

**PRESS BRAKE**  
technology



**THE COMPLETE  
PRODUCT RANGE OF  
WEINBRENNER**

Quality German Engineering

 **weinbrenner**  
Maschinenbau GmbH  
Since 1954

# **ff** The **Technology** Behind The Future

Today; the easiest, fastest, and most precise bending and cutting processes are achieved with CNC machines. Weinbrenner had been considered on Premium Segment and take center as Quality, Productivity, Flexibility and Precision on its product range since 1954. In addition to all these, latest Weinbrenner products offer energy efficiency, higher speeds, energy efficiency and sustainability as of 2023 with development of new technologies. Since the foundation of Weinbrenner, first place always were technical progress, quality and economic efficiency. During the first years, the production of the company primarily was special bending machines. In the light of technological developments in sheet metal processing industry, Weinbrenner Maschinenbau GmbH come to stay and assured his position on the international market. Automation Systems for both bending and cutting processes will make an impression on the market.

**WPH**  
**HYBRID PRESS BRAKE**







SAVE ENERGY SAVE OUR PLANET

## **WPS** ELECTRIC PRESS BRAKE



## **WPB** ELECTRIC PRESS BRAKE



# **6** Reasons to buy a **Weinbrenner**

**1**

**THE POWER ON  
WHEN YOU NEED IT**

**2**

**FAST RETURN  
ON INVESTMENTS**

**3**

**EXTREME PRECISION  
AND REPEATABILITY**

**4**

**MORE SPEED,  
FASTER PROCESSING**

**5**

**LESS MAINTENANCE, LESS  
WASTE, SAVES COSTS**

**6**

**SAME JOB,  
LESS ENERGY**



## BENDING & AUTOMATION TECHNOLOGIES

	WPH	WPS	WPB
Drive Technology	Hybrid	Belt&Pulley	Ball Screw
Frame Design Structure	O Frame	O Frame	C Frame
Capacity	110-200 Tons	40-130 Tons	20-36 Tons
Bending Length	3060 mm	1530-3050 mm	900-1300 mm
Accuracy Y axis	± 0.01 mm	± 0.01 mm	± 0.01 mm
Approach Speed (Max.)	200 mm/s	170 mm/s *	150 mm/s
Daylight Opening (Max.)	690	590	430
Stroke (Max.)	350	300	150

\* 170 mm/s Approach Speed is on WPS 15040 Model only



The experts at Weinbrenner understand that high speed, flexibility, accuracy, energy efficiency and automation with durability and highest quality are the most important customer requirements in modern machine tool manufacturing. Weinbrenner responds to these facts with its newly designed high quality machines and automation systems.



# WPH HYBRID PRESS BRAKE

## Hybrid Drive System

Ultra High Reliability and Increased Efficiency

## 70 % Less Oil Consumption

Reduced Tank Volume  
, Consumes When Runs

## 110 to 200 Tons

Strong and Extremely Fast

## Full Working Length

Freedom Inside The Machine

## 30% Higher productivity

Effective production for Optimum Results

## Advanced Clamping & Backgauge

Efficient Bending for Complex Parts

## Hydro Mechanic Crowing

Premium Parts Quality

## 3100mm Bending Length

O Type Body Frame





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### ■ Hybrid Drive System

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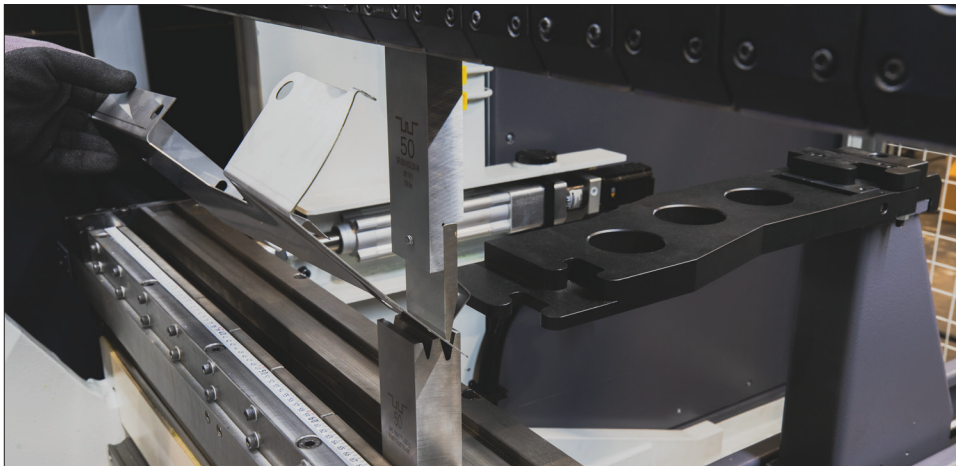
Hybrid drive system combines servo motor with high efficiency pumps providing high speed ram movement and great accurate ram repeatability This state of the art design offers quick setup, high speed operation, and increased throughput.

