ACCELL SERIES

Accell **E**

THE COMPETITIVE EDGE

Accell **U**

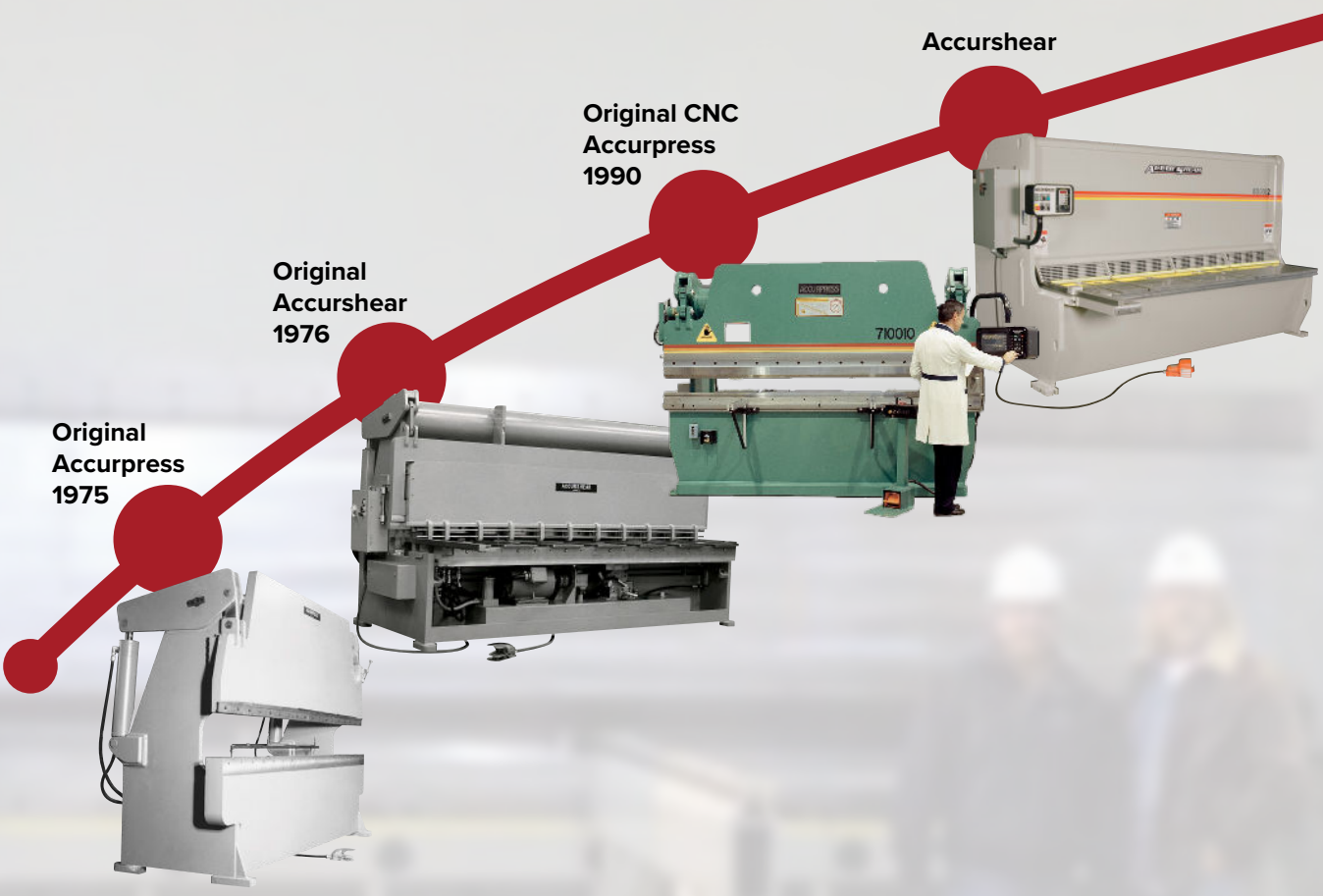
UPGRADE PACKAGE

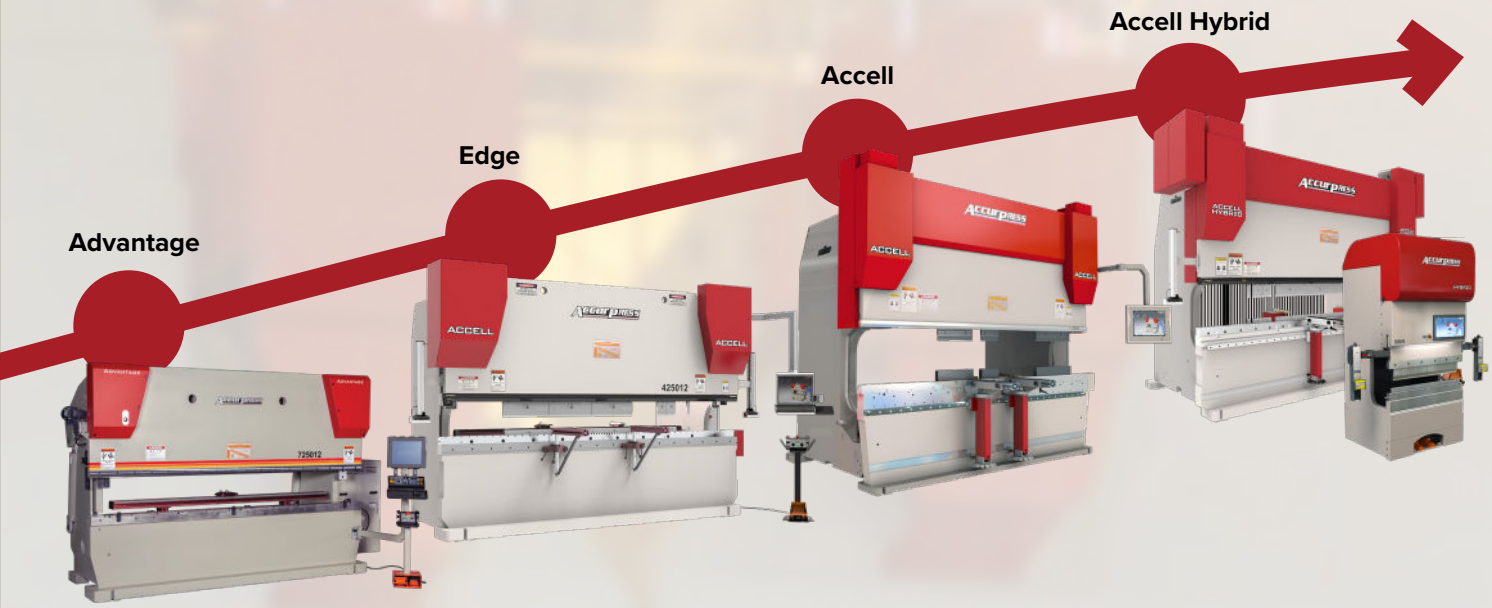
Accell **H**

HYBRID TECHNOLOGY

AccurPress

PRECISION FORMING SYSTEMS


Original
Accurpress
1975
Original
Accurshear
1976
Original CNC
Accurpress
1990
Accurshear
710010



About Us

With over 45 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 21,000 machines sold to thousands of satisfied customers, Accurpress continues to build press brakes and shears to meet the demands of today's manufacturing environments.

"While 45 years have brought huge changes to the machine tool industry, all of us at Accurpress continues 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."

Steve Hilton
President

The **ACCELL** Lineup

A Complete Line of Y1/Y2 Machines

Accell **E**

THE COMPETITIVE EDGE

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.

Accell **U**

UPGRADE PACKAGE

Available from 90-550 Tons

The **Accell U** Upgrade Package builds on the already impressive standard features of the machine to provide even more functionality and flexibility. This specialized machine can handle any forming challenge or production run with ease.

Color Options

The **Accell** line of Press Brakes from ACCURPRESS can be upgraded from the standard Grey with Red or Green accent covers. Other upgrade premium color options are available. Consult your dealer representative for adding color selections.

Accell **H**

HYBRID TECHNOLOGY

Available from 60-500 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 **HT**

