



TOOLING & MACHINERY

COMPLETE METALWORKING SOLUTIONS

(800) 991-4225

www.ahbinc.com

ISO Certified

customerservice@ahbinc.com



Y1-Y2 Model EV Precision Brakes
 (+, - .0004" ram repeatability)



Guillotine Shears

Model AB or AB2 Press Brakes
 (+, - .001" ram repeatability)



4 Column Presses

C-Frame Presses

Straightening Presses

Straight Side Presses

EV Precision Press Brakes

Standard Industrial Corporation
1410 Industrial Park Drive
Clarksdale, MS 38614

United States of America

The next evolution of the Standard Industrial press brake is the precision Y1-Y2 EV Series.

- ✪ +,- .0004" repeatability combined with the uncompromising heavy duty construction we are known for insures you are getting a machine proudly made in the USA.
- ✪ Standard features include our unmatched 5 year parts/ 2 year CNC and 5 year limited onsite labor warranty.
- ✪ Off the shelf, non-proprietary components means no more over-priced, single source buying from one manufacturer.
- ✪ With service all over the United States and multiple parts sources all over the world, you will never again have to wonder where your support is coming from.





EV450-12 Y1-Y2 Precision Brake with optional 11 Axis of gauging, crowning and CNC sheet followers

Proudly & Stubbornly Made ONLY in the United States of America

- ✪ 100% Owned and Operated solely in the United States
- ✪ No off-shore manufacturing facilities, every machine is made in the U.S. by U.S. craftsmen
- ✪ With 50 years experience providing the heaviest, most dependable machines on the planet
- ✪ All components are available off the shelf from local U. S. suppliers

Construction

- ✪ Extremely heavy duty interlocked design, built to last a lifetime
- ✪ Overbuilt for production applications
- ✪ Heavy Duty all steel American made frame
- ✪ Clevis mounted precision cylinders
- ✪ Off the shelf, non-proprietary components available anywhere in the world
- ✪ State of the art synchro manifold hydraulics providing maximum precision as well as the most dependable system available, fully supported by our unmatched 5 year warranty

MADE IN THE U.S.A

We don't hide our warranty, we want everyone to see, especially our competitors

- ✪ A 5 year parts warranty / 2 year CNC warranty
- ✪ A 1 year original manufacturer's dies and die related items including items such as crowning units and sheet assists.
- ✪ A 5 year onsite limited labor warranty: In the event of a problem the customer will be required to help troubleshoot the situation over the phone with the factory. In the event the problem cannot be diagnosed and troubleshooting has been exhausted, Standard Industrial will send in a technician from the factory at no charge to resolve the situation throughout the 5 year warranty period. Once the technician arrives and it is established that the customer performed all the required troubleshooting and all the required machine maintenance has been performed the customer will not be charged for the visit. The customer is required to perform all required preventative maintenance as illustrated in machine manual.
Note: All parts are fob Clarksdale, MS. The customer may be required to return the replaced part to Standard Industrial Corp.

WARRANTY 101

Standard Industrial 5 year parts warranty is based on a 24 hour work day
Which equals:

43,800 Hours of warranty

Compared to a typical 1 year warranty:

We EXCEED them by:

35,040 Hours of warranty

Compared to a 2 year parts warranty based on an 8 hour workday

We EXCEED them by:

