



**ACCELL H**

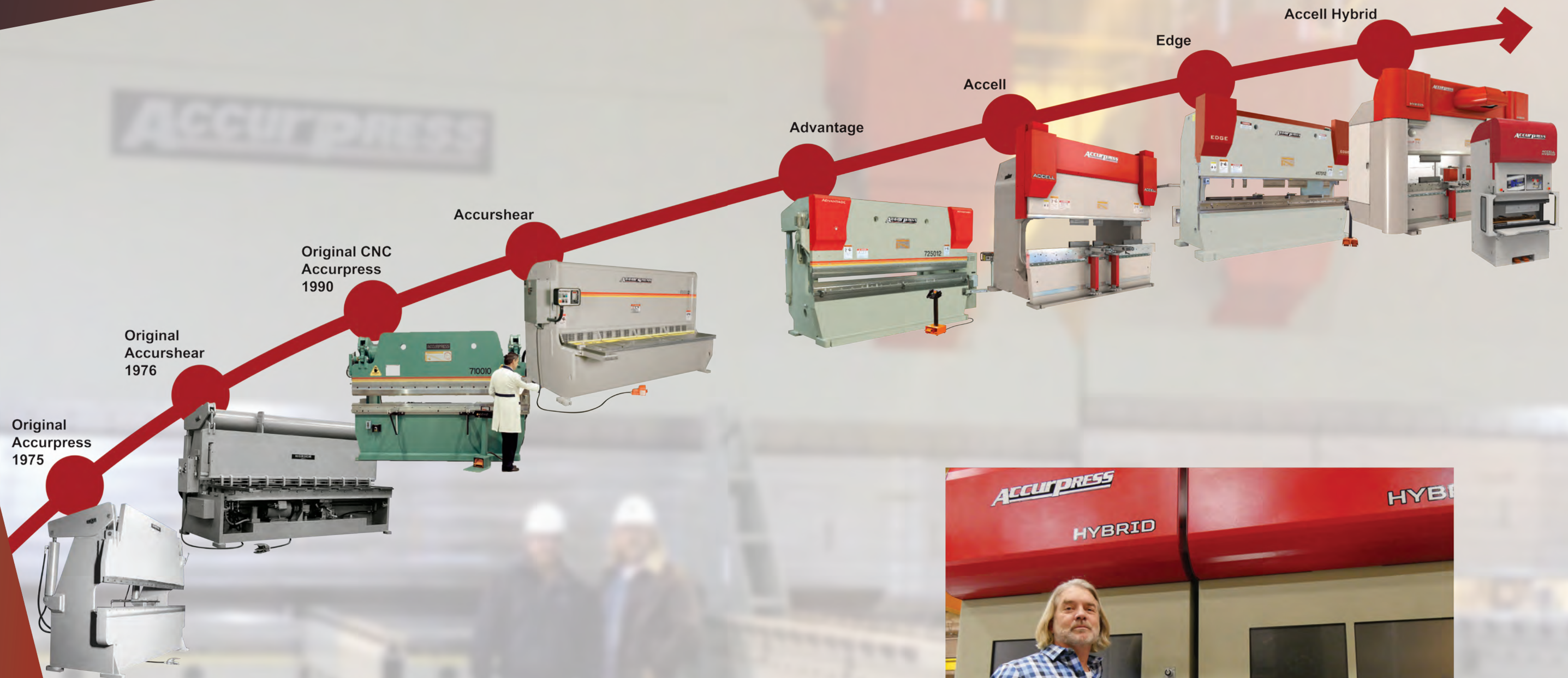
HYBRID TECHNOLOGY



**Accurpress**

[www.accurpress.com](http://www.accurpress.com)





## ABOUT US

With over 40 years in the marketplace, Accurpress continues to build on its tested history to manufacture an innovative and complete line of press brakes and shears for every bending and shearing application. Proudly North American made, Accurpress leads the way with high tonnage machines, revolutionary pole bending technologies, tandem machines and robot automation. With over 19,000 machines sold to thousands of satisfied customers, Accurpress continues to build press brakes and shears to meet the demands of today's manufacturing environments.



**Steve Hilton**  
President

"While 40 years has brought huge changes to the machine tool industry, all of us at Accurpress continue to stand firm on the original foundation of quality that the company was built on. Every Accurpress machine, including the one you'll buy, is made with 100% of our best efforts. Our business depends on it and so does yours."



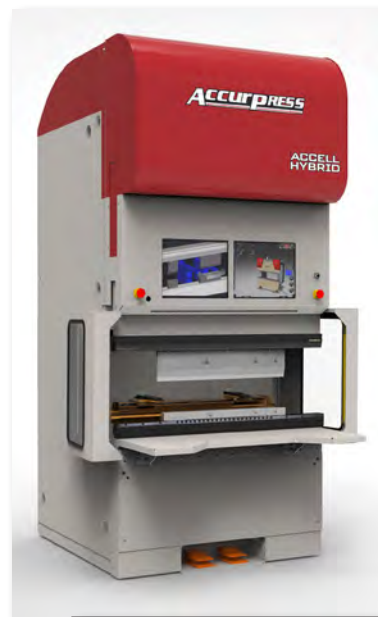
# THE ACCELL LINEUP

A Complete Line of Y1/Y2 Machines

## ACCELL H YBRID TECHNOLOGY



**Accell H 190 Ton**



**Accell H 60 Ton**

### Available from 60 - 190 Tons

The **Accell H** exceeds performance expectations with its high speed forming and ability to tackle any application challenge. With advanced motion technologies and the most flexible features and options, the Accell H is the ultimate in creating complex parts.

## ACCELL E

THE COMPETITIVE EDGE



**Accell E**

**Accell U**



### Available from 75 - 500 Tons

The **Accell E** is the complete package. With a high-quality build, an impressive number of features and options, competitive pricing and advanced controls, this is your first choice in Y1/Y2 machine technology.

Note: **Accell U** is an upgrade to the Accell E

Reference **ACCELL E BROCHURE** for complete list of features and options

## ACCELL HT

HIGH TONNAGE



### Available from 650 - 3000 Tons

The **Accell HT** features rugged builds, oversized components and powerful gauging devices. These machines are tough and durable and will stand up to any forming challenge. If you want to bend something big, we've got you covered.