HIGH TONNAGE

Available from 650-3000 Tons

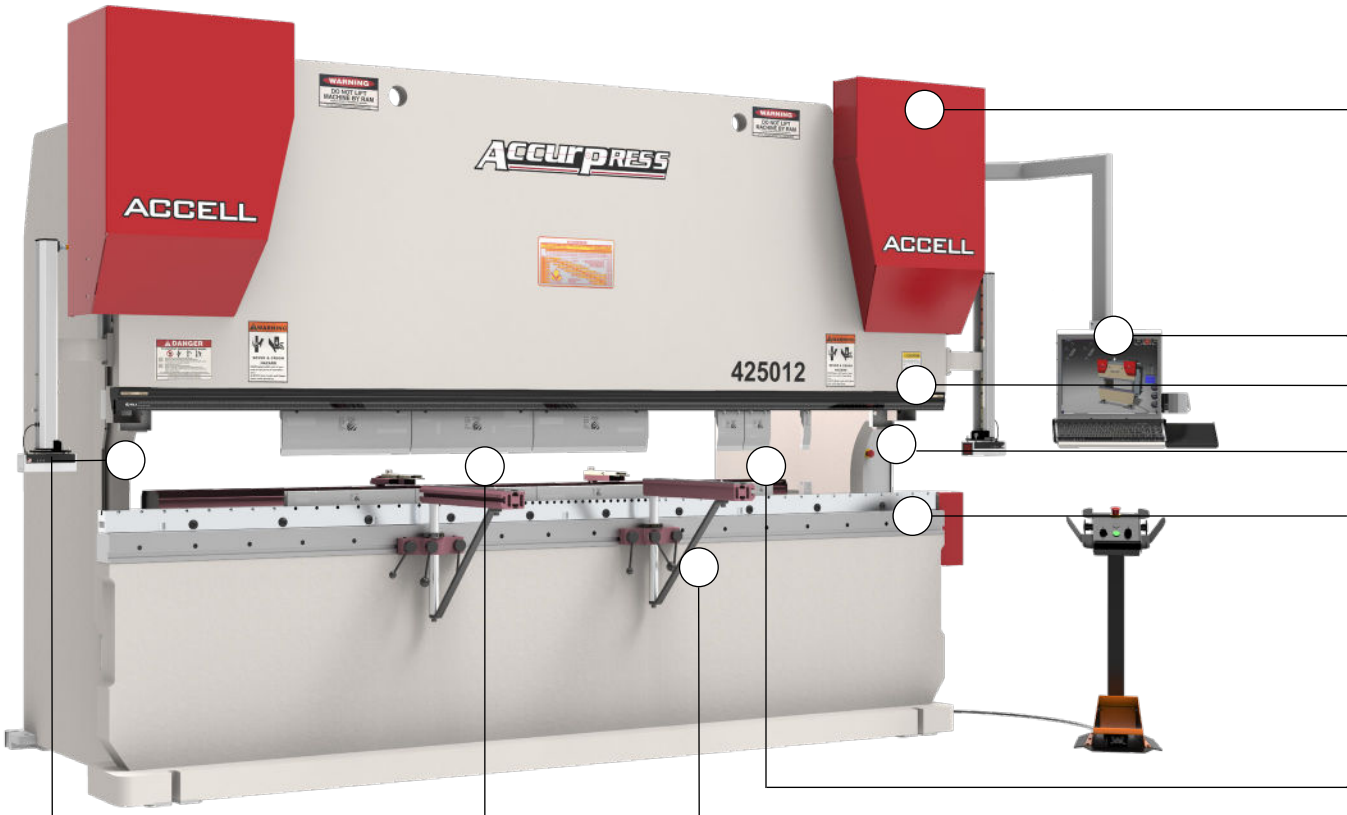
The **Accell HT** features rugged builds, oversized components, and powerful gauging devices. These machines are tough and durable and will stand up to any forming challenge. If you want to bend something big, we've got you covered.

Reference **ACCELL HT Brochure** for a complete list of features and options.

The **ACCELL E**

75 - 500 Ton Models

Your first choice in Y1/Y2 machine technology! With its quality build, an impressive number of features and options, advanced Vision Control and competitive pricing, the Accell E is the total package.



THROAT DEPTH

12” Throat Depth on machines up to 250 Tons.
14” Throat Depth on 350–500 Ton models.

UL Approved Electrical Standards
Electrical cabinets are assembled and wired to the applicable and current UL approved standards.

FRONT SUPPORT ARMS

Swing-stock arms mounted to the front of the bed, slide left-right via the machine t-slot on the face of the bed.

The Competitive **EDGE**

Y1/Y2 PROPORTIONAL HYDRAULIC TECHNOLOGY

The Accell E has the latest in proportional hydraulic technologies allowing for positional accuracies of 0.0004". Machine reliability is monitored via a Safety PLC.

CONTROL HEAD WORK STATION [See P. 18-19]

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

HYDRAULIC RAM CLAMPING [See P. 28]

All E-models are equipped with Wila Hydraulic Ram Clamping to suit American tooling. Wila New Standard Pro or Premium is available as an option.