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### ■ Ultra High Precision

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Two Independent servo motors drive higher precision and efficiency. Brushless servo motors, that are quick and precise, are directly connected to two small oil tanks.



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## ADVANTAGES OF WPH SERIES

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- Improved Productivity Up to
- Improved Energy Efficiency
- Greatly Reduced Tank Volume
- Rigid Frame Design
- Superior Accuracy ( $\pm 0.01$ )
- Custom Daylight & Stroke
- Minimum Risk of Leakage
- Cost Effective & Quiet

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### ■ Faster Production

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Compared with standard hydraulic press brakes, Hybrids can easily reach 200 mm/s movement speeds. Extremely fast approach, bending and return speeds provide faster cycle times and enhance performance with more parts per hour.



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### ■ Less Consumption & Environmental Impact

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Less energy and oil consumption in average compared to the Standard Hydraulic Press Brakes. In a traditional hydraulic press, a big pump is continually active, even if the machine is working or not. Thus there is high and ineffective energy and extra heat distribution..

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### ■ Silent Working

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As servo motor and pump assembled inside the tank with compact design of hydraulic system, 13% more silent work achieved.



# WPS ELECTRIC PRESS BRAKE

**1500 to 3100 mm Bending Length**  
O Type Body Frame

**Belt & Pulley System**  
Proven Mechanism

**Noiseless Operation**  
Operator Comfort

**+30% Higher productivity**  
Effective Production for Optimum Results

**No Harmful Hydraulic Oil**  
Environment Friendly

**Up To 50% Energy Saving**  
Effective in All Ways

**Full Working Length**  
Freedom Inside The Machine

**40 to 130 Tons**  
Strong and Economic





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### ■ Belt&Pulley Drive System

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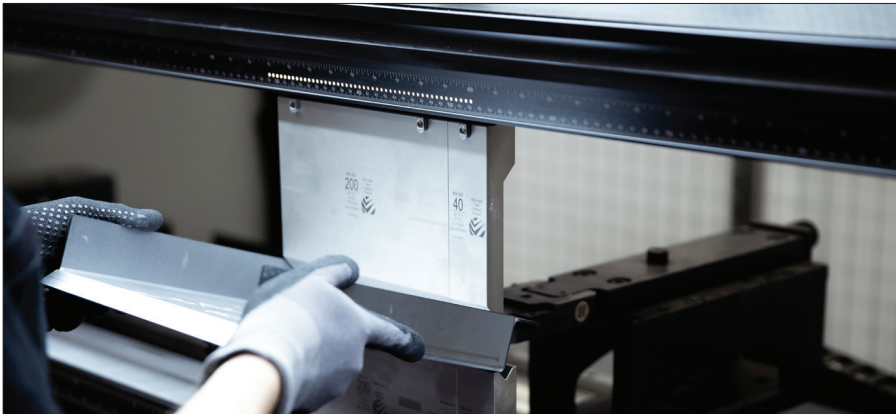
The belt and pulley drive system works with two synchronized servo motors which transfer the force to the upper beam from belt and pulley movements. During the movement of the upper beam, servo motors coil the belt to the main pulley and apply the bending force with even distribution of tonnage across the entire bed length.

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### ■ Faster Production

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- Less energy consumption and less material waste = Less CO2
- 60 % less energy consumption in average compare to the traditional Hydraulic Press Brakes
- High energy saving



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## ADVANTAGES OF WPS SERIES

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- |                                |                                   |
|--------------------------------|-----------------------------------|
| • High Accuracy and Efficiency | • O Type Frame Design             |
| • Low Energy Consumption       | • Optimum Bending Results         |
| • Low Operation Cost           | • No Maintenance & No Cylinder    |
| • Maximum Functionality        | • No Hydraulics and Hydraulic Oil |

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### ■ The Best Productivity and Efficiency

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- High efficiency = Less machine usage for the same production volume
- 30 % less processing time in average and short installation time
- Easy programming and high precision = less material waste



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### ■ Flexibility and Part Quality

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- There is no limitation of throat gap for the long parts
- O Type body design, and highly repeatable precision thanks to servo electrical drivers and different tool systems
- Servo motor drives offer superior movement control to produce best parts.