Reference **ACCELL HT BROCHURE** for complete list of features and options

# THE ACCELL H LINEUP



Accell H 120-190 Ton



Accell H 60 Ton



Accell HU (Upgrade Package)  
120-190 Ton Model

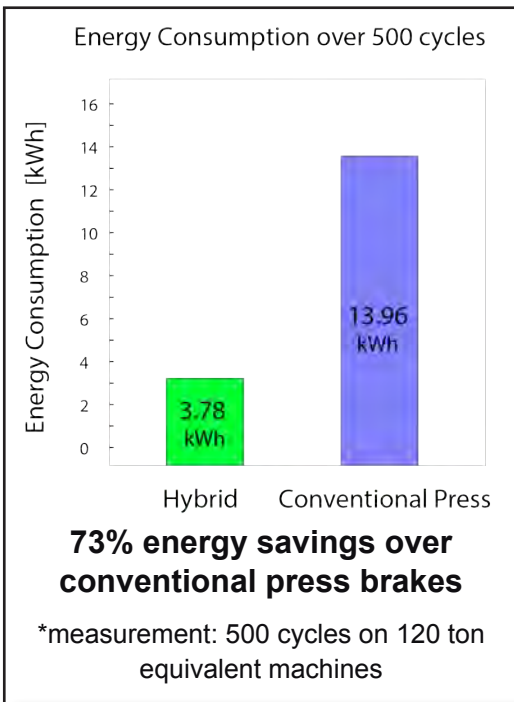


# HYBRID Technology

## Choose an Accurpress HYBRID Machine

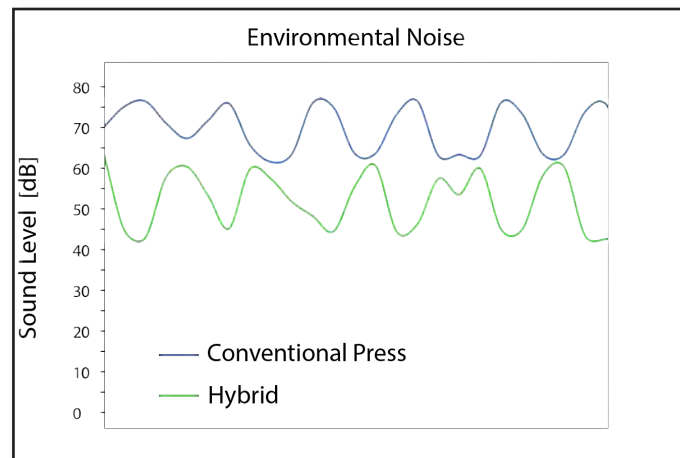
### 1 HIGH ENERGY EFFICIENCY

The Accurpress Hybrid machines use a combination of hydraulic and Servo Drive systems to control ram motion resulting in dramatically reduced energy costs. There is no hydraulic pump, meaning no energy consumption when the machine is at idle and the counterbalanced return stroke requires almost no energy to raise the ram.



### 2 LOW NOISE

The Hybrid is the quietest Accurpress machine available. With no hydraulic pump, shop noise is reduced significantly.



### 3 FIESSLER SAFETY SYSTEMS



The Fessler AKAS 3F laser guarding system comes standard on the 120 and 190 ton Hybrid models and protects the operator from pinch point hazard of closing tooling. The 60 ton Hybrid model comes standard with the Fessler light curtain safety system and the laser guarding system can be added as an option.



### 4 ULTIMATE IN SPEED AND ACCURACY

Ram repeat and positional accuracies are at an amazing +/- 0.0002 and ram approach and return speeds at 540 IPM make this the fastest machine in the Accurpress lineup.

### 5 STREAMLINED DESIGN

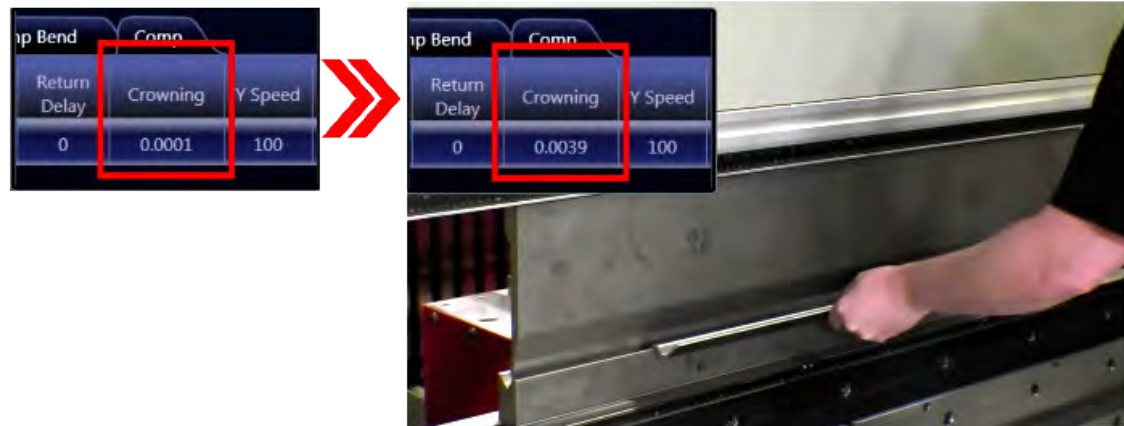
Accurpress Hybrid machines are easy to service and maintain. The oil reservoir contains only a couple of gallons of Hydraulic oil with a 7000 hour change interval. Also, there is no external plumbing so the possibility of leaks is greatly reduced.

# MATERIAL COMPENSATION

## TEACH CROWNING

Theoretical Crowning value BEFORE forming.

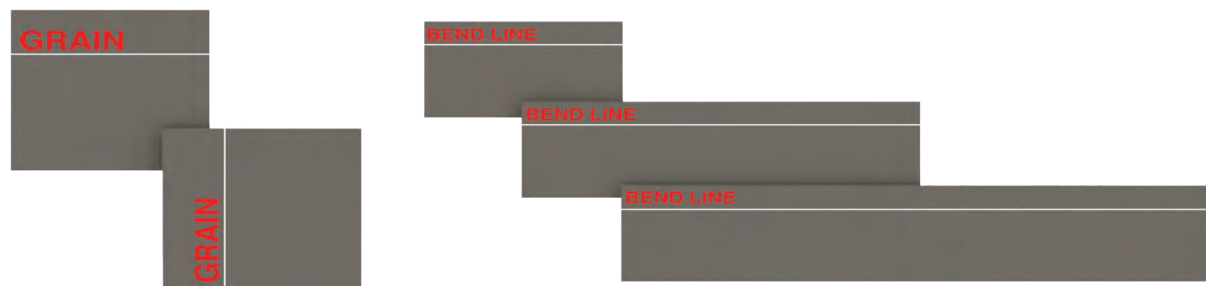
Real Time Crowning Adjustment AFTER forming.



The Teach Crowning feature eliminates the need to manually adjust crowning values. A crowning sensor measures machine deflection in real-time and automatically updates the Vision Program.