37,960 Hours of warranty



MADE IN THE U.S.A

STANDARD FEATURES

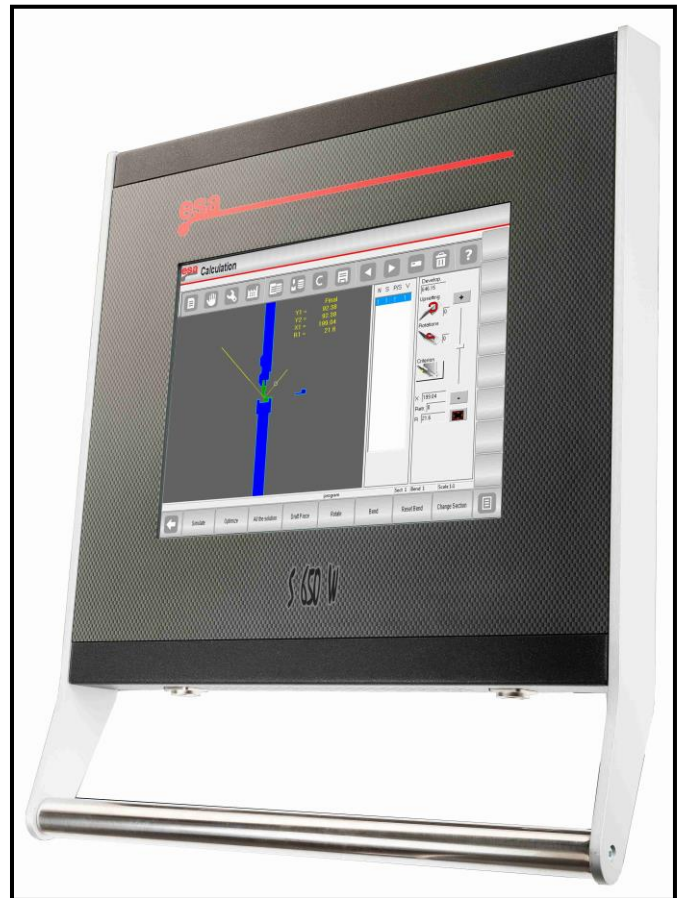
PRECISION

Our model EV press brakes are available from 90 to 3,000 tons up to 24' and with tandem configurations up to 60'. Our Y1-Y2, fully proportional hydraulic system provides $\pm .0004$ " of precision ram to bed level accuracy across the length of the machine.

CONTROLS

650 2D GRAPHICAL CONTROL

- ✦ Remote support/service and diagnostics via ethernet
- ✦ Windows 10 operating system
- ✦ Fully 2D Graphical control w/touchscreen
- ✦ 15" color screen on pendant
- ✦ Crowning correction in degrees (*crowning sold separately*)
- ✦ 2D identification of best bending sequences
- ✦ 2D graphical Offline software for desktop programming
- ✦ 2D collision detection
- ✦ Unlimited job storage via USB & Ethernet
- ✦ X, Y, R, Z1-Z2, X-Prime programmability
- ✦ Readily accepts most tooling files
- ✦ 30,000 hard drive programs
- ✦ Programmable delay & retract at pinch point
- ✦ Direct connection of optional *Mitutoyo* protractor and *Anglecheck* devices to allow process angle measurement
- ✦ Inch/mm conversion
- ✦ Auto return of ram included
- ✦ Low speed retract included
- ✦ Dwell/decompression included
- ✦ Onsite training at customer's facility



PROGRAMMABLE CNC RAM TILT

- ✦ Complete programmable control of the tilt of the ram via the 650 CNC.
- ✦ Maximum ram tilt of $\pm 3/4''$ of centerline
- ✦ Able to save individual ram tilt settings in each job

X AXIS SERVO STANDARD GAUGING SYSTEM

- ✦ X servo axis
- ✦ 29" X axis travel
- ✦ X axis
 - Speed: 15" per second
 - Accuracy: $\pm .003''$
- ✦ Manual R + Manual Z
- ✦ Upgradeable to R, Z1-Z2, X-Prime, X1-X2, R1-R2 axes
- ✦ Upgradeable to 39" travel (longer travels are available)



STANDARD FEATURES

UNLIMITED PARTS AVAILABILITY

All Standard Industrial machines come standard with off the shelf components that are available everywhere in North America. We use no proprietary components that force you to come back to us for parts. In your manual you will have the original manufacturer's name and part number of each component.

WARRANTY

5 Year Parts + 5 Year Limited Onsite Labor + 2 Year CNC/PLC Warranty. This warranty includes a 5 year limited onsite labor warranty and a 2 year CNC/PLC Warranty. Unlimited lifetime telephone support is included at no charge. If during the first 5 years you have an unresolved issue and telephone troubleshooting has been fully exhausted, we will provide onsite labor to take care of the problem. This warranty is based on 3 shifts a day and 24 hour days. Every machine is also available with our optional 7 Year Extended Warranty that extends the parts warranty by 2 years. NO OTHER MANUFACTURER MATCHES OUR WARRANTY.