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### ■ Low Maintenance Cost

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- No hydraulic oil = no damaging waste
- Compare to the Hydraulic machines, there are less precious and critical parts
- Easiness of cooling
- Operational Safety



# WPB ELECTRIC PRESS BRAKE

**Ball Screw Mechanism**  
The Best Productivity for Small Parts

**20 and 36 Tons**  
Strong Enough for Small Parts

**Up To 50% Energy  
Saving, Low Co2  
Emissions**  
Effective in all ways

**Noiseless Operation**  
Operator Comfort

**No Harmful Hydraulic Oil**  
Environment friendly

**900 and 1300 mm  
Bending Length**  
Robust C type Frame

**More Than 30% Higher  
productivity**  
Effective production for Optimum Results

**Small Foot Print**  
Maximum Power on Minimum Space





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### ■ Ball Screw Drive System

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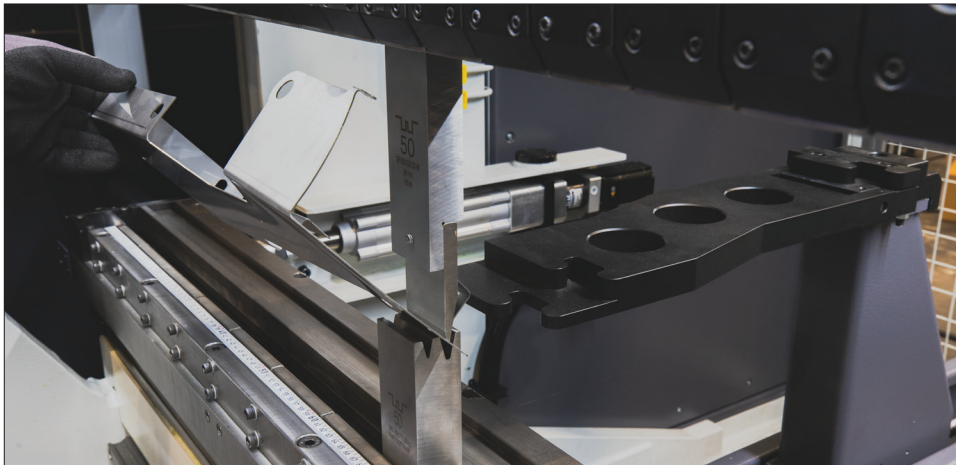
WPB Series offers maximum efficiency and reliability with maximum acceleration and precision. The high capacity ball-screws have larger diameter with higher quantity. There are no deflections on the ball screw while applying force.

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### ■ The Best Productivity and Efficiency

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- High efficiency = Less machine usage for the same production volume
- 30 % less processing time in average and short installation time
- Easy programming and high precision = less material waste



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## ADVANTAGES OF WPB SERIES

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- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| • High Accuracy and Efficiency    | • High Precision Ball-Screw Drive |
| • Low Energy Consumption          | • High reliability                |
| • Low Operation Cost              | • No Maintenance and No Cylinder  |
| • Minimum floor space is required | • No Hydraulics and Hydraulic Oil |

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### ■ Compact and Energy Saving

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- Thanks to its small foot print for space saving
- Less energy consumption and less material waste = Less CO2
- Power consumption is reduced by around 50% compared with conventional press brake



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### ■ Low Maintenance Cost

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Weinbrenner WPB Series don't use any hydraulic systems, so exclude all possible oil leaks and reduce need for periodic maintenance. The system offers both sustainability, less maintenance and no oil to purchase.

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### ■ Strong Enough for Small Parts

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Using unique and high quality components the speeds in WPB Series are higher compared to other electric press brakes. Thanks to the ergonomic frame design, the operator works in a comfortable position, the machine allows to bend more parts in less time.



