 axes backgauge system
- CNC motorized crowning system

## MSBend-S series

Designed to maximize productivity and decrease cost per unit, the innovations applied in **MSBend-S** result in faster speeds on the approach, bending, return and backgauge.

- Models from **1.2 m x 40 tons** up to **10 m x 2,000 tons**
- **CNC X, R axes backgauge system**
- **CNC motorized crowning system**
- Delem CNC touch screen control unit
- Front top beam sheet cover with LED lighting
- Robust safety features

### Options

- CNC X1-X2, R1-R2, Z1-Z2 axes backgauge system
- Laser angle measurement device with 2 cameras
- Roller hydraulic top tool clamping system
- CNC sheet following system (carriage capacity 250 kg/each)
- Parking area for sheet following system length extension 1,500 mm



## MSBend-E series

New generation **MSBend-E** electric servo press brake is an eco-friendly non-hydraulic bending solution. The innovative machine concept combines productivity, accuracy, flexibility and reliability.

- Models from **1.5 m x 40 tons** up to **3 m x 100 tons**
- **CNC X, R axes backgauge system**
- **CNC motorized crowning system**
- Delem CNC touch screen control unit
- Robust safety features

### Options

- CNC X1-X2, R1-R2 or X1-X2, R1-R2, Z1-Z2 axes backgauge system
- CNC sheet following system (carriage capacity 250 kg/each)







## Get more done in tandem

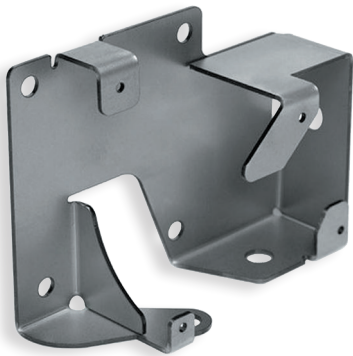
Press brakes working in parallel offer unparalleled flexibility. Bend long parts using both and double the production when using each individually.

Trying to plan ahead? Take advantage of the option of tandem preparation for future applications and have your press brake ready to welcome its twin colleague when needed.

## Another helping hand

An optional robotic interface connects your robotic manipulator to the press brake to create an automated bending workstation. Backgauge fingers are equipped with sensors to let the system know the blank is in the correct position.

Advances to bending technology have brought significant quality improvements over time, but press brakes are still labor-intensive machine tools. A robot provides the opportunity for high-volume uninterrupted production to move at full speed.



For more information visit:  
[www.microstep.eu/machines](http://www.microstep.eu/machines)



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## Your Partner for Cutting and Automation

MicroStep also offers CNC cutting systems with a variety of processes and accessories in a single machine. Our machines enable complex bevel cutting jobs with all technologies – plasma, fiber laser, oxyfuel, and waterjet along with marking, drilling, tapping, milling, and countersinking operations.

By adding bending to our portfolio, we now bring complete production processes under one roof. After cutting, MicroStep supported press brakes are ready to take over.

We do not stop there – we integrate our machinery with material handling systems and provide added value through automation and digitalization.