GENEROUS OPEN HEIGHT/STROKE LENGTH

The Accell line comes standard with impressive ram open heights and stroke lengths to provide flexibility for complex part designs.

CNC CROWNING

The CNC Accurcrown offers flexibility and accuracy to the full range of bending applications by compensating for machine deflection during forming. This feature is standard for all 4125xx-4500xx ton models. The 475xx models come standard with the Accurpress non-crowning Die Holder.

OFF CENTER BENDING

The integrity of the frame provides for precision off-center bending applications. Additionally, the advanced control allows for the creation of CNC fade bends.

BACKGAUGE OPTIONS [See P. 20-21]

Accell E models include the Premium CNC X, R, (optional Z1/Z2) backgauge, or the optional Elite backgauge offering greater flexibility in 6-axes X1/X2, R1/R2, Z1/Z1.

The **ACCELL E**

MODEL 4758

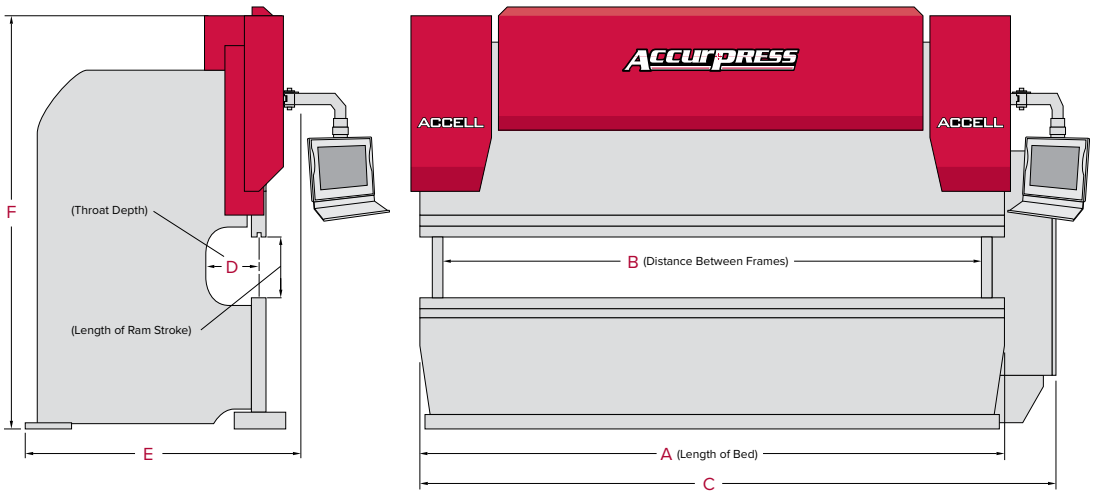
MODEL 435014

ACCELL E Specifications

MODEL NUMBER	MAX TONS	BED HEIGHT	TOP BED WIDTH	RAM OPEN HEIGHT	RAM CLOSED HEIGHT	STROKE LENGTH	OVERALL DIMENSIONS (INCHES)						APPROX. SPEEDS (IN/MIN)			APPROX. SHIPPING WEIGHT (LB)
							A	B	C	D	E	F	APPROACH	BEND	RETURN	
4756	75	34	3	18	8	10	72	54	78	12	60	90	500	24	320	10,000
4758	75	34	3	18	8	10	96	78	102	12	60	90	500	24	320	11,000
47510	75	34	3	18	8	10	120	102	124	12	60	90	500	24	320	13,000
41258	125	34	4	20	8	12	96	78	102	12	60	100	490	24	320	14,000
412510	125	34	4	20	8	12	120	102	124	12	60	100	490	24	320	16,000
412512	125	34	4	20	8	12	144	126	148	12	60	100	490	24	320	18,000
412514	125	34	4	20	8	12	168	148	174	12	63	102	490	24	320	22,000
417510	175	34	4	20	8	12	120	102	124	12	63	106	370	24	280	19,000
417512	175	34	4	20	8	12	144	126	148	12	63	106	370	24	280	22,000
417514	175	34	4	20	8	12	168	148	174	12	63	108	370	24	280	24,000
417516	175	36	8	20	8	12	192	178	204	12	65	113	370	24	280	36,000
417520	175	36	8	20	8	12	240	218	254	12	65	116	370	24	280	48,000
425010	250	36	5	20	8	12	120	102	124	12	65	109	320	24	260	22,000
425012	250	36	5	20	8	12	144	126	150	12	65	109	320	24	260	27,000
425014	250	36	8	20	8	12	168	148	174	12	65	116	320	24	260	32,000
425016	250	36	10	20	8	12	192	172	204	12	65	119	320	24	260	39,000
• 425020	250	36	10	20	8	12	240	218	254	12	65	122	320	24	260	52,000
435012	350	38	10	20	8	12	144	126	156	14	76	126	320	24	240	38,000
435014	350	38	10	20	8	12	168	148	178	14	76	126	320	24	240	43,000
435016	350	38	12	20	8	12	192	172	204	14	76	130	320	24	240	49,000
• 435020	350	38	12	20	8	12	240	218	254	14	76	139	320	24	240	62,000
• 435024	350	38	12	20	8	12	288	266	340	14	76	141	320	24	240	70,000
450012	500	38	10	20	8	12	144	124	156	14	82	131	280	24	220	45,000
450014	500	38	10	20	8	12	168	146	178	14	82	131	280	24	220	52,000
• 450016	500	38	12	20	8	12	192	170	204	14	82	136	280	24	220	58,000
• 450020	500	38	12	20	8	12	240	218	254	14	82	140	280	24	220	70,000
• 450024	500	38	12	20	8	12	288	266	340	14	82	142	280	24	220	82,000