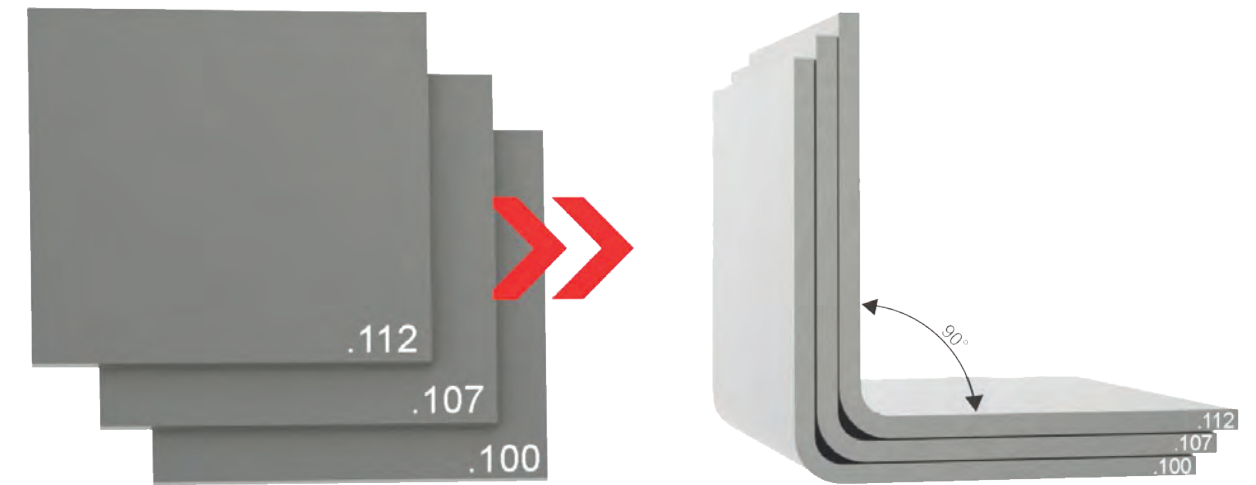
When additional Crowning is needed, simply depress the foot pedal a second time to form the part using the corrected crowning value.

## PRESSURE COMPENSATION



The Accell Hybrid senses variations in pressure between bending with or against the material grain and senses different bend line lengths. Variations can be automatically compensated for, resulting in consistent angle performance. This feature is ideal for material grain, bend lines and tensile strength variances.

## MATERIAL THICKNESS SENSING SYSTEM:



During the bending process, the Accell measures variations and inconsistencies in material thickness and then self-adjusts to maintain accurate angle performance.

The Material Thickness Sensing system also has a built-in safety feature when material thickness is detected outside of an acceptable range. In this case, when significant differences in material are detected, the ram will stop downward motion and return stately to the top of the stroke.





# ACCELL H

## 60 Ton Model - Hybrid Technology

The Accell H 60 ton machine is all about features. This smart and accessible machine has so much packed into the frame that whatever forming challenge you have in mind, it has got you covered. Everything from the revolutionary ALLY backgauge, optional dual screens and intelligent design makes this machine an obvious choice for forming smaller parts.

### FEATURING:

#### RUGGED BUILD

At 13,500 lbs., our 60 ton Hybrid is the heaviest single cylinder machine on the market, making it the toughest and most durable machine of its kind.

#### COMPACT DESIGN

Easily relocate the machine with a forklift!

#### 16" THROAT

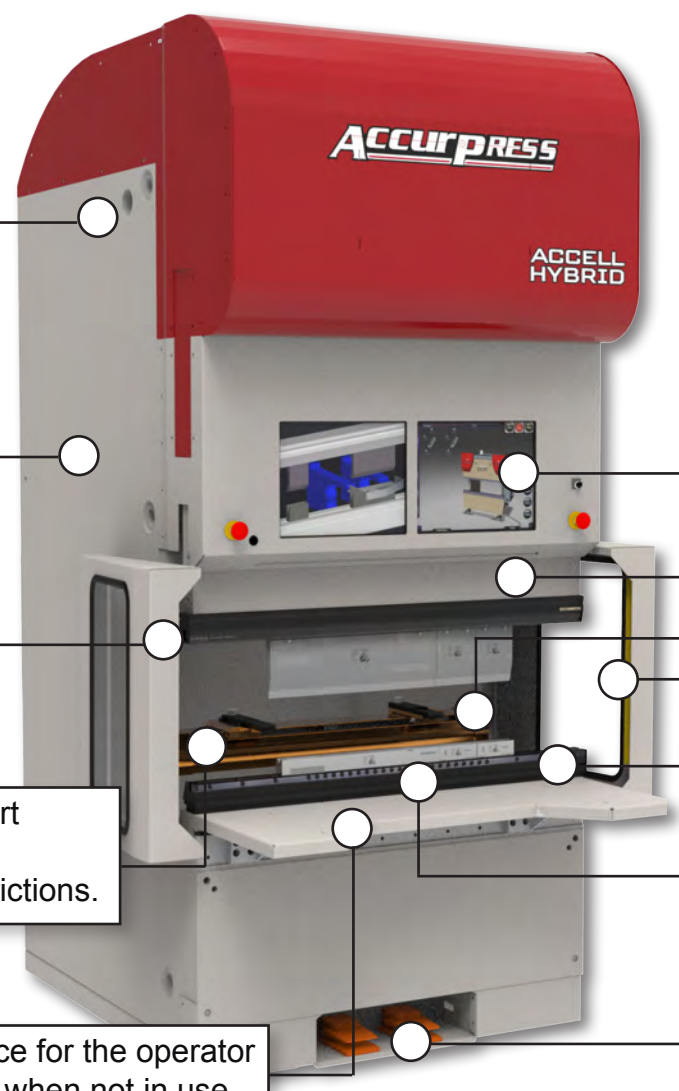
A large side depth increases flexibility with forming larger parts.

#### OFF CENTER BENDING

The Hybrids advanced hydraulics allow for part forming (reduced tonnage) off the ends of the machine, removing "center only" forming restrictions.

#### WORK TABLE

The work table provides a useful working space for the operator during forming. The table can be folded down when not in use.



### MACHINE CONTROLS

The powerful and easy to use Vision Control comes standard. Add an optional extra screen for convenient file management and display of PDF part drawings. (Note: Moses Control upgrade for 60 ton comes standard with dual screens).

#### WILA CLAMPING

All Hybrid models come standard with either Wila NSCL1 New Standard Pro or ASCL1 American ram clamping systems.

#### ALLY 4 AXIS BACKGAUGE

Specifically designed for the 60 ton machine, the 4 axis CNC backgauge (X, R, Z1/Z2) comes standard with three finger rests and full range of motion across all axes. (Optional 5 and 7 axis models available)

#### LIGHT CURTAIN RAM INITIATION/GUARDING

Ram motion can be initiated by breaking the light curtain beam rather than using the foot pedal. This is great for increasing production times and reducing operator fatigue.