MANUAL OR OPTIONAL HYDRAULIC RAM CLAMPING

American or New Standard Style Ram Clamping. Extremely heavy duty, spring loaded die clamps for easy, fast die change. Accepts all American style standard and precision ground tooling. All press brakes can be ordered optionally with Wila (or equiv.) style quick-change powered ram clamping systems and European clamping systems in lieu of manual system.

PROGRAMMABLE TONNAGE

The model EV press brake comes standard with programmable tonnage via the CNC that can be programmed for individual jobs.

EXTREMELY HEAVY DUTY BED CONSTRUCTION

Includes American Style Die Groove as standard. Incredibly heavy duty lower beams are essential to any well-made press brake to provide the best deflection possible. CNC crowning units are available optionally.

SAFETY

The Hand/Foot safety sequence with footswitch is an O.S.H.A. approved 2 hand pedestal control with 3 position footswitch that comes standard on all press brakes. Available optionally are light curtains, Keyence scanning systems and AKAS laser systems. As well as interlocking, physical barriers across back of machine if needed.

ONSITE TRAINING

All EV press brakes comes standard with onsite training at customer's facility. Once the machine is fully installed by your riggers, our experienced technicians arrive at your facility to fully train your operators on operation, preventative maintenance and answer an and all questions about the equipment.

CNC CONTROLLED PRECISION RAM TO BED LEVEL ADJUSTMENT

All EV press brakes have $\pm .0004$ " ram repeatability and full Y1-Y2 CNC controlled programmable ram tilt of $\pm .750$ " of the centerline and more ram tilt is available as an option. All EV press brakes come standard with the 2D graphical 650 control with 15" color touchscreen for state of the art precision

T-SLOT ACROSS FRONT EDGE OF BED

5/8" t-slot across front edge of bed to allow work support arms to slide left to right across full length.

24" T-SLOT SUPPORT ARMS

Heavy duty Work support, bolt-down, arms with precision machined t-slotted bars to place gravity or other stops in for front gauging. Available optionally with embedded scale. These arms slide left to right in included t-slot across front of bed.



STANDARD FEATURES

MANIFOLD CENTRALIZED LUBE SYSTEM

Each brake is equipped with our efficient manifold lube system that brings all lubrication points to one easily accessible area. Automatic lubrication available optionally with warning light and auto-shut-off

AUTO RETURN OF RAM

Normal operation of ram requires operator to release footswitch to allow ram to return to upper limit. This option makes the ram return automatically even if footswitch is still depressed.

DECOMPRESSION SYSTEM

REQUIRED FOR BOTTOMING APPLICATIONS—allows oil pressure to bleed off to reduce shock to hydraulic system.

LOW SPEED RETRACT

Ram returns in slow press speed for handling of large work pieces.

SERVICE

We have service capability everywhere in the contiguous United States which can only be expected for a U.S. made machine. We also supply free telephone support for the lifetime of the machine. You talk directly to the people that actually made your machine.



