



PRESS BRAKE

WAD / WADE



⋮



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CONTACT US

COMPANY PROFILE

Established in 2002, ADH Company is situated in Ma'anshan City, Anhui Province, just 30 kilometers from Nanjing Lukou Airport. Our expansive 2,000,000 square meter facility specializes in manufacturing press brakes, hydraulic shearing machines, laser cutting machines (including automatic production units), CNC turret punches, intelligent flexible bending centers, and sheet metal automation equipment. As a leading high-tech manufacturer prioritizing R&D and innovation, we hold numerous patents and industry certifications.

2002

Founded

6000 +

Annual Production

120 +

R&D Personnel

100 +

Exported Countries



| www.adhmt.com

Mission

We are committed to research and development, improving product and service quality, in order to establish a globally renowned sheet metal manufacturing machinery center.



Vision

Our goal is to become a highly respected sheet metal support service provider, earning the trust of customers and the pride of employees.



Values

Innovation, Lean Manufacturing, Integrity, Win-Win.



PRESS BRAKE

CNC

WAD Series



- Modular segments enable customizable lengths for diverse bending operations, enhancing versatility and precision.
- Automatic calculation adjusts for deformation, ensuring uniform bending accuracy across workpieces.
- Saves 40% energy with servo-driven hydraulic systems, boosting ram efficiency by 7-20%.
- Hydraulic clamping reduces tool replacement time by 80%, optimizing production continuity.
- DSP laser and light curtains ensure operator protection without compromising workflow.
- Heat-treated components and hardened tooling extend lifespan in high-demand environments.

PRESS BRAKE

CNC

WADE Series



- Modern streamlined design providing high speed, precision, and rigidity for bending operations.
- Energy-efficient electro-hydraulics servo synchronization, reducing energy consumption by 40-60% compared to traditional systems.
- Advanced hydraulic system integrating real-time servo control for stable pressure and reduced hydraulic failure rates.
- High-performance backgauge system with digital AC servo motor, precision ball screw, and linear guide rail for accurate positioning.

PRODUCT DETAILS

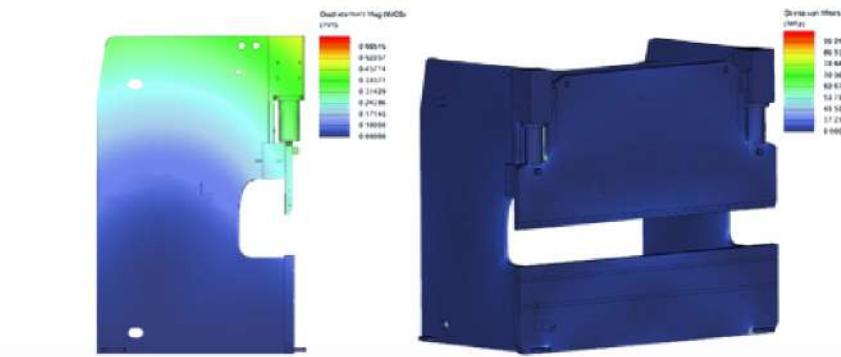
Frame

- High-yield steel mono-block frame ensures long-term accuracy and reliability, backed by a 15-year warranty.
- CNC-machined in one process for precise parallelism and verticality of mounting surfaces, ensuring deformation resistance.



Mechanical Structure

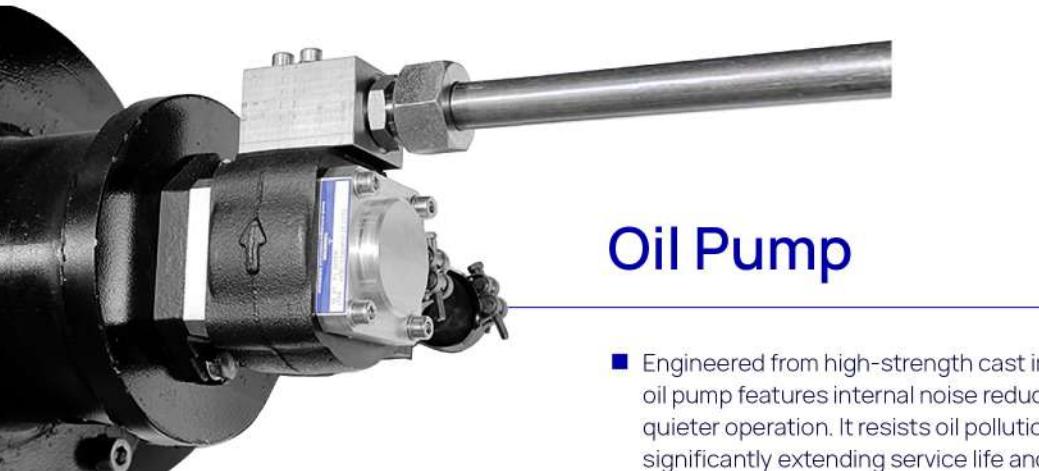
- The press brake consists of a frame, column, ram, worktable, main cylinder, and backgauge. These components are meticulously refined using finite element analysis and advanced 3D software, ensuring exceptional strength and rigidity.
- The structural elements are thoughtfully engineered to be robust and stable, significantly boosting the machine's efficiency and durability.



Main Servo Motor



- Energy-efficient servo motor reduces consumption by up to 40% while enhancing ram efficiency by 7-20%.
- Quiet operation at 60 dB ensures minimal noise disruption, creating a comfortable working environment.



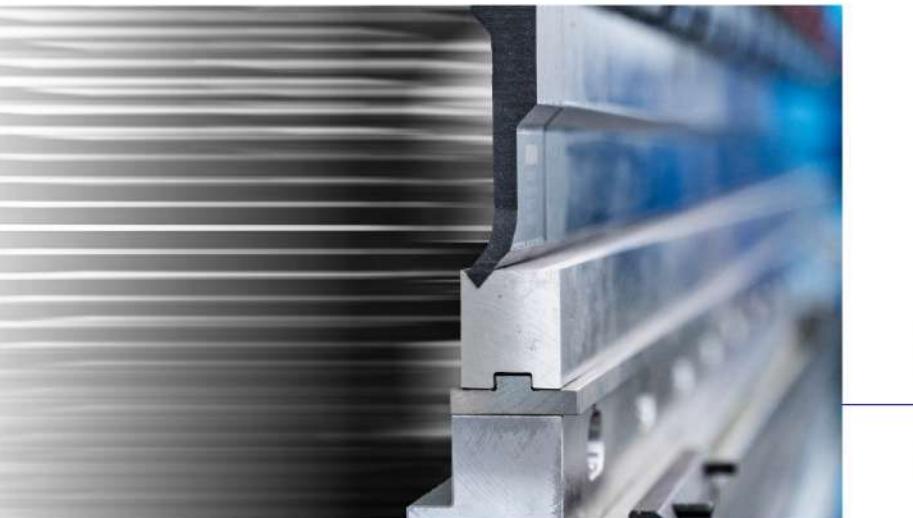
Oil Pump

- Engineered from high-strength cast iron, our oil pump features internal noise reduction for quieter operation. It resists oil pollution, significantly extending service life and ensuring reliable performance.