#### MATERIAL COMPENSATION

Material Thickness Sensing, Teach Crowning and Pressure Compensation all provide real time positioning adjustments based on material variance.

#### ACCURPRESS BOTTOM DIE HOLDER

Optional localized adjusters and clamping bars in lieu of set screws.

#### RECESSED FOOT PEDAL

Foot pedal can be extended or recessed for preferred use.

# ACCELL H

## 120-190 Ton Models - Hybrid Technology

The Accell H 120 - 190 ton models combine power and precision into a sleek design. Using a combination of Electric and Hydraulic Drive Systems, these hybrid machines are highly efficient, impressively quiet and utilize the latest in Accurpress Motion Technologies.

### FEATURING:

**4 POINT RAM GUIDE WAYS**  
The Four Point Ram Guiding System allows for stable ram movement even with larger open heights and stroke lengths. The ram moves freely up and down via 4 hardened Roller Ways.

**FISSLER LASER GUARDING**  
The Fiessler system transmits 3 lasers across the tooling area and monitors any interference as the parts are formed. In the event of an unplanned obstruction in the laser area, the ram is immediately stopped, protecting the operator.

**16" THROAT DEPTH**  
A large side depth increases flexibility with forming larger parts.

**REAR SAFETY DOOR**  
The backgauge area is completely protected via sliding doors and safety interlock switch.

**OFF CENTER FORMING**  
The Hybrids advanced hydraulics allow for part forming (reduced tonnage) off the ends of the machine, removing "center only" forming restrictions.

### VISION CONTROL

The powerful and easy to use Vision Control comes standard with all Accell Hybrid models. Optional MOSES upgrade is available.

### CONTROL HEAD WORK STATION

The Vision control display has a convenient area for a keyboard, mouse and even your coffee mug!

### WILA CLAMPING

All Hybrid models come standard with either Wila NSCL1 New Standard Pro or ASCL1 American ram clamping systems.

### CNC ACCURCROWN DIE HOLDER

The Accurcrown system provides a uniform crown via precision wedges that compensate for machine deflection. This is fully integrated into Vision and the Material Compensation System.

### OPTIONAL PRECISION SHEET SUPPORTS

The bed of the machine is prepared for optional Precision Sheet Supports. This allows for easy installation of these support fixtures at any point.

### MATERIAL COMPENSATION SYSTEM

Material Thickness Sensing, Teach Crowning and Pressure Compensation all provide real time positioning adjustments based on material variance.



# ACCELL HU

## Accell HU Hybrid Upgrade Package

The Accell H 120 -190 ton models can be upgraded to The Accell HU Package. All of the features of the Accell H model are included with the following additions:

### FEATURING:

#### 4 POINT RAM GUIDE WAYS

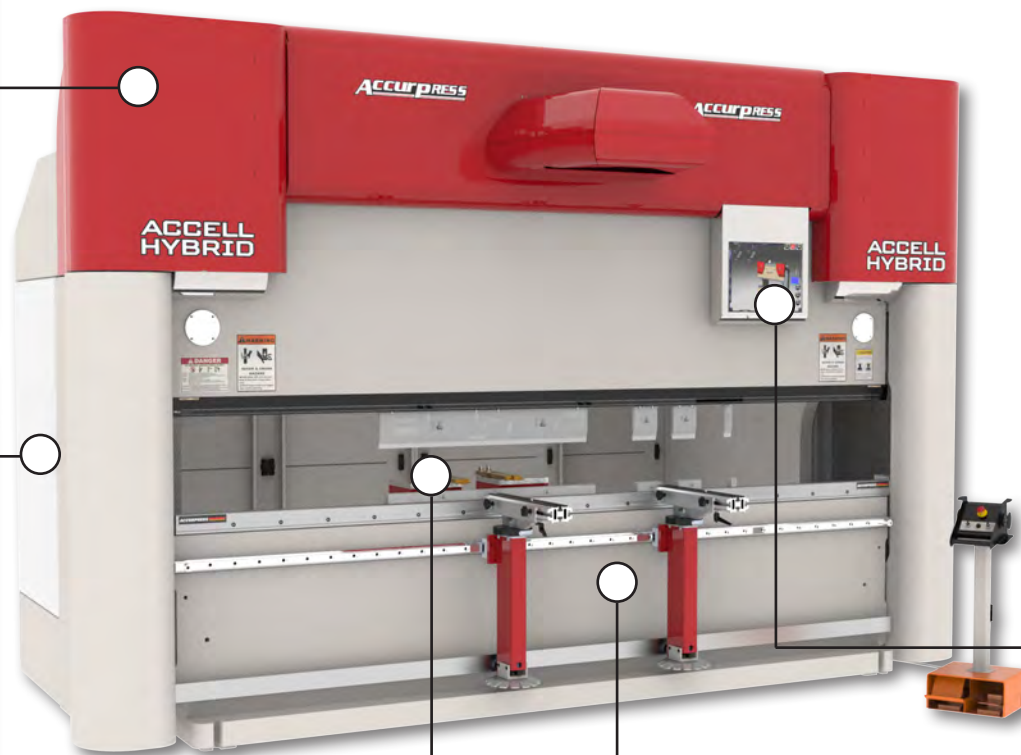
The Four Point Ram Guiding System allows for stable ram movement even with larger open heights and stroke lengths. The ram moves freely up and down via 4 hardened Roller Ways.

#### UPGRADED COVERS

Quality sheet metal panels protect the safety guarding system and give the Accell HU a signature new look. These panels swing open to allow for easy side loading of tooling and access to the safety system.

#### SUPREME BACKGAUGE

Combining speed with rigidity, the Supreme Backgauge offers independent 6- axis motion, notched fingers for offset and corner gauging and the highest heavy load capacity outside of the Titan Backgauge.



#### VISION CONTROL DROP DOWN

The Vision control screen can be lowered down for programming use, then raised up and out of the way during forming. Screen up and down motion is controlled via a key selector switch on the Pedestal Control.

#### PRECISION SHEET SUPPORTS

Precision Sheets Supports are fully adjustable for different tooling heights and thicknesses. The bottom foot disc allows the operator to easily adjust the height of the support arms while the top support piece can be adjusted front to back depending on the desired foot position. These 24" supports are mounted on a linear rail for smooth and accurate positioning left to right on the press brake and also feature angle gauging, squaring bars and disappearing stops.

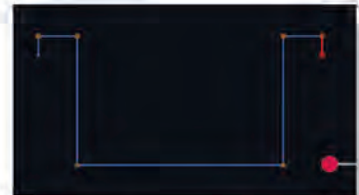


**MACHINE CONTROLS**

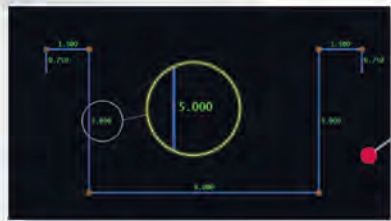
The Vision Control is a ground-breaking and revolutionary press brake control software system. Vision streamlines and simplifies the bending process, giving you full control over every aspect of metal forming.