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**STATE OF THE  
ART DESIGN  
FOR HIGH SPEED AND  
PRECISION**





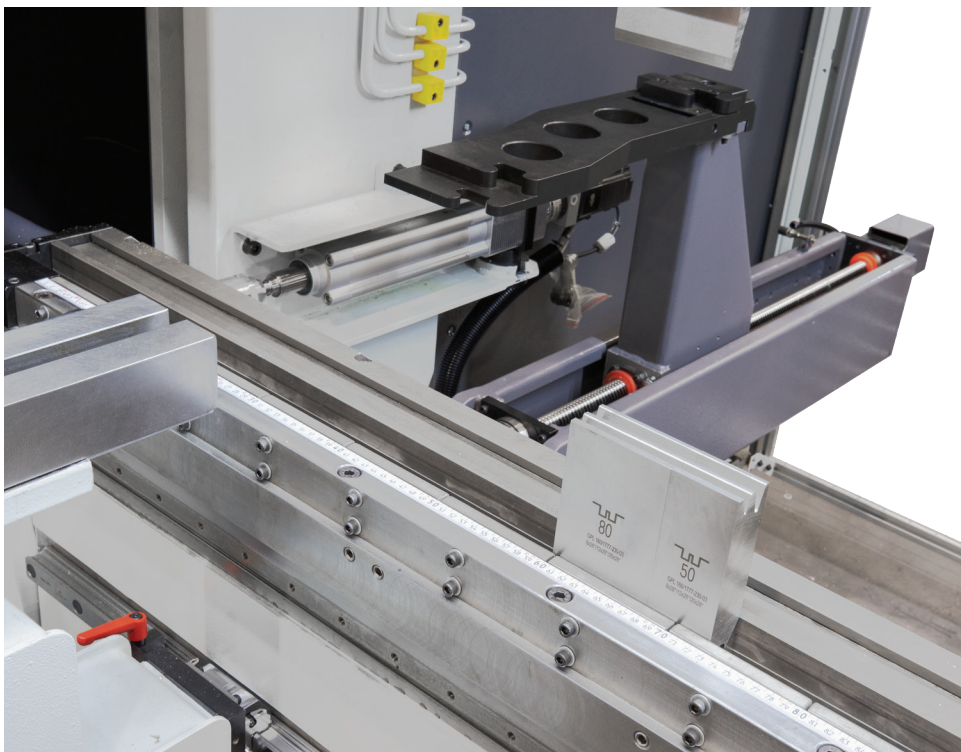


## ADVANCED SOLUTIONS TO ESSENTIALLY ALL REQUIREMENTS

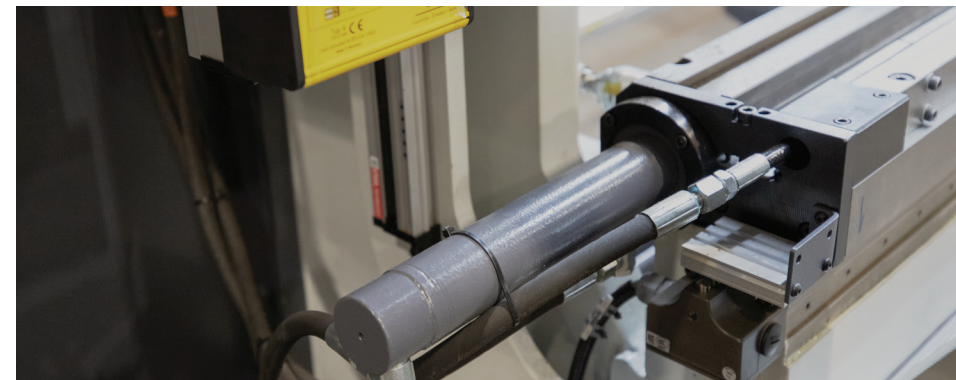
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Unique designed structure of Weinbrenner machines provides Advanced Solutions to its customers. Unrivalled clamping system, sophisticated tool shifting, innovative back gauge systems and many more solutions are developed with a years of experience.

Numerous options ensure that your Weinbrenner Machines completely matches your requirements. The most important benefits of Weinbrenner Press Brakes are parts quality, productivity, ergonomics, diversity, easy programming, clamping and tooling options.



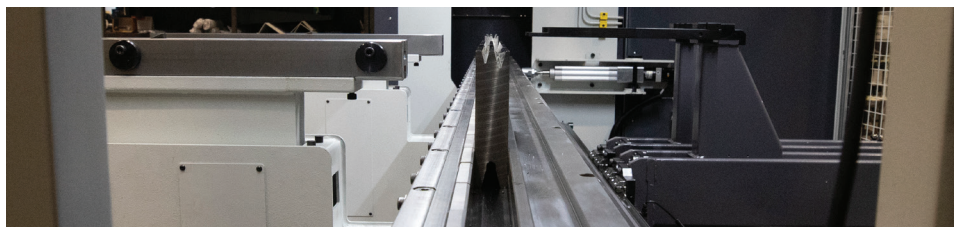
## ■ Hydro-Mechanic Crowning System



The crowning-construction balances the elastic deformation of the bedplate and the crosshead of the Press. Calculation an automatic setup occurs by the CNC. Automatic calculation and positioning of the crowning depend on the pressure surface and the bending position.