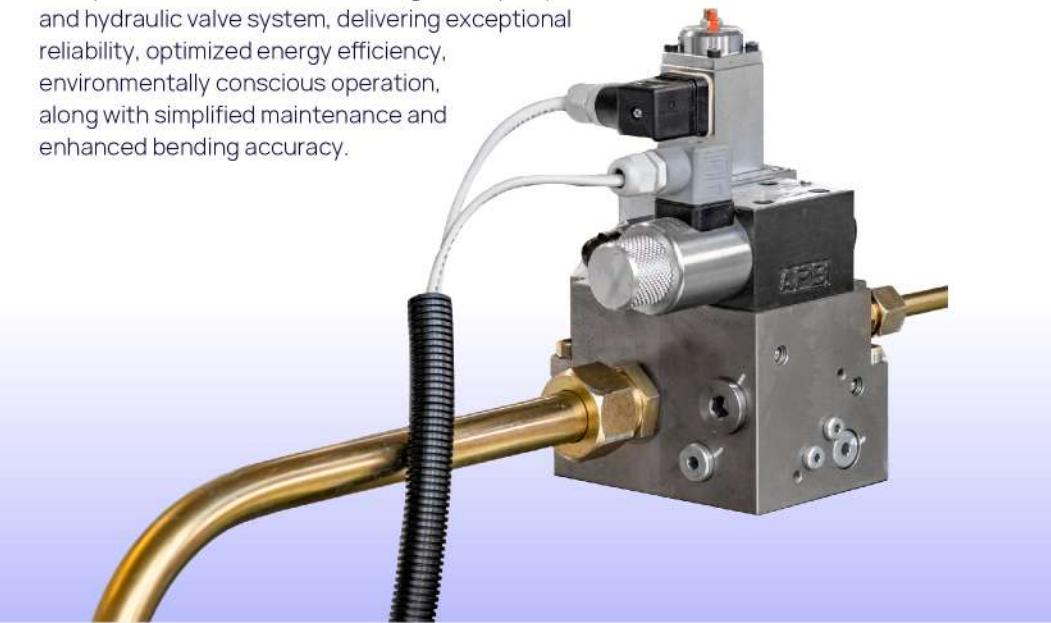
Fast Clamp

- Engineered for rapid setup, the Fast Clamp reduces tooling changeover time by up to 70%. Durable hardened steel construction ensures longevity, while universal compatibility and zero-adjustment design streamline workflows. Maintains secure grip for consistent, safe operations.



Hydraulic Valve

- Incorporates HAWE's German-designed oil pump and hydraulic valve system, delivering exceptional reliability, optimized energy efficiency, environmentally conscious operation, along with simplified maintenance and enhanced bending accuracy.



Punch & Die

- Precision-ground top punch and dual-V bottom die ensure accurate bending angles, enhancing versatility for complex sheet metal fabrication.
- Customizable punch and die configurations enable swift adaptation to diverse materials and production demands, maximizing operational flexibility.

Electrical Parts

- Featuring premium Schneider components for enhanced stability, operational safety, and extended service life, ensuring consistent machine performance.
- Integrated with globally recognized electrical brands, our systems deliver superior control, minimized downtime, and efficient power usage for peak productivity.



Backgauge

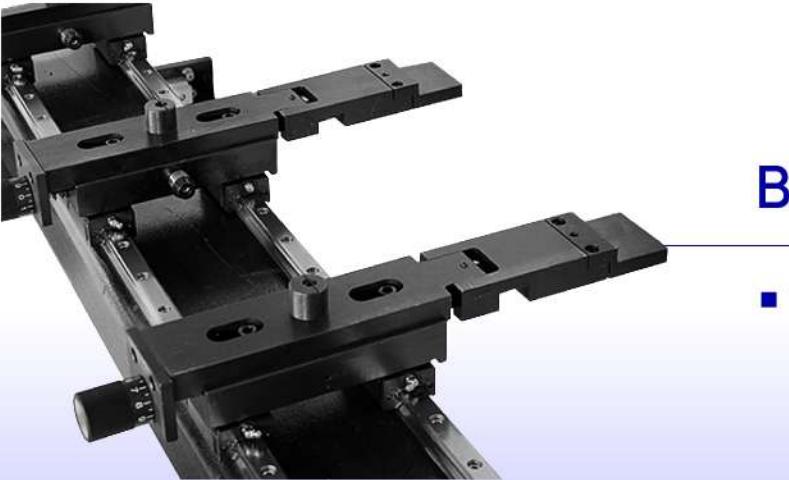
- Servo-driven backgauge delivers rapid, repeatable positioning ($\pm 0.01\text{mm}$) via ball screw transmission. Rugged construction ensures durability in high-volume production, while intuitive controls streamline setup for diverse bending applications.





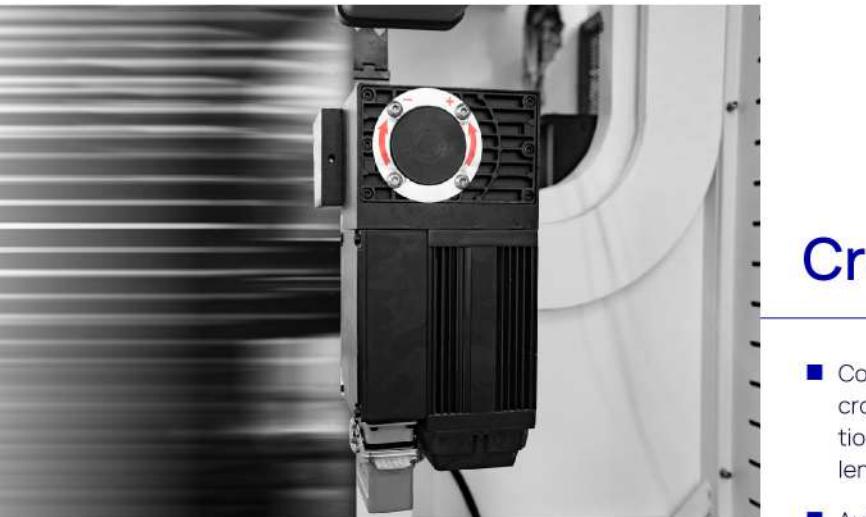
Backgauge Servo Motor

- Y-axis servo motor ensures precise movement and superior accuracy.
- Advanced servo motor: rapid, high-accuracy positioning, enhancing throughput and consistent part quality.



Backgauge Fingers

- The backgauge fingers feature three precision-positioning components, offering four adjustable ranges for versatile bending solutions. Engineered with step-design blocks and hardened construction, they ensure maximum stability and sensitivity during operation.