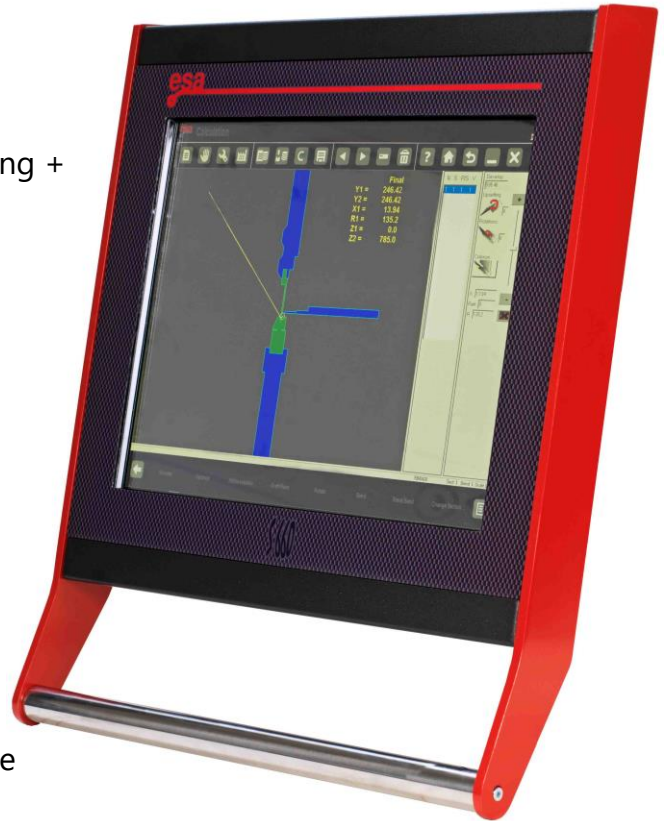
OPTIONS FOR EV PRESS BRAKES

CNC CONTROL UPGRADE

660PC WITH FULL 2D/3D GRAPHICS

(RADAN RADBEND fully compatible) also available for complete 3D graphics and modeling and is required for X Prime axis as well as Z1-Z2+X1-X2+R1-R2 axes.

- ✦ Fully 2D/3D Graphical touchscreen control with graphical work-pieces and tooling
- ✦ 2D/3D identification of best bending sequences
- ✦ 2D collision detection
- ✦ 2D/3D graphical Offline software for desktop programming + unlimited job storage via (2) USB ports and (2) RS232 ports + Ethernet
- ✦ 19" TFT color screen on a pendant
- ✦ Programmable tonnage
- ✦ X, Y, R, Z1-Z2, X-Prime programmability
- ✦ Controls CNC crowning
- ✦ Embedded Windows 10 Operating System
- ✦ 20 gigabytes hard drive memory
- ✦ Readily accepts most tooling files
- ✦ Laser system compatible
- ✦ Programmable delay & retract at pinch point
- ✦ Inch/mm conversion
- ✦ 3D On screen part viewing
- ✦ Capable of full 3D capability with Autopol/Radan software



OPTIONAL RADAN RADBEND SOFTWARE

OFFLINE PROGRAMMING & SIMULATION FOR PRESS BRAKES

Radbend from RADAN is the comprehensive offline programming solution for press brakes. Completely integrated with RADAN3D it also provides a full 3D simulation of the bending process.

- Automatic bend sequencing
- Automated tool selection
- Tool setup optimization
- Automatic finger stop positioning
- Customizable reports
- Support for lifting aids and angle measurement systems
- Can be integrated with RADAN3D

(FOR MORE INFORMATION www.radan.com)

SERVO GAUGING UPGRADES

OPTIONAL PRECISION SERVO GAUGES FROM 2-6 AXIS

NOTE: All EV Press brakes come standard with 29" travel, X axis servo gauging system

Backgauges are low profile with the fingers being the tallest component for easier material positioning

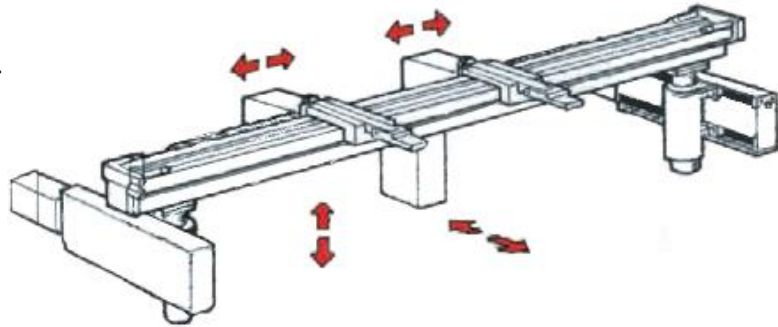
X + R (2 axis)

- ⊛ 8" Programmable R Axis
- ⊛ Manual Z full length of gauge bar

OR

X + R + Z1-Z2 (4 axis)

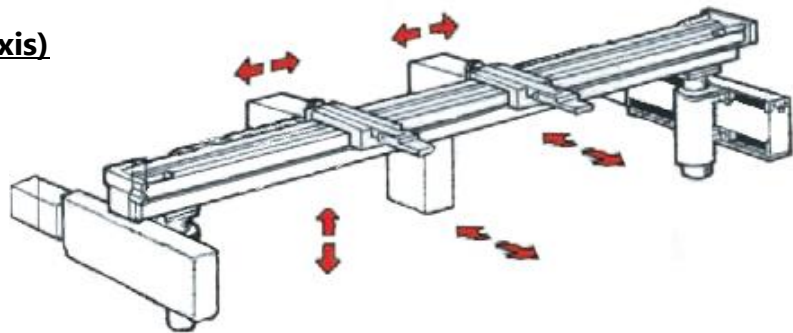
- ⊛ Fully independent Z1-Z2 programmable actuation across the gauge bar