Dimensions are for reference only and subject to change. Machine shipping widths and weights may change pending optional accessories.
• MODELS REQUIRE BELOW FLOOR LEVEL BED.

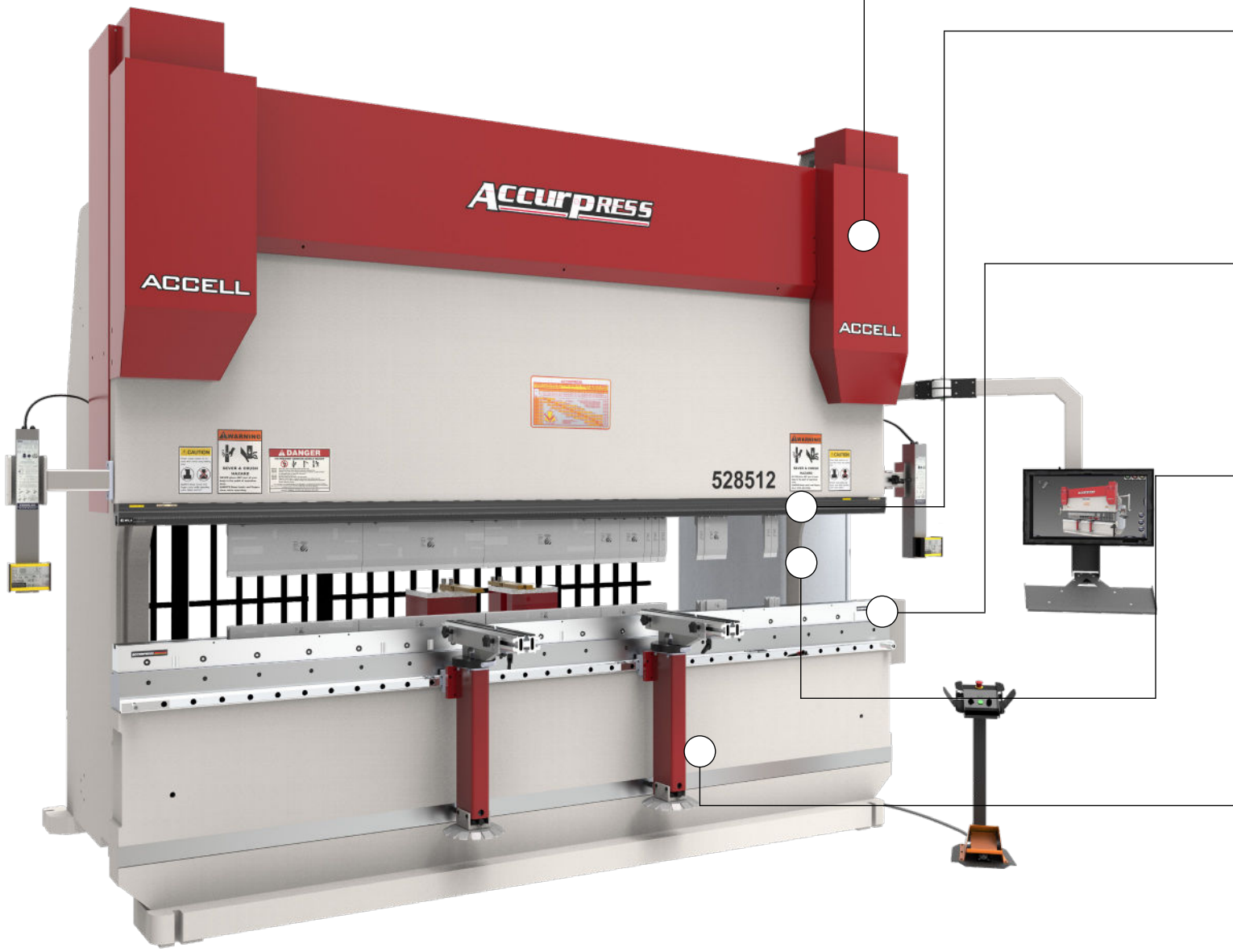
Dimensions



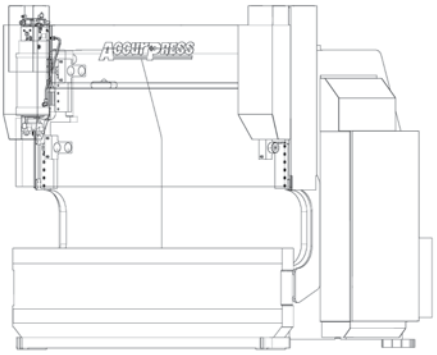
The **ACCELL U**

90 - 550 Ton Models

The **Accell U Upgrade Package** builds on the already impressive standard features of the machine to provide even more functionality and flexibility. This specialized machine can handle any forming challenge or production run with ease.



UPGRADE Package

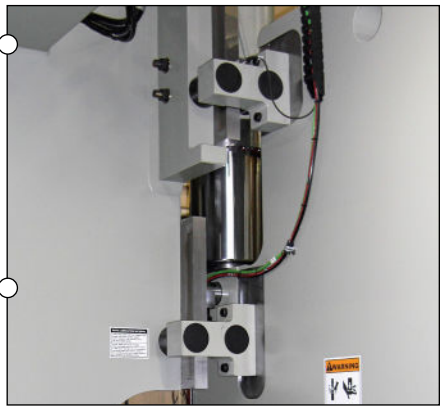


DOUBLE BENDING SPEED

An added bonus with the U-model package is the two-speed bending feature which increases from 24 to 48 IPM. This feature is available on the U-Models with the exception of the 5550xx.

EXTRA STROKE LENGTH

The Upgrade Package means 14-inches of Ram Stroke Length to provide generous allowances for the variation in precision punch heights and special forming applications. Optional Ram Stroke Lengths are available beyond the standard 14-inch upgrade package.



MATERIAL COMP FEATURE [See P. 24]

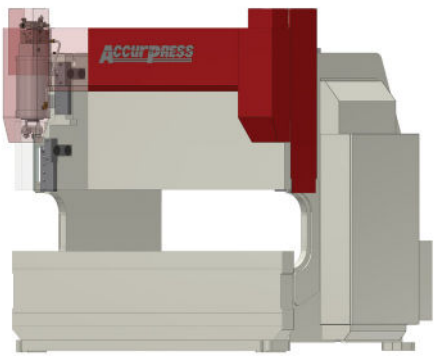
Material Thickness Sensing, Teach Crowning and Pressure Compensation all provide real-time positional adjustments based on material variance.

- The U-models from 575xx to 5500xx utilize a 4-point Ram Guiding system to provide the ultimate in machine motion and stability under the full load increased tonnage capacities for each model.
- The System incorporates large rollers/ hardened ways for low friction and is an integral aspect of the COMP Feature to ensure exceptional accuracies in a wide range of bending applications.
- The Guiding System ensures maximum rigidity for the longer stroke lengths provided on the U-models.

THROAT DEPTH INCREASE

Models	Inches
590xx	16
5150xx	16
5190xx	16
5285xx	16
5385xx	18
5550xx	18

Accell-U models are engineered and built with deep throat depths to provide more flexibility forming parts the full length of the bed.



OPTIONAL PRECISION SHEET SUPPORTS [See P. 25]

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

UL Approved Electrical Standards
Electrical cabinets are assembled and wired to the applicable and current UL approved standards.

The **ACCELL U**

MODEL 515010

MODEL 555016