\* Optional on WPH Series || \*\* N/A on WPS / WPB Series

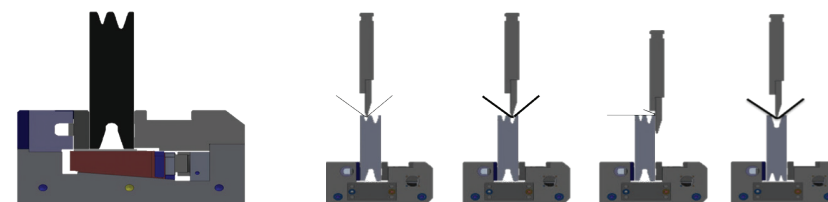
## ■ The System: Weinbrenner Style Lower Table



Weinbrenner Hybrid Press Brakes have the most unique designed lower table construction for maximum accuracy and highest quality solutions. Weinbrenner Style Lower Table can be restored after several years of operation with top performance.

\* Optional on WPH Series || \*\* N/A on WPS / WPB Series

## ■ Lower Tool Shifting



Bending and flattening in a single process, for different thicknesses without setup changes. In this way an easy replacement of the tools is guaranteed. The biggest advantage of this design allows bending and flattening in a single process.

\* Optional on WPH Series || \*\* N/A on WPS / WPB Series

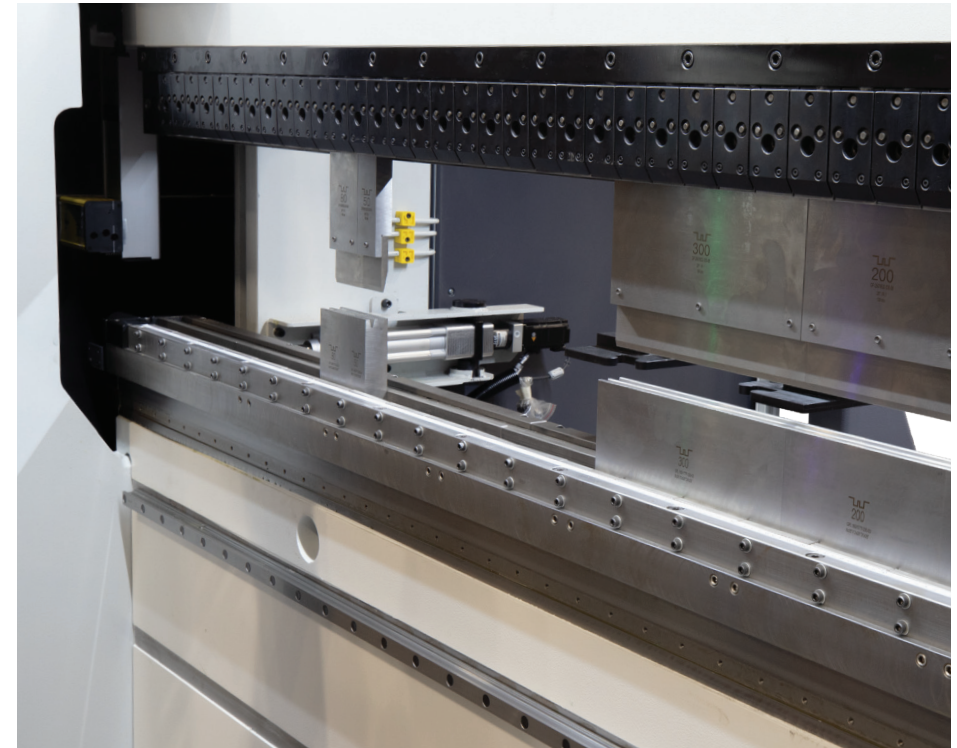


## Hydraulic Top Clamping



Weinbrenner style hydraulic top tool clamping is very unique system, which allows quick setup change of tools. Very precise, automatic tool centering. Rigid construction of this system is extremely resistant.