Crowning

- Compensates for bed deflection with dynamic crowning, maintaining even pressure distribution for consistent results across full sheet lengths. Eliminates mid-bend accuracy errors.
- Automated crowning system adjusts ram deflection in real time, delivering flawless bends from edge to edge. Optimizes workpiece quality and repeatability.



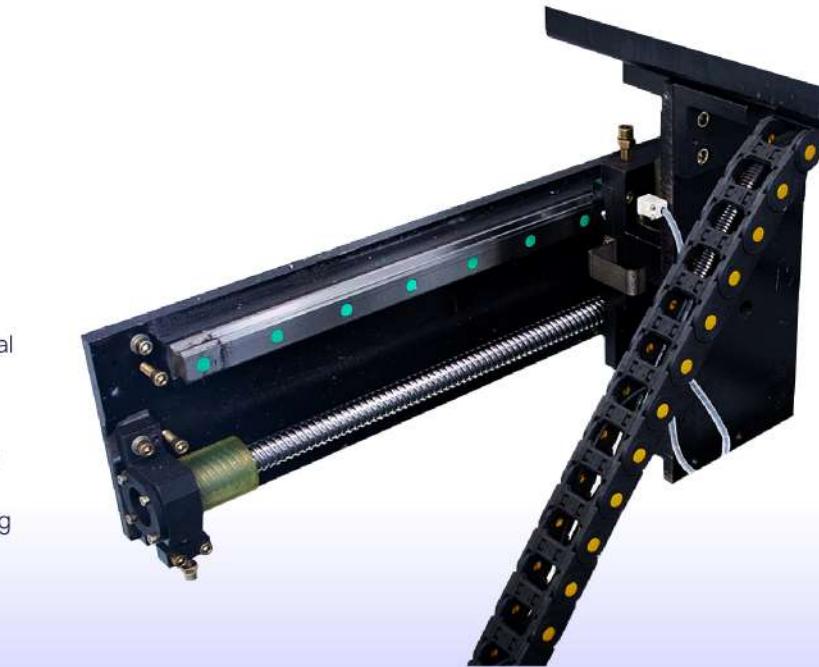
Servo Drive

- The Estun servo drive ensures precise machine control with advanced vibration suppression, fast response rate, and enhanced efficiency, significantly reducing downtime and boosting productivity in demanding manufacturing environments.



Linear Scale

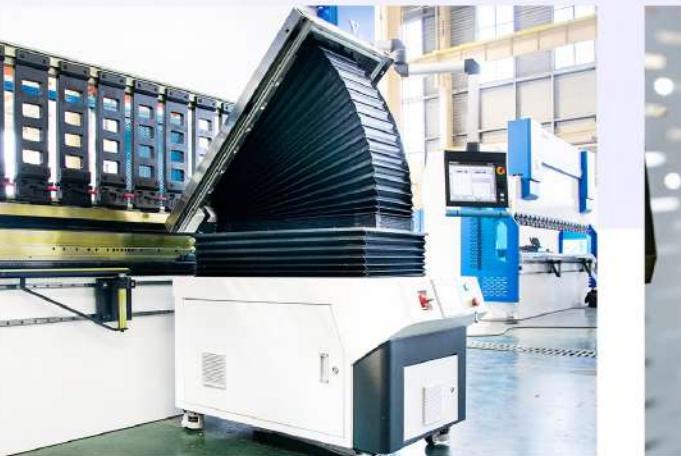
- Heidenhain linear scales ensure high-precision positioning and reliable measurement, enhancing bending accuracy in press brake operations.



Ball Screw & Guide

- High-quality ball screws and linear guides ensure smooth, accurate positioning, enhancing operational repeatability and the longevity of your ADH machinery.
- Experience swift, dependable travel with our robust ball screw and guide system, engineered for high efficiency and consistent performance in demanding applications.

OPTIONAL



Sheet Follower

- Automated support for sheets during bending. Ensures precise angles and reduces operator strain for improved quality and safety.
- Maximize bending accuracy and operator safety. Followers eliminate deformation and ensure consistent results.



DSP Laser Protection

- EN12622 (CAT.4/SIL3) compliant laser barrier prevents crushing during rapid press closure.
- MCS module manages diverse signals and functions for optimized, safe press brake performance.



Light Curtain

- Enhance operator safety with our advanced Light Curtain system, offering real-time protection, precise detection, and seamless integration into your ADH machinery for secure and efficient operations.



Wila Hydraulic Clamping System

- The Wila Hydraulic Clamping System enables quick, push-button tool loading and reduces tool change time by up to 80%, boosting productivity.
- Designed for reliable performance, the Wila "New Standard" Tooling System offers a service life exceeding 10 years, ensuring long-term operational excellence.
- Allows rapid mold replacement from both sides or bottom, reducing downtime while maintaining high safety standards with anti-fall mechanisms.

Double Sided Quick Clamp

- Enables secure tool retention with an 8.4x3.5mm safety groove and bidirectional installation, supporting fast tool changes for European-style punches and enhanced workflow efficiency.

- Provides quick, secure tool changes with pneumatic or hydraulic options, enhancing efficiency and reliability without requiring component modifications.

Rolleri Pneumatic Fast Clamping

CONTROLLER

CONTROLLER



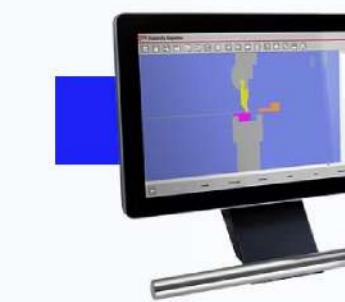
DELEM DA-66S (Netherlands)

- Features 2D touch programming and 3D simulation.
- 24" high-resolution color TFT display.
- Compatible with Delem Modusys for scalability and adaptivity.
- USB and peripheral interfacing supported.
- Multitasking environment for user-specific applications.
- Includes sensor bending and correction interface.
- Supports Profile-S2D offline software.



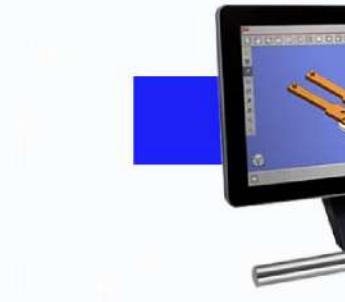
DELEM DA-69S (Netherlands)

- 3D and 2D graphical touch screen programming mode
- 24" high resolution color TFT
- Delem Modusys compatibility (module scalability and adaptivity)
- USB, peripheral interfacing
- Sensor bending & correction interface
- Profile-S3D offline software



ESA S840 (Italy)

- 15.6" Touch Screen
- Up to 6 Axes
- ETS Real time Operating System
- Ethercat/CANopen or Analog Axes Interface



ESA S875 (Italy)

- 21" Multitouch Screen
- Up to 156 Axes
- Windows 10 Operating System
- Ethercat/CANopen or Analog Axes Interface



SCS920 (China)

- Uses Taiwan high-sensitivity 21.5-inch industrial touchscreen.
- Level 4 EMC industrial computer board ensures stability and reliability.
- Dual CPU system ensures precise control.
- Supports standard PLC+C Motion programming.
- Enables standard EtherCAT communication expansion.
- Operates on Linux with support for instantaneous power failure.