Backgauges are covered by our 5 year parts warranty with off the shelf readily available components

X + R + Z1-Z2 + X-Prime (5 axis)

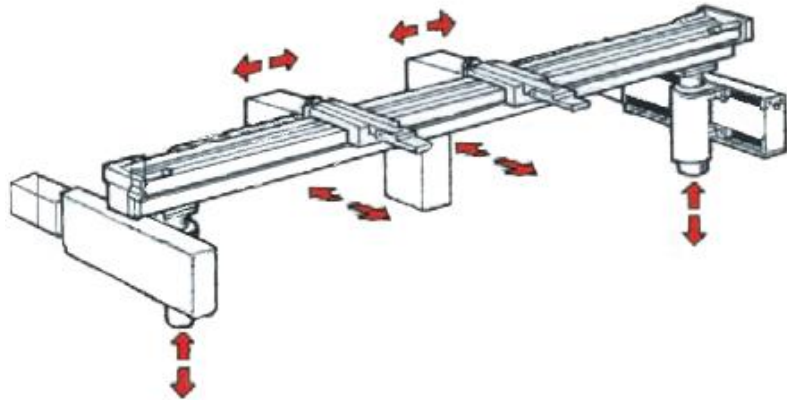
- ⊛ One finger includes a programmable adjustment of +/- 3" for tapered bends



Backgauges are available for 90 to 3,000 ton press brakes in 29" or 39" travel

Z1-Z2 + R1-R2 + X1-X2 (6 axis)

- ⊗ Fully programmable and independent actuation of
Z1-Z2 (left to right)
X1-X2 (front to back)
R1-R2 (up and down)



Backgauges equipped with precision machined fingers with multiple gauging points for longer part forming

ADDITIONAL BACKGAUGE OPTIONS

ADDITIONAL FINGERS

To mount on gauge bar for additional points of gauging

39" TRAVEL IN LIEU OF 29" TRAVEL GAUGING SYSTEM

(custom gauge travel lengths available)

SUPPORT ARMS, QUICK-RELEASE SYSTEMS & SHEET FOLLOWERS

GRAVITY STOPS FOR T-SLOT SUPPORT ARMS

Precision machined stops for t-slots that allow work piece to slide over the top of slide but not backward.

36" OR 48" HEAVY DUTY T-SLOT SUPPORT ARMS

Work support, bolt-down, arms with precision machined t-slotted bars to place gravity or other stops in for front gauging. Available with embedded scale. NOTE: Each brake comes standard with (2) non-t-slotted work support arms.

QUICK-CHANGE LINEAR WORK SUPPORT SYSTEM

Heavy duty, quick-release style work support arms equipped with smooth transition rollers and precision machined ways. Vertical and horizontal adjustments allow precision control for rapid set-up.



CNC SHEET ASSIST SUPPORT SYSTEMS

Controlled by 650 controller, these heavy duty material assists rise and lower with the ram movement. Portable and precise, the circular arc of the arms follows the part being formed. This system not only provides your operator with a level of assistance but the quality of bend will benefit from the following action. Parking option also available.

Vertical adjustment
Horizontal adjustment
Mechanical accuracy
Maximum inclination
Holding capacity
Portable, precise and very heavy duty
Plate support extending from 35" to 58"

2.34"
2.34" on the bending line
+,- 2 degrees
0-60 degrees
330 lbs. each

WILA CROWNING, TOOLING, CLAMPING AND ACCESSORIES

State of the art tooling solutions with uncompromised quality

CROWNING FOR THE BED

For the most precision requirements, Wila crowning is unmatched in dependability and quality.

- ✦ Manual & Hand cranks with readers for precision adjustment in seconds
- ✦ CNC crowning with 650 or 660 controls is available with optional clamps for 4 way dies
- ✦ Adjustment screws every 8" for variances in bed and fine adjustment
- ✦ Built in clamping bars which automatically center and align single v dies
- ✦ Always provides an extremely consistent bending angle



Manual Crowning



CNC Crowning

PRECISION GROUND TOOLING

Specifically designed to provide the best quality tooling as well as the fastest set up times.