**FEATURES:**

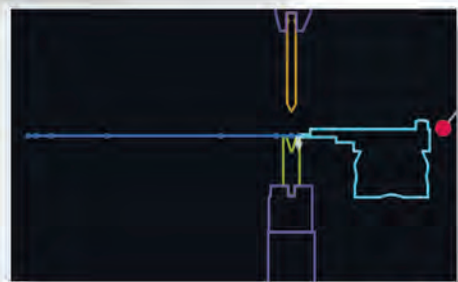
- Touch screen control
- Automatic bend sequencing
- Automatic tool selection
- Quick tooling change
- Complete control over all axis
- Simple bump bending
- Special bend support such as offset, hemming and pre-bends
- Easily program custom tools



Sketch part profile using touchscreen

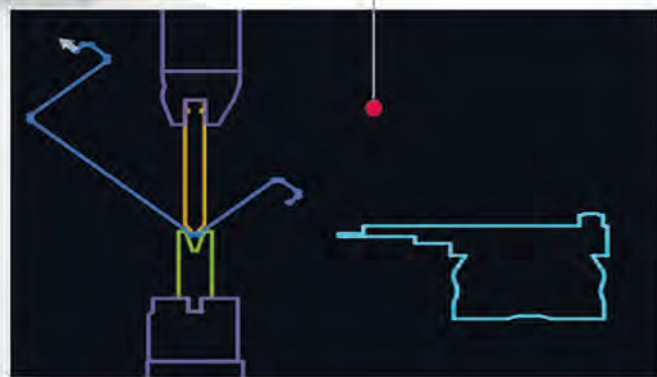


Easily add dimensions and angles



Confirm bend sequence and tooling

Begin forming

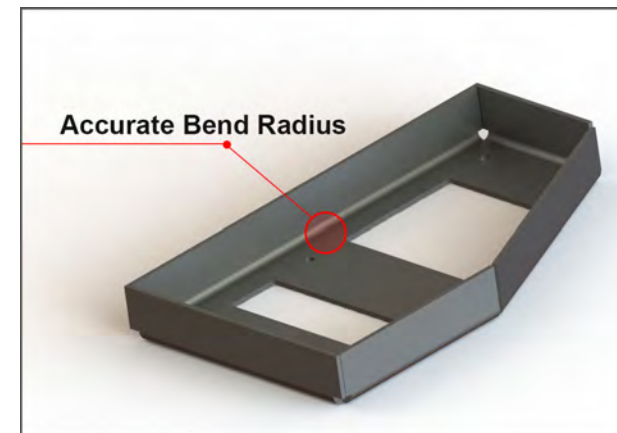


**VISION 3D**

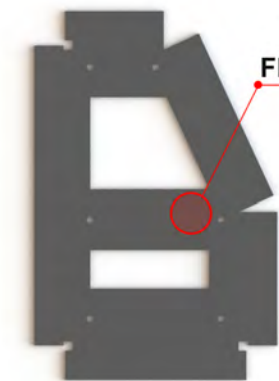
Working with Solidworks or Inventor, Vision 3D lets you import part models into Vision for full 3D programming, bend visualization and dynamic viewing during the forming process.

**FEATURES:**

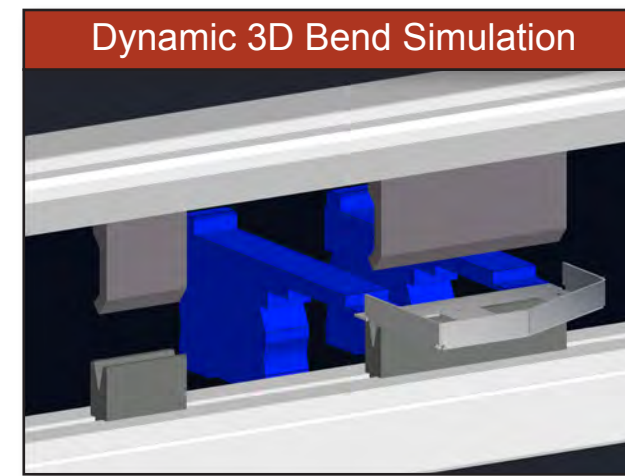
**USE VISION RIGHT IN YOUR PART MODELS**



Accurate Bend Radius



Accurate Flat Patterns





## MOSES CONTROL

This groundbreaking Vision Control Upgrade gives the operator the ability to edit and run programs in a full 3D visual environment. Bend sequencing and part orientation are fully animated and projected to the ram as the part is formed. Edits can be made to the program by using the ram as a touchscreen!



### 60 Ton Model

On the 60 ton model, dual touch screen monitors are utilized to provide 3D simulation and easy program edits for the operator.

Note: Moses control upgrade for the 60 ton automatically includes a second screen.



### 120-190 Ton Models

On the 120 and 190 ton models, a digital HD projector is installed on the top cover of the machine in a fully protected sheet metal shroud. 3D bend simulation visuals are projected onto the ram and allow the operator to make edits and change views by using the ram itself as the touchscreen.

## LIGHT CURTAIN Ram Motion Initiation



**This feature is standard on all 60 ton models and can be added as an option for the 120 -190 ton models.**

The Accurpress Hybrid has a feature that allows for ram motion to be initiated by interrupting the light curtain beam. This is a great feature that speeds up part forming production while also reducing operator fatigue by allowing the operator to move the ram without using the foot pedal.