CYBELEC CT12 (Switzerland)

- 12" color touch LCD with icons.
- "EasyBend" for simple single bends.
- Automatic calculation: bending data, pressure, deflection, die depth.
- Angle/backgauge correction; 2D graphics programming.



DELEM DA-53TX (Netherlands)

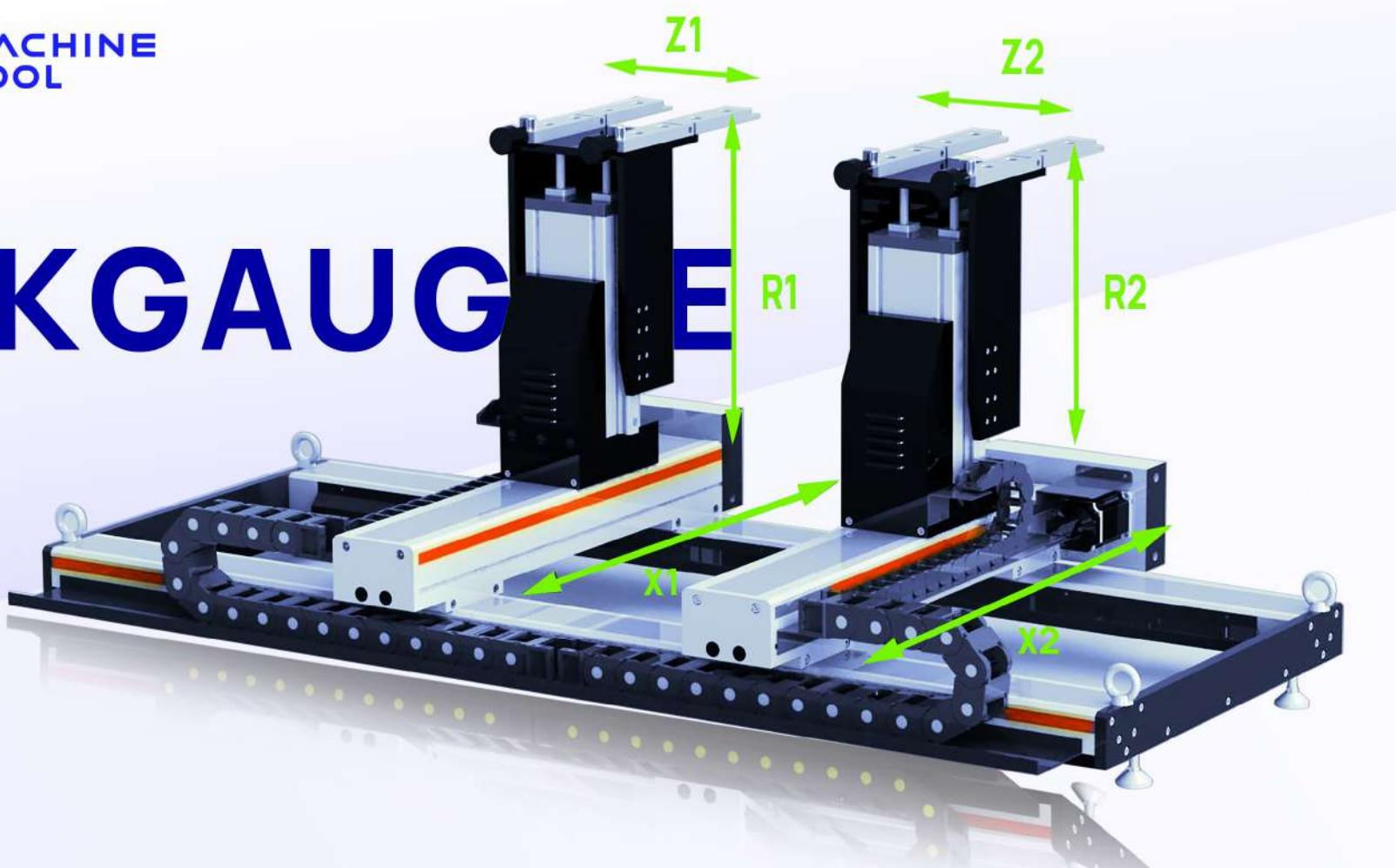
- Numerical touch screen programming
- 15" high resolution color TFT
- Crownng control
- Servo and frequency inverter control
- USB, peripheral interfacing
- Profile-T offline software



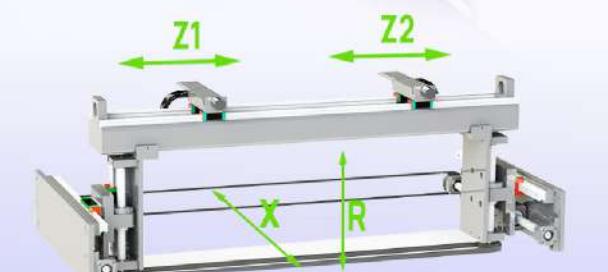
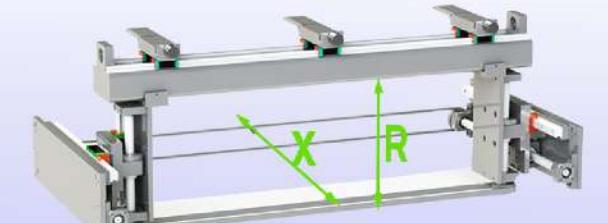
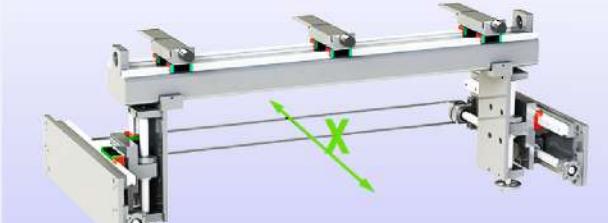
DELEM DA-58TX (Netherlands)

- 2D graphical touch screen programming optimizes usability.
- Features an 18.5" high-resolution color TFT display.
- Includes automatic bend sequence calculation and crowning control.
- Supports servo and frequency inverter control.
- Advanced Y-axis algorithms handle closed-loop and open-loop valves.
- Offers USB interfacing and Profile-T offline software compatibility.