AMERICAN AND NEW STANDARD PRECISION GROUND TOOLING

- ✦ Precision ground to +/- .0004" & hardened at wear points to Rockwell 60c
- ✦ Segmented to allow for any length bending
- ✦ American precision tooling can fit any American style tool holder
- ✦ Push button "Safety-Click" technology allows operator to quickly remove any section of segmented tooling for fastest set up.





WILA RAM AND BED CLAMPING SYSTEMS

- ✦ Extremely fast press brake tooling changes
- ✦ Maximum control of vertical tolerances
- ✦ Extremely accurate clamping, positioning & alignment
- ✦ Individual clamping pins for each tool segment for superior clamping force.
- ✦ Vertical & horizontal tool loading & unloading for maximum speed and safety.
- ✦ All load bearing and clamping surfaces are fully CNC-Dee-phardened® (ca. 56 HRC) for maximum durability
- ✦ Capable of clamping and positioning punch segments as small as .394" in length
- ✦ Suitable for both head and shoulder-loaded tools



PRESS BRAKE PRODUCTIVITY CABINET

- ✦ For New Standard and American Style Punches and Dies
- ✦ High load bearing capacity up to 441 lbs. per drawer
- ✦ Variable layout and adjustable shelf distances
- ✦ Features anti-tilt safety device
- ✦ Height 35"



Contact us today for other Wila products and accessories

CONVENTIONAL TOOLING

All Standard Industrial press brakes are available with conventional (non-precision ground) tooling including single V, 4 way, large adjustable dies and all other tooling packages.

ROBOTIC SYSTEMS INTERFACE

Integration of robotics into 650/660 control.

TANDEM IINTEGRATION

Linking of multiple machines while being actuated via one CNC control on each machine. Machines can be operated individually or as one.

SAFETY FEATURES & CONTROLS

LIGHT CURTAIN SAFETY BARRIER

Infra-red light curtain across the front of press brake coupled with physical side barriers protects the operator. Tapeswitch and Merlin curtains are available as well as customer preference.

LASER GUARDING SYSTEMS

State of the art laser systems wrap around punch to allow operator closer proximity to pinch-point and still be OSHA approved. Not recommended for punching/bottoming applications.

INTERLOCKING PHYSICAL BARRIERS/CAGES

Heavy duty, enclosed physical barriers do not allow access to rear of press brake. Interlocking gates shut machine down when opened.

COMPLIANCE OPTIONS

U.L., CSA and ZED compliance are available optionally. As standard, all machines are U.L. 5088 compliant. Contact factory for other compliance options.

ADDITIONAL PEDESTAL CONTROL & FOOTSWITCH

Recommended for applications requiring a second operator

RAM & BED MODIFICATIONS

Customization to Fit Your Needs

EXTRA OPEN HEIGHT

EXTRA STROKE LENGTH

EXTRA THROAT DEPTH

HORN EXTENSIONS

Lengthens bed and ram length without lengthening distance between housings.

We welcome requests for other modifications. Just let us know what you need.

7 YEAR WARRANTY SERVICE

This package includes:

- ✪ A 7 year parts warranty in lieu of standard 5 year parts warranty
- ✪ A 2 year PLC and CNC warranty
- ✪ A 5 year onsite limited labor warranty: In the event of a problem the customer will be required to help troubleshoot over the phone. If the problem cannot be diagnosed and troubleshooting has been exhausted, Standard will send in a technician at no charge to resolve the situation during the entire 5 year warranty.

AUTOMATIC LUBRICATION SYSTEM

Air operated, timed system that automatically brings grease to all lubrication points (except backgauge screws). A great option for multiple shift operations. Manifold centralized lubrication system is standard on all brakes. Includes warning light when grease is low and auto-shut-off when empty.

HIGH SPEED HYDRAULICS PACKAGES

All press brakes are available with high speed packages to increase productivity. Each system is equipped with oil cooler to maintain proper temperature and increase system longevity. Contact the factory for typical systems or customized systems per your special needs.



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