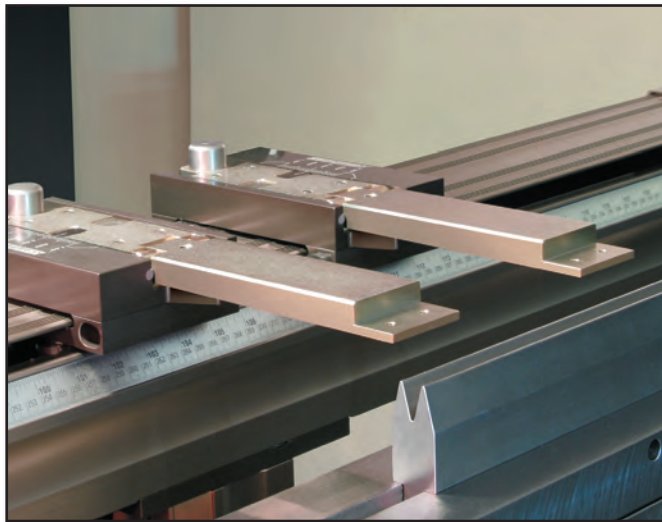


# ACCELL H

## BACKGAUGE OPTIONS

### PREMIUM BACKGAUGE

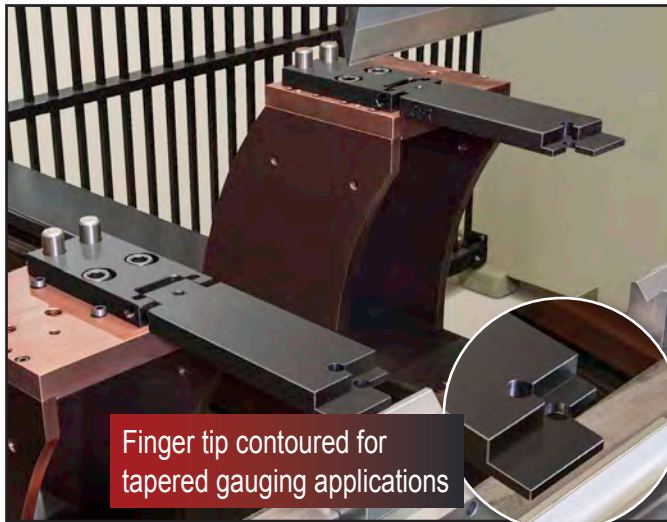
The Premium backgauge is Accurpress' standard backgauge, available for all makes and models of Accurpress press brakes. Available in lengths from 6' to 24', the Premium backgauge is built with large section extrusions and roller carriage castings that maintain strength and accuracy over the life of the machine. This gauge is easily serviced and maintained and comes standard with X,R,Z1/Z2 powered axis.



PREMIUM SPECIFICATIONS			
	X Axis	R Axis	Z1/Z2 Axis (DC drives)
Axis Travel	24" - 39" 609.6 - 990.6 mm	10" 254 mm	Distance between side frames minus 16"
Positioning Speed	900 ipm	900 ipm	500 ipm
Position Repeatability	+/- 0.001"	+/- 0.001"	+/- 0.003"
Holding Force	750 lbs		

### ELITE BACKGAUGE

The Elite backgauge offers full 6-axis part gauging via 2 independent gauging platforms that are mounted on a linear rail on the back of the bed. This rugged and accurate design combined with flexible gauging options and competitive pricing make the Elite backgauge your first-choice in 6-axis gauging. Rear guarding complete with gate and safety interlock switch, is installed for every Elite backgauge to meet all applicable safety standards.

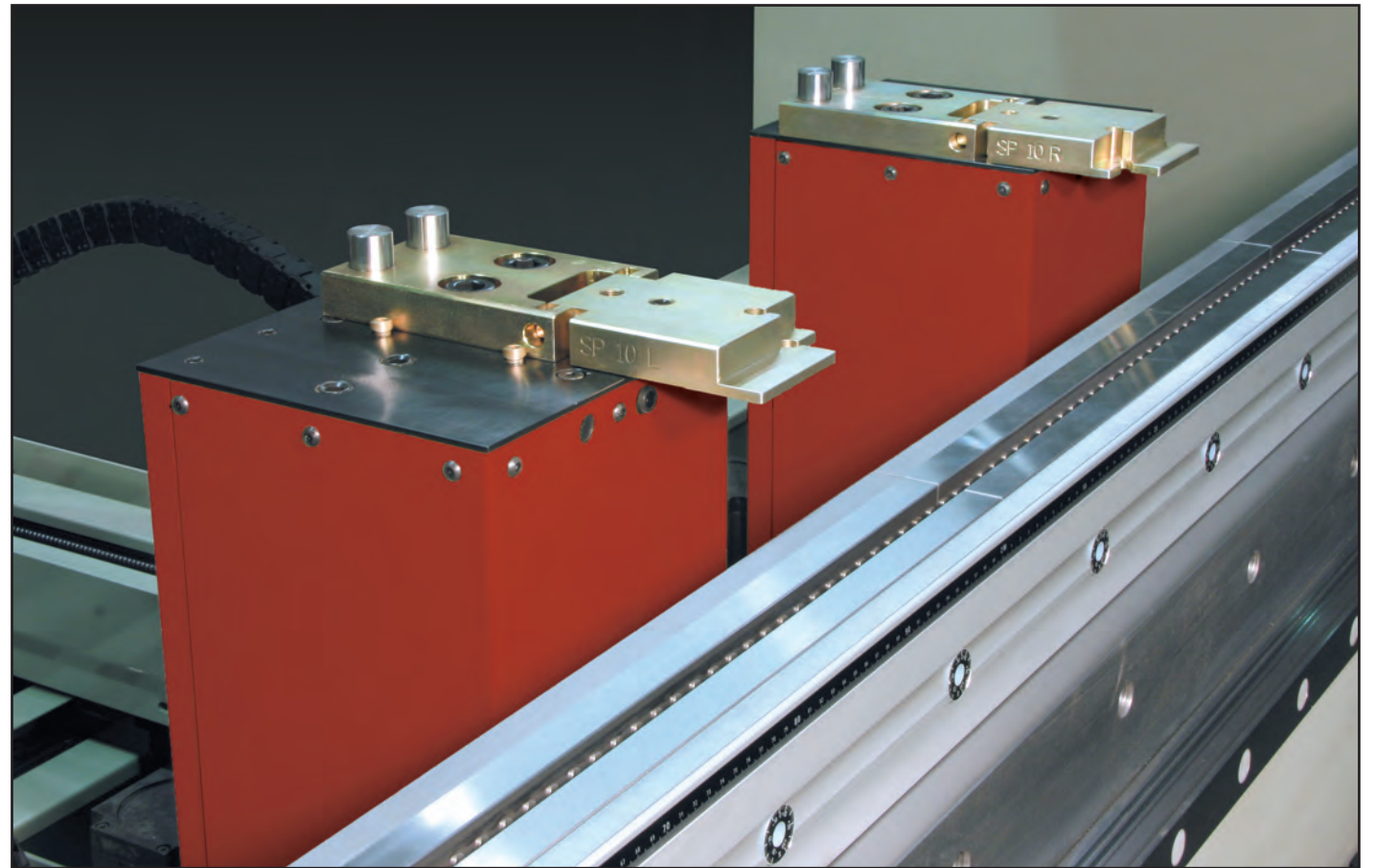


ELITE SPECIFICATIONS			
	X1/X2 Axis	R1/R2 Axis	Z1/Z2 Axis
Axis Travel	39" 990.6 mm	13" 330.2 mm	Distance between side frames minus 24"
Positioning Speed	900 ipm	900 ipm	900 ipm
Position Repeatability	+/- 0.001"	+/- 0.001"	+/- 0.003"
Holding Force	750 lbs		

Note: Premium and Elite are available for the H and HU Models

### SUPREME BACKGAUGE

The Supreme backgauge is Accurpress' 6-axis gauging system that meets the challenges of complex sheet metal parts and fast paced production environments. Constructed from a one-piece rugged steel platform that is isolated from machine ram movements, the Supreme backgauge maintains its accuracy and strength over the lifetime of the machine. Rear guarding, complete with gate and safety interlock switch, is installed for every Supreme backgauge to meet all applicable industry safety standards.