BACKGAUGE



X-forward & backward
R-up & down
Z-left & right

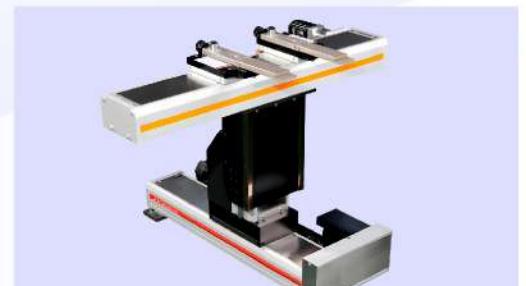


/ BGA

BGA 2	2 axes X+R (Standard)
BGA 4	4 axes X+R+Z1+Z2 (Optional)
BGA 5	5 axes X+R+Z1+Z2+X2 (Optional)
	Type of motor
	Servo Drive
	Mechanical system
	Ball screw
	Ball screw
	Rack
	Rack
	Ball screw

Axes	X	R	Z1	Z2	X5
Stroke (mm)	500	200	Under request*	Under request*	190
Speed (mm/s)	350	200	2000	2000	300
Precision (mm)	0.01	0.05	0.05	0.05	0.01
Type of motor	Servo Drive	Servo Drive	Servo Drive	Servo Drive	Servo Drive
Mechanical system	Ball screw	Ball screw	Rack	Rack	Ball screw

Axes	X1	X2	R1	Z	Z2
Stroke (mm)	500	50	200	Under request*	Under request*
Speed (mm/s)	350	35	200	2200	2200
Precision (mm)	0.01	0.1	0.01	0.5	0.5
Type of motor	Servo Drive	Servo Drive	Servo Drive	Servo Drive	Servo Drive
Mechanical system	Ball screw	Ball screw	Rack	Rack	Rack



SMALL BACKGAUGE

$X+R+Z1+Z2$



4 AXIS BACKGAUGE

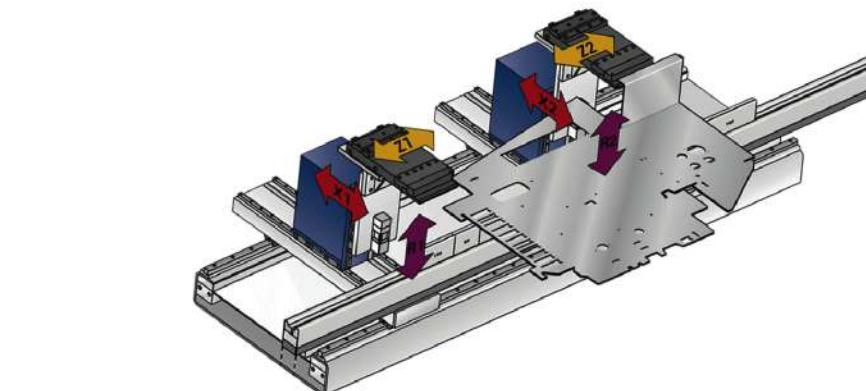
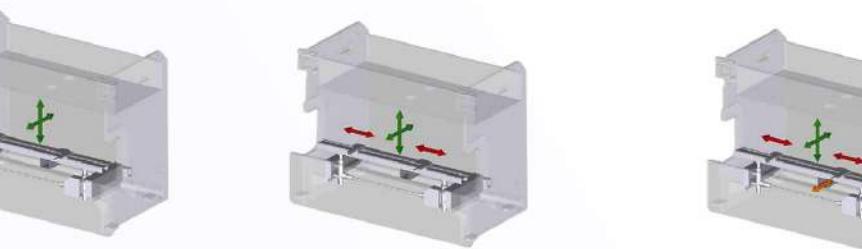
$X+R+Z1+Z2$



6 AXIS BACKGAUGE

$X1+X2+R1+R2+Z1+Z2$

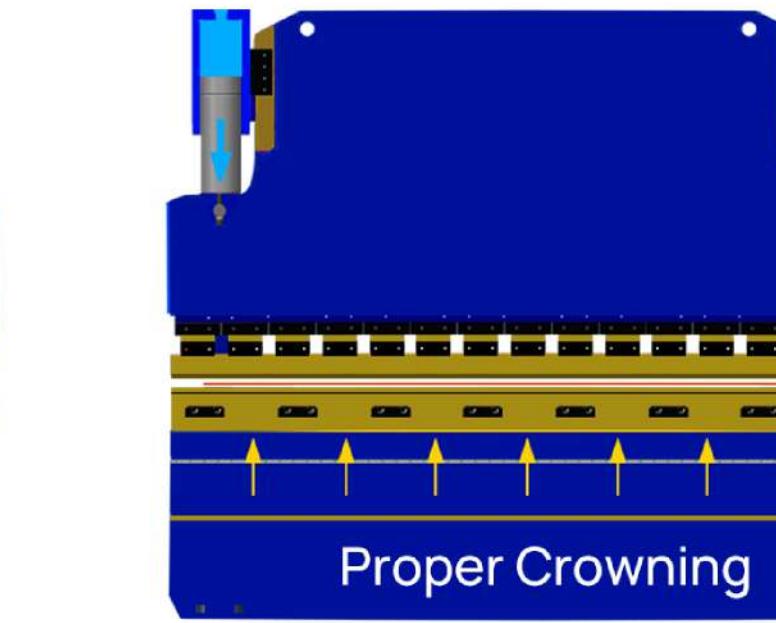
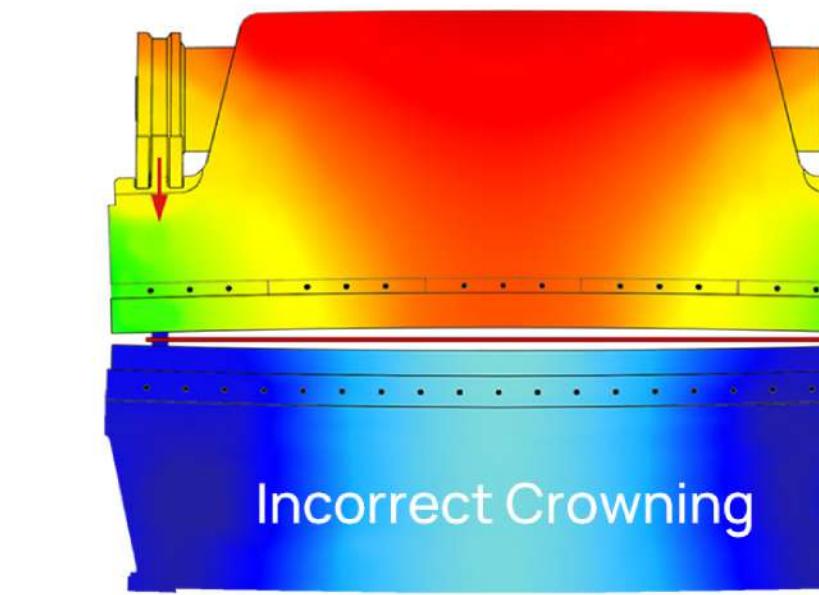
Backgauges featuring various axis configurations to accommodate all your requirements.