\* Optional on WPH Series || \*\* N/A on WPS / WPB Series



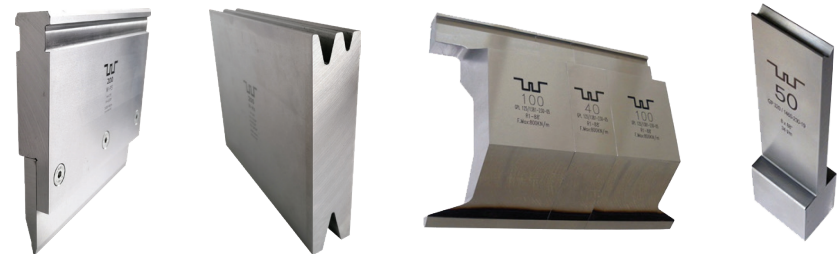
## Hydraulic Bottom Clamping



Exclusive bottom tool clamping system allows quick removal of tools. It has very precise holding and automatic tool centering.

\* Optional on WPH Series || \*\* N/A on WPS / WPB Series

## Weinbrenner Style Tooling

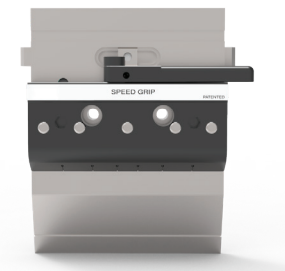


You can choose in a comprehensive assortment of simple and precise punches and multi-channel dies. Weinbrenner Style tools are Induction hardened of all surfaces, for different thicknesses without setup changes. The rigid construction of machines gives tools extremely resistant for several years of usage.

\* Optional on WPH Series || \*\* N/A on WPS / WPB Series



## Manuel Top Clamping



Frontal introduction and extraction of the European-type standard tool and automatic return at the stop.

\* Optional on WPS / WPB Series

	Promecam (Not Available in WPH)			Wila Pro Clamping		Wila Premium Clamping	
	Manual	Pneumatic	Hydraulic *	Pneumatic	Hydraulic *	Pneumatic	Hydraulic *
Top Clamping							
Bottom Clamping	N/A	N/A	N/A				
* Hydraulic Power Pack is Required				** CNC Crowning is Standard			

## Wila Hydraulic/ Pneumatic Clamping Systems



WILA's state-of-the-art Clamping and Crowning systems offer the ultimate solution when it comes to efficiently changing tools - both hydraulically and mechanically. Tool Holders available with Hydraulic Clamping (HC), Pneumatic Clamping (SL) or Manual Clamping (MC) and suitable with Safety-Click®, the Smart Tool Locator.

\* Optional on WPS / WPB Series

## Hydraulic/Pneumatic Clamping



Hydraulic or Pneumatic upper fast clamping system with front clamp for Promecam tools, 150mm length, Max. load 1000 kN/m

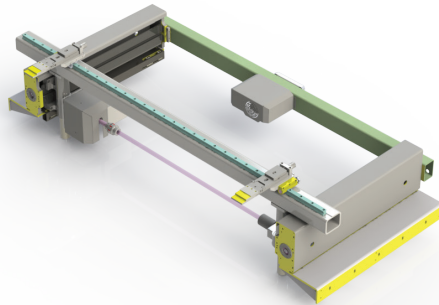
\* Optional on WPS / WPB Series



## ■ Weinbrenner Backgauge Range

Weinbrenner supplies a full range of backgauge systems to meet all requirements, encompassing all press sizes and degrees of complexity of the parts. Press Brakes are used for variety of applications and Weinbrenner presents advanced backgauge systems with up to 6 CNC-Controlled axes are available. All electric drives are designed in maintenance free AC technology.

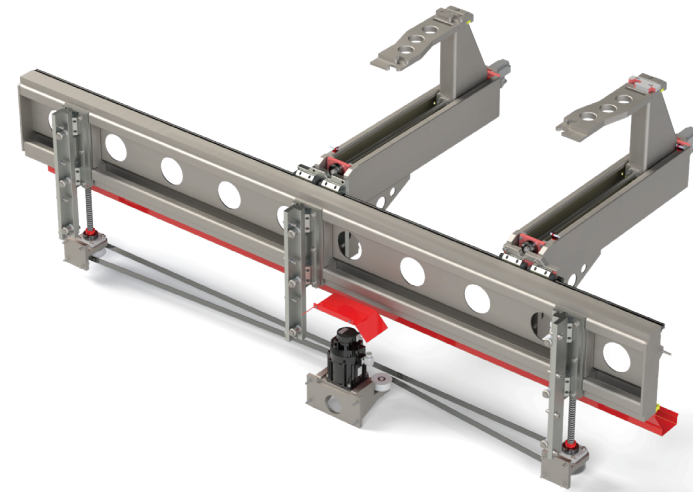
### ■ 2 Axis Backgauge X + R



X and R axes are in standard configuration of Weinbrenner Electric Press Brakes. Travel on ballscrew spindles from DC-motor driven mechanism.