Note: Supreme is available for the HU Models.

### SUPREME SPECIFICATIONS

	X1/X2 Axis	R1/R2 Axis	Z1/Z2 Axis
Axis Travel	39" 990.6 mm	10" 254 mm	Distance between side frames minus 24"
Positioning Speed	1,500 ipm	1,500 ipm	1,500 ipm
Position Repeatability	+/- 0.0005"	+/- 0.001"	+/- 0.002"
Holding Force	1,000 lbs		



# ACCELL H

## 60 TON BACKGAUGE OPTIONS

### ALLY BACKGAUGE

The Ally Backgauge is available exclusively for the 60 ton Hybrid model and comes with three levels of gauging to meet any forming challenge. These gauging systems are installed in the body of the machine and provide varying levels of flexibility and automation.

#### 4 Axis



The Ally 4 axis backgauge has powered X,R and Z1/Z2 axis. This gauge is ideal for parts with parallel bend lines to part edges. Powered R and Z1/Z2 axis allows for automatic gauge positioning, particularly with stage bending.

**All programing is fully supported in the Vision Control.**

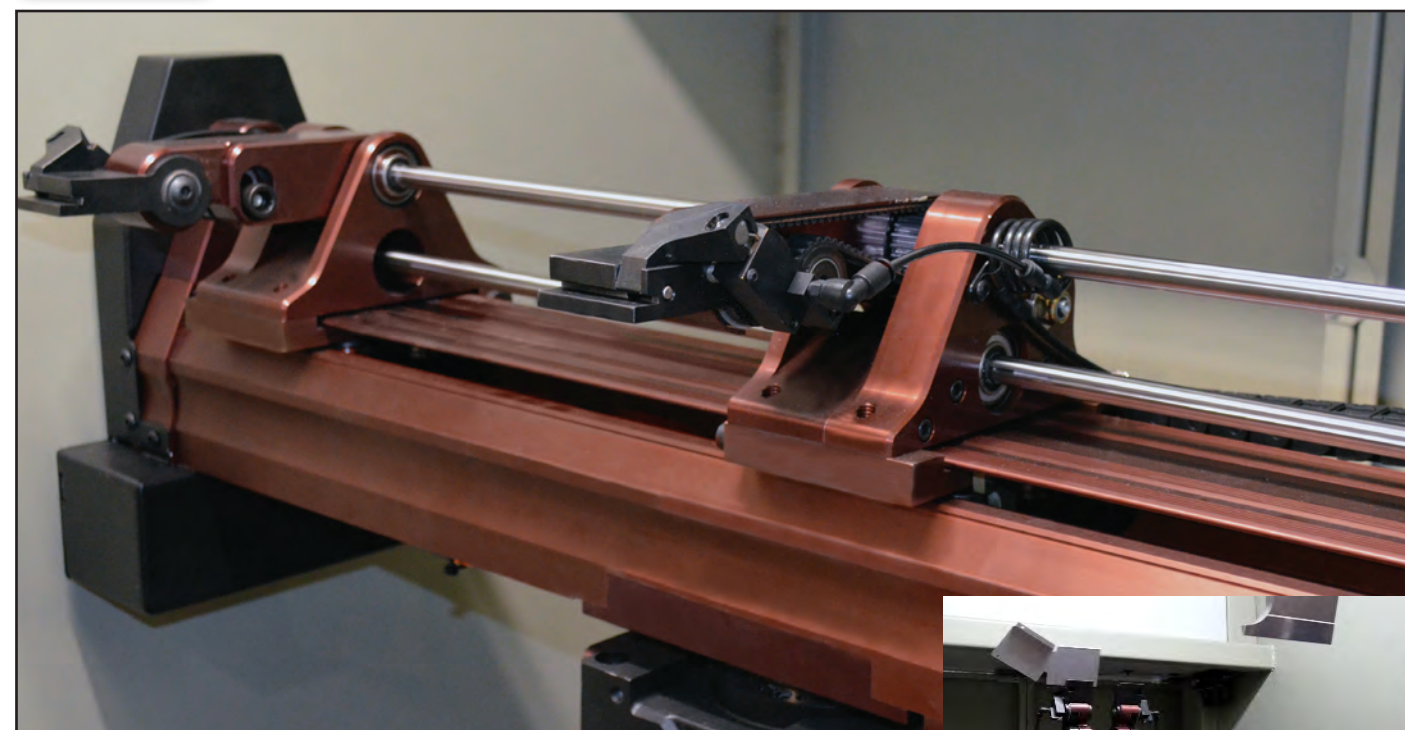
#### 5 Axis



The Ally 5 axis backgauge has all the benefits of the 4 axis, with the addition of the 5th Xr axis. This is the backgauge motion where the main Z bar can rotate clockwise or counterclockwise 30 degrees in order to gauge parts with non parallel bend lines. The two backgauge fingers are built with cut outs and corner notches to better assist in offset gauging.

**The 5 axis offset gauge feature is fully supported in the Vision control.**

#### 7 Axis



The Ally 7 axis backgauge has special clamping fingers that will clamp and hold the part, move into position and release/retract when the ram begins forming.

The main Z bar has a full 360 degree range of rotation and the power Z fingers can rotate front to back. This allows total control and part reorientation based on bend direction, bend sequence and multiple tool stages. Once the part is completed, Ally will pass the part back to the operator.

**The 7 axis Ally backgauge comes complete with a teach pendant for programming and is fully supported in the Vision control.**





**ADDITIONAL OPTIONS**  
(24" STANDARD ON ACCELL HU MODELS)



**PRECISION FRONT SUPPORT ARMS**

The Accurpress front support arms come in 24" and 36" lengths and are fully adjustable for different tooling heights and thicknesses. The bottom Foot Disk allows the operator to easily adjust the height of the support arm while the top support piece can be adjusted front to back depending on the desired position. These support arms are mounted on a liner rail for smooth and accurate positioning left to right on the press brake. Both sizes feature angle gauging, squaring bars and disappearing stops.