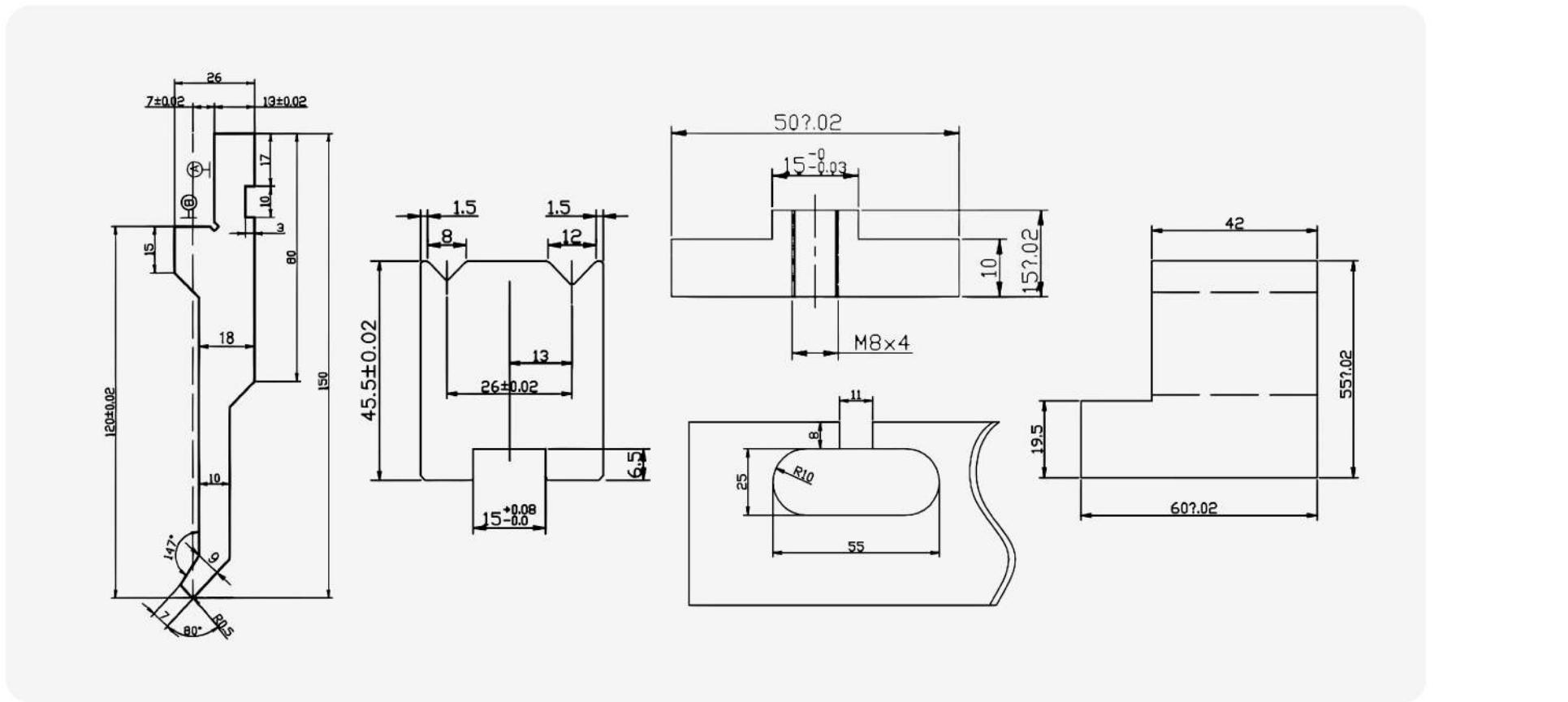




CROWNING

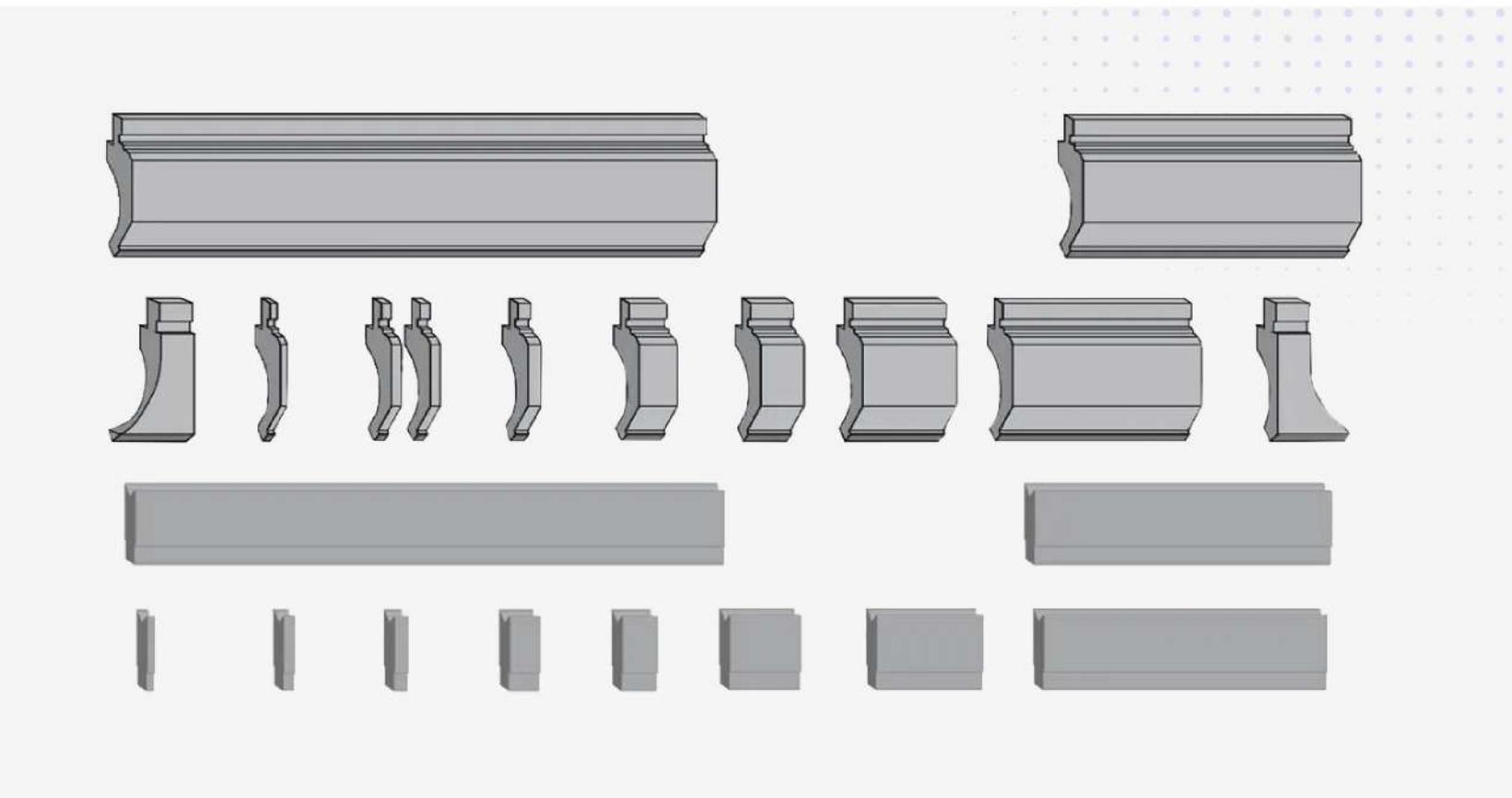
The CNC system calculates the required compensation based on the load force and the bending size of the workpiece, which leads to deflection deformation of the ram and the vertical plate of the work table. It then automatically controls and adjusts the relative displacement of the convex wedge block to effectively offset the deformation of the ram and the upright plate of the table. This ensures the workpiece achieves the desired bending result.