\* Standard on WPS / WPB Series || \*\* N/A on WPH Series

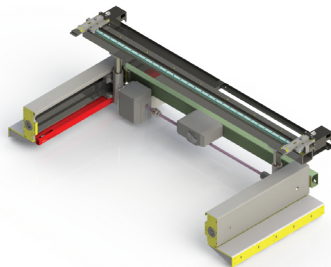
### ■ 5 Axis Backgauge X1+X2+R+Z1+Z2



This exclusive Backgauge solution has additional X2 axis for sheets with angled bending lines. Easy correction of both gauge positions in X direction.

\* Standard on WPH Series || \*\* N/A on WPS / WPB Series

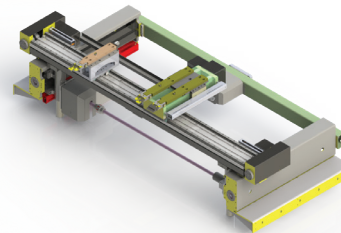
### ■ 4 Axis Backgauge X+R+Z1+Z2



Weinbrenner offer the distinct flexibility of Z1 and Z2. Suitable for bending parts with various lengths.

\* Optional on WPS Series / WPB 13036 || \*\*N/A on WPB 09020

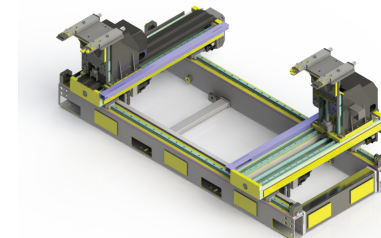
### ■ 5 Axis Backgauge X+R+X5+Z1+Z2



This superb system ensures one of the best solution. Suitable for non-parallel bending lines.

\* Optional on WPS Series || \*\*N/A on WPB / WPH Series

### ■ 6 Axis Backgauge X1+R1+Z1+X2+R2+Z2



The most advanced backgauge solution also called "Independent Type Backgauge".

\* Optional on WPS / WPH Series. || \*\*N/A on WPB Series

## Wide Range of CNC Controllers



All Weinbrenner Press Brakes can be equipped with advanced CNC controllers. Highly effective CNC controllers optimize the machine cycle and minimize set-up time. These controllers make using press brakes easier, more efficient and more functional.

CNC Controllers are very easy to use and can be programmed quickly and accurately. Additionally 2D or 3D bending simulator and offline software solutions are available.

Offline programming offers several ways to design and to import and correctly produce 2D or 3D drawings.



### Features

	Esa S 875W 2D	Delem DA-665	Delem DA-695	VisiTouch Pac
Screen	21.5" LCD Full HD	24" TFT, High Brightness	24" TFT, High Brightness	18.5" Glass Touch Screen
Resolution	1920 x 1080 pixels	1920 x 1080 pixels	1920 x 1080 pixels	1366 x 768 pixels
2D Programming/View	■	■	■	■
3D Graphic View	■	□	■	□
3D Programming	□	N/A	■	□
Auto Tool Selection	■	■	■	■
Auto Bend. Sequence	2D/3D	2D	2D/3D	2D
2D DXF Import	■	□	■	□
2D DXF Export	□	□	■	□
3D IGES/STEP Import	□	N/A	■	□
Offline Software	(EsaBend 3D)	(Profile-SL)	(Profile-S3D)	(VisiTouch Offline)

Standard



Optional





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### ■ Laser Safe Laser Finger Protection

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Laser Safe products provide an efficient and cost effective platform with fewer components, reduced wiring, simplified interface and CE Certified hardware and software to minimize engineering and build time.

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### ■ Fiessler Laser Finger Protection

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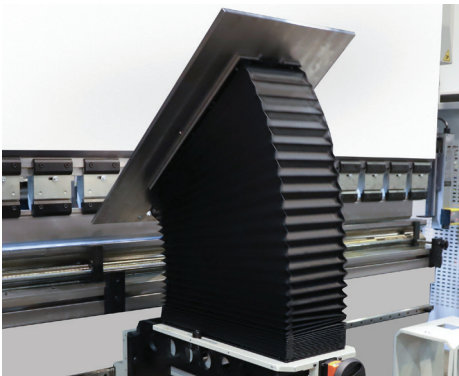


The components are CE type tested (c)UL listed and comply with further national and international standards. Innovative finger guarding system for press brakes by following laser optical safety light grids in front of the tool.

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### ■ CNC Front Sheet Followers

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Support the workpiece during the bending with CNC automatic calculation. Available weight of 125 to 250 Kg. Bending aids available in front and rear of the machines

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### ■ Manuel Height Adjustable Support Arms

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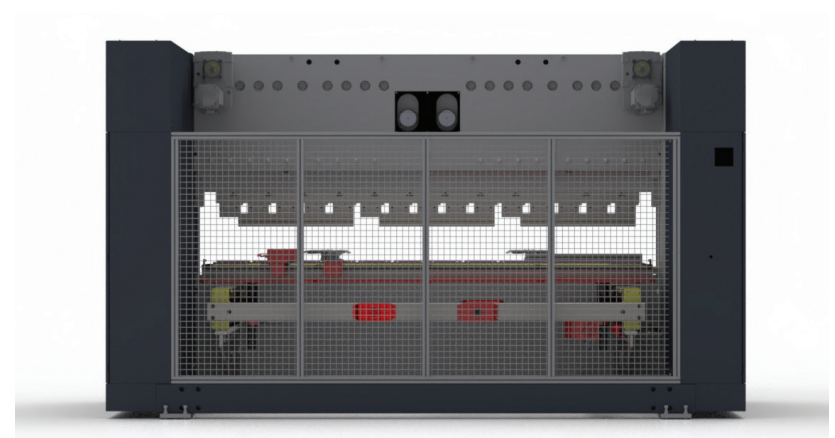


Weinbrenner Press Brakes offers newly designed Manuel Height Adjustable Support Arms. The mechanism equipped with a reducer and rack-pinion to adjust height easily.

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### ■ Metal Fence Door System

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Metal Fence Door System prevents operator injuries and with the help of its window, operator can see inside during maintenance and operation.



# ROBOTIC BENDING APPLICATIONS

## Satisfying Profitability

Ultra-High Reliability and Increased Efficiency

## Automated Tool Changer

Automatic tool set-up to reduce down time

## Best Solutions for Your Requirements

To meet all the production requirements

## High Level Automation

Bending successfully and automatically

## Bending Tool Gripper

Place holder for picking up parts

## Ready When Needed

The System is always ready to produce

## Enhances Productivity

Ideal automation for every production

## Advanced Graphic Interface

Best simulation of the bending process





## AUTOMATED PRODUCTION MAXIMIZING PROFITABILITY

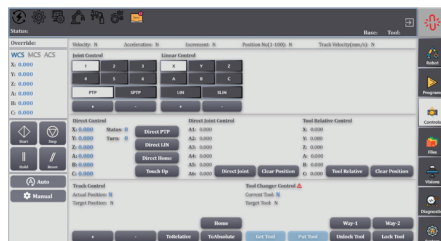
Weinbrenner is continuously developing new solutions and machines to share its 70 years of knowledge and experience with customers. It is very important that our customers' machines are continuously running with maximum performance, so they can deliver products within lead times. Robotic Systems reduce cycle times and bend with minimal manual effort. The continuously high quality production is possible with automation systems and saves from wrong parts.

Robotic applications minimize and eliminate losses during manual bending processes and provide maximum productivity. Robotic arm uses special grippers to hold and fix the parts during bending processes.

These advanced systems equipped with several sensors to ensure reliable material handling with consistent quality.



### ■ HMI Interface



Robotic Bending Application provides a comprehensive set of tools for creating and maintaining an accurate bend database. The database can be shared with CAD system and CNC press brake controls for consistency and ease of maintenance.

All control can be done through a single interface. Maintenance status, current information and errors of the machine can be easily monitored and transferred to the operator.

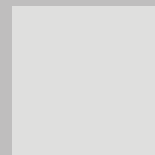
### ■ Beckhoff Robotic Cell Control System



In the Automatic Bending Cell, the program instructions are executed by the Industrial computer. It is responsible for the control of the entire processing cycle. The machining program for the Automatic Cell is run by the robot controller and this controller is responsible for correct execution of the entire program by controlling the program cycle. This advanced system allows to edit bending tools, clamping systems and other functions.









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