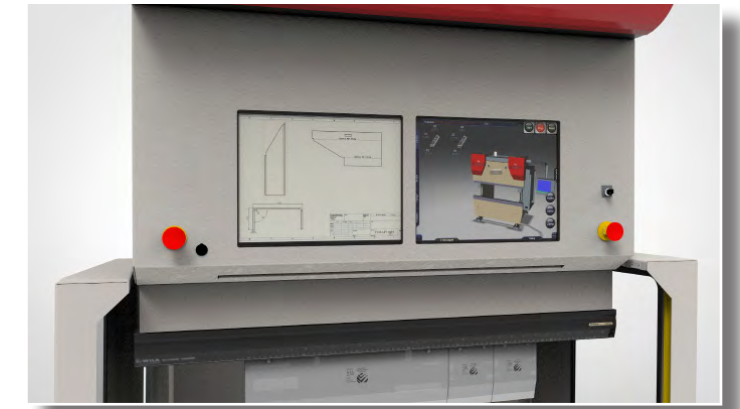
**SHEET FOLLOWERS**

The Accurpress Sheet Following System is a moveable support table that lifts and supports material during the bending motion. It is fully synchronized with the ram bend speed and desired angle and can support a load capacity of 500lb per sheet follower. Descent speed and activation of the Sheet Following System are fully programmable by the operator.



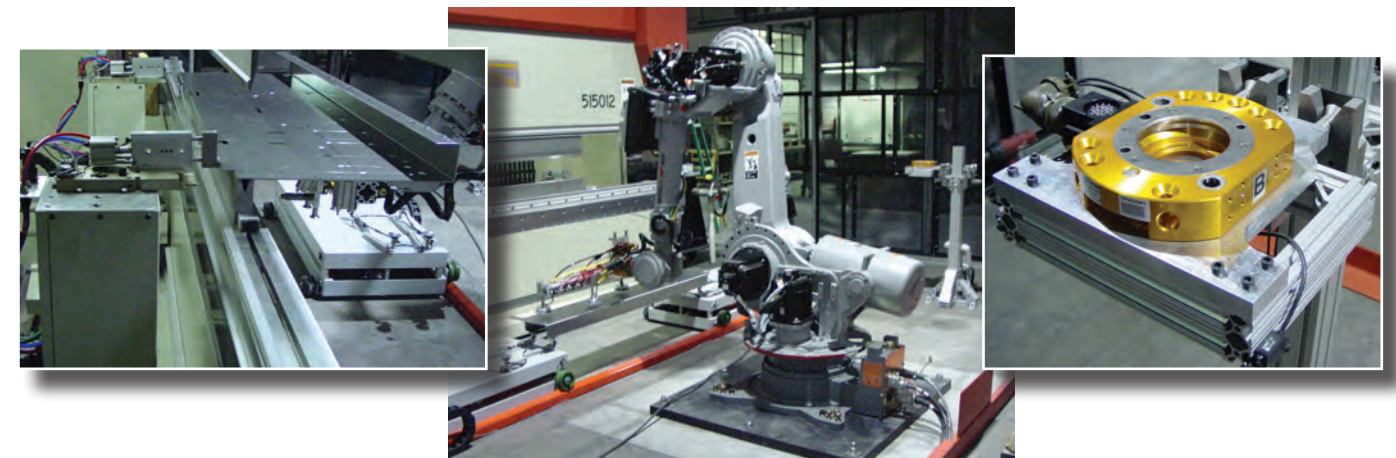
**SECOND SCREEN**  
(60 TON MODEL)

A second screen can be added to the 60 ton model that helps with file management, opening network locations and reviewing part drawings.



**ROBOTICS**

Accurpress offers robotic press brake solutions for automated bending. Robotized bending combines the Accell press brake with experienced partners in robotics and offline software.



**BARCODE SCANNER**

Note: Vision Control required  
Two models available:  
1) Paper-read  
2) Paper-read/barcode etched in metal

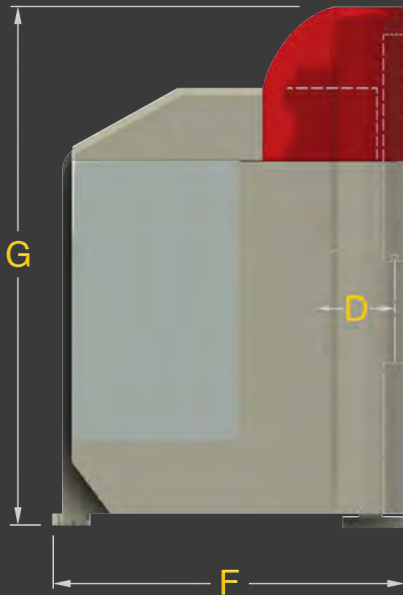




## ACCELL H SPECIFICATIONS

MODEL NUMBER	TONS	OVERALL DIMENSIONS											APPROX. SPEEDS			APPROX. SHIPPING WEIGHT (LB)
		A LENGTH OF BED (INCHES)	B DISTANCE BETWEEN FRAMES (INCHES)	BED HEIGHT (INCHES)	TOP BED WIDTH (INCHES)	C LENGTH OF RAM STROKE (INCHES)	RAM OPEN HEIGHT (INCHES)	RAM CLOSED HEIGHT (INCHES)	D THROAT DEPTH (INCHES)	E LENGTH (INCHES)	F DEPTH (INCHES)	G HEIGHT (INCHES)	APPROACH SPEED (IN/MIN)	BEND SPEED (IN/MIN)	RETURN SPEED (IN/MIN)	
5604/H	60	48	44	32	4	11	19	8	16	49	64	112	540	24	540	13,500
51208/H	120	96	82	34	4.75	11	19	8	16	126	77	112	540	24	540	21,000
51208/HU	120	96	82	34	4.75	11	19	8	16	126	77	112	540	24	540	21,000
512010/H	120	120	106	34	4.75	11	19	8	16	150	77	112	540	24	540	23,000
512010/HU	120	120	106	34	4.75	11	19	8	16	150	77	112	540	24	540	23,000
512012/H	120	144	130	34	4.75	11	19	8	16	174	77	112	540	24	540	25,000
512012/HU	120	144	130	34	4.75	11	19	8	16	174	77	112	540	24	540	25,000
519010/H	190	120	106	34	5.75	11	19	8	16	151	80	116	540	24	540	30,000
519010/HU	190	120	106	34	5.75	11	19	8	16	151	80	116	540	24	540	30,000
519012/H	190	144	130	34	5.75	11	19	8	16	175	80	116	540	24	540	33,000
519012/HU	190	144	130	34	5.75	11	19	8	16	175	80	116	540	24	540	33,000
519014/H	190	168	154	34	5.75	11	19	8	16	199	80	116	540	24	540	37,500
519014/HU	190	168	154	34	5.75	11	19	8	16	199	80	116	540	24	540	37,500

Overall depth of 51208/H to 519014/H increases if MOSES 3D Virtual Control is purchased. Machine shipping widths and weights may change pending optional accessories. Specifications are subject to change without notice.



Ram Open Height (C) is measured from the bottom of the ram tool holder to the top of the bed.

For more information, please visit [www.accurpress.com](http://www.accurpress.com)