Standard Toolings

- Integrated quenching enhances durability, ensuring a longer working lifespan for precision press brake tooling
- Offers a variety of upper and lower dies for flexible configuration to accommodate diverse processing requirements.
- Ensures consistent performance across applications with robust design crafted for reliability over extended usage.



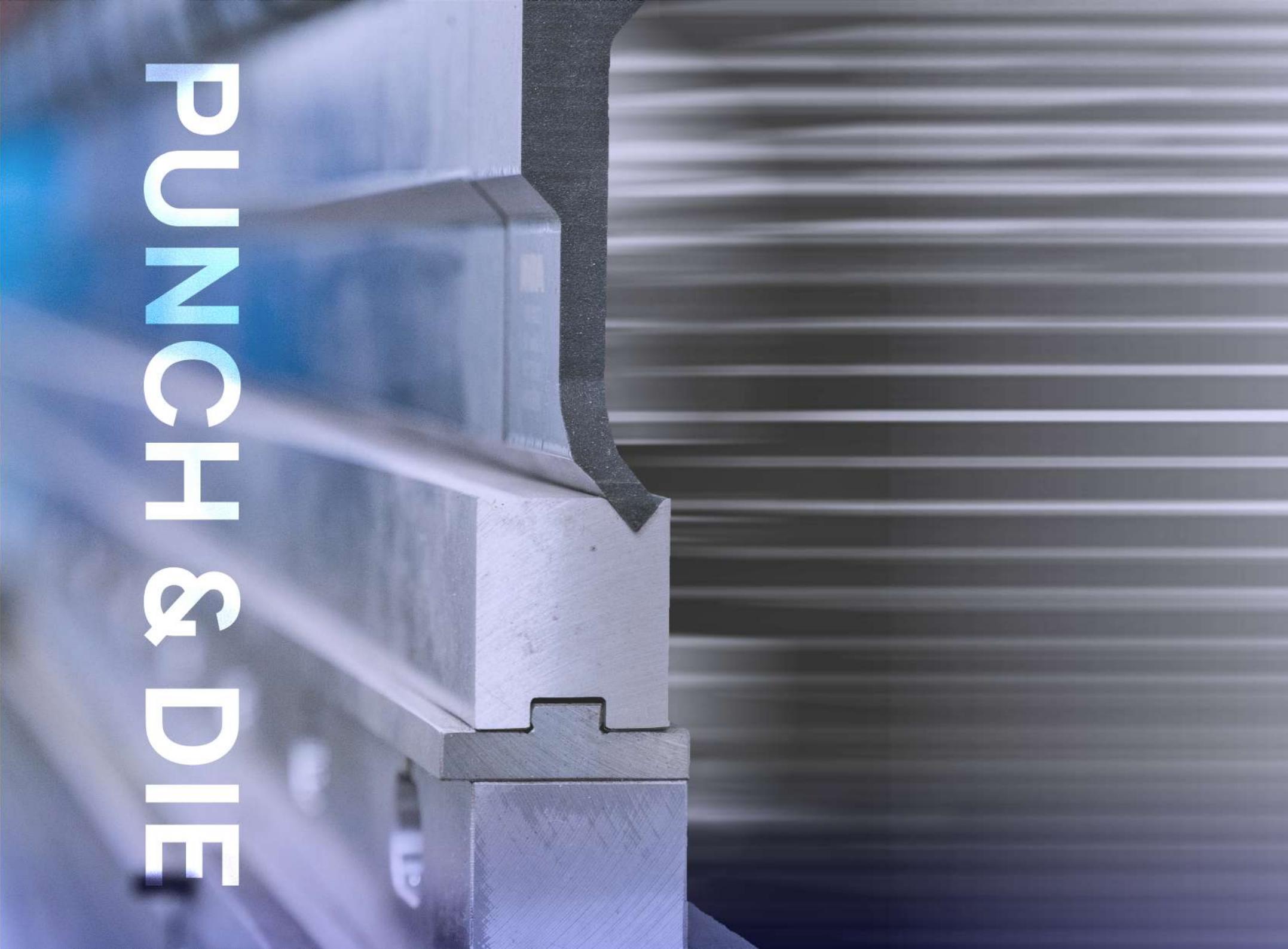
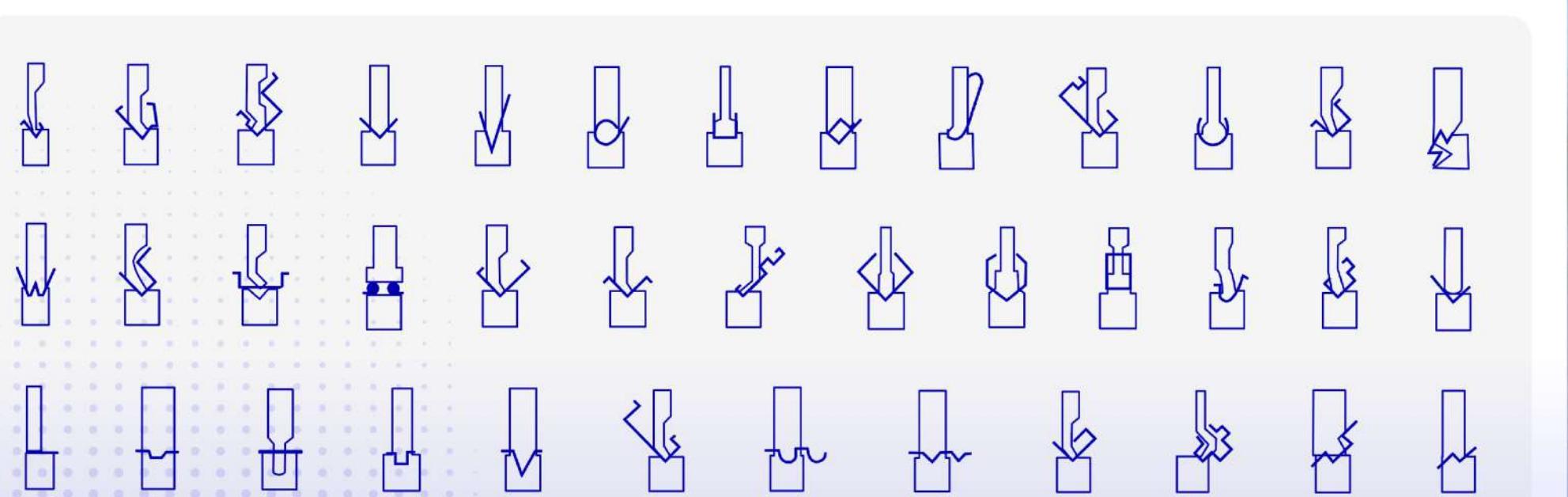
Segmented Toolings

- Modular segments of varying lengths provide customizable assembly for enhanced versatility and application range.
- Facilitates precise bending of box-shaped parts through user-defined segmentation to meet diverse size requirements.
- Supports diverse bending operations, including right-angle, acute-angle, and obtuse-angle bends, using split punches and dies.

Die Drawing for Press Brake



Processing Workpiece Drawing



Specifications

WAD/WADE Series

Model	Bending Force	Bending Length(A)	Oil Tank	Approaching Speed	Ram Speed	Return Speed	X-axis stroke	X-axis Speed	R-axis stroke	R-axis Speed	Column Distance(B)	Throat Depth(D)	Stroke(C)	Daylight(E)	Step/Servo Motor	Weight	Dimensions	
																	Unit	KN
50T/1300	500	1300	130	160	13	160	500	350	200	200	1120	250	150	460	8.4	3.7	1750*1500*2330	
50T/1600	500	1600	130	160	13	160	500	350	200	200	1120	250	150	460	8.4	3.7	1750*1500*2330	
70T/2000	700	2000	130	220	13	160	500	350	200	200	1600	300	150	460	8.4	4.6	2400*1600*2400	
70T/2500	700	2500	130	220	13	160	500	350	200	200	1600	300	150	460	8.4	4.6	2400*1600*2400	
80T/2500	800	2500	170	220	12	145	500	350	200	200	2050	300	150	460	8.4	5.6	3100*1600*2460	
110T/3200	1100	3200	170	220	12	160	500	350	200	200	2700	400	200	480	12.4	7.8	3750*2202*2700	
110T/4000	1100	4000	170	220	12	160	500	350	200	200	3600	400	200	480	12.4	8.9	4600*1800*2700	
110T/4100	1100	4100	170	220	12	160	500	350	200	200	3600	400	200	480	12.4	9.1	4700*1800*2700	
135T/3200	1350	3200	170	220	10	130	500	350	200	200	2700	400	200	480	12.4	9.2	3800*1800*2700	
135T/4000	1350	4000	170	220	10	130	500	350	200	200	3600	400	200	480	12.4	9.9	4600*1800*2700	
135T/4100	1350	4100	170	220	10	130	500	350	200	200	3600	400	200	480	12.4	10.4	4700*1800*2700	
170T/3200	1700	3200	300	160	10	100	500	350	200	200	2700	450	200	480	17.8	10.8	3800*2000*2800	
170T/4000	1700	4000	300	160	10	100	500	350	200	200	3600	450	200	480	17.8	12.1	4600*2000*2800	
170T/4100	1700	4100	300	160	10	100	500	350	200	200	3600	450	200	480	17.8	12.6	4700*2000*2800	
170T/5000	1700	5000	300	160	10	100	500	350	200	200	4000	450	200	480	17.8	14.0	6300*2000*3160	
170T/6000	1700	6000	300	160	10	100	500	350	200	200	4800	450	200	480	17.8	19.4	6300*2000*3160	
220T/3200	2200	3200	300	160	9	105	500	350	200	200	2600	450	200	480	21.4	12.1	3800*2200*2850	
220T/4000	2200	4000	300	160	9	105	500	350	200	200	3600	450	200	480	21.4	14.2	4600*2200*2850	
220T/4100	2200	4100	300	160	9	105	500	350	200	200	3600	450	200	480	21.4	14.6	4700*2200*2850	
220T/5000	2200	5000	300	160	9	105	500	350	200	200	4000	450	200	480	21.4	17.0	5600*2200*2980	
220T/6000	2200	6000	300	160	9	105	500	350	200	200	4800	450	200	480	21.4	20.9	6700*2200*3220	
250T/3200	2500	3200	460	130	9	100	500	350	200	200	2600	450	250	540	21.4	15.8	3800*2200*3120	

Model	Bending Force	Bending Length(A)	Oil Tank	Approaching Speed	Ram Speed	X-axis stroke	X-axis Speed	R-axis stroke	R-axis Speed	Column Distance(B)	Throat Depth(D)	Stroke(C)	Daylight(E)	Step/Servo Motor	Weight	Dimensions	Unit	KN	mm	L	mm/S	mm/S	mm/S	mm	mm/S	mm	mm/S	mm	mm	mm	mm	mm	LxWxH mm
																	Model	Bending Force	Bending Length(A)	Oil Tank	Approaching Speed	Ram Speed	X-axis stroke	X-axis Speed	R-axis stroke	R-axis Speed	Column Distance(B)	Throat Depth(D)	Stroke(C)	Daylight(E)	Step/Servo Motor	Weight	Dimensions
250T/4000	2500	4000	460	130	9	100	500	350	200	200	3100	450	250	540	21.4	17.4	4600*2020*3150																
250T/5000	2500	5000	460	130	9	100	500	350	200	200	3800	450	250	540	21.4	21.5	5600*2150*3150																
250T/6000	2500	6000	460	130	9	100	500	350	200	200	4800	450	250	540	21.4	23.3	6300*2150*3150																
300T/3200	3000	3200	650	120	9	110	500	350	200	200	2600	500	250	570	23.2	18.9	3500*2250*3200																
300T/4000	3000	4000	650	120	9	110	500	350	200	200	3100	500	250	570	23.2	20.9	4300*2050*3400																
300T/5000	3000	5000	650	120	9	110	500	350	200	200	3800	500	250	570	23.2	23.3	5300*2050*3400																
400T/4000	4000	4000	800	80	8	80	980	200	200	40	3100	500	300	610	3.2	10.8	4300*2700*3500																
400T/5000	4000	5000	800	80	8	80	980	200	200	40	3800	500	300	610	3.2	13.4	5300*2700*3500																
400T/6000	4000	6000	800	80	8	80	980	200	200	40	4800	500	300	610	3.2	16.8	6300*2700*3500																
500T/4000	5000	4000	760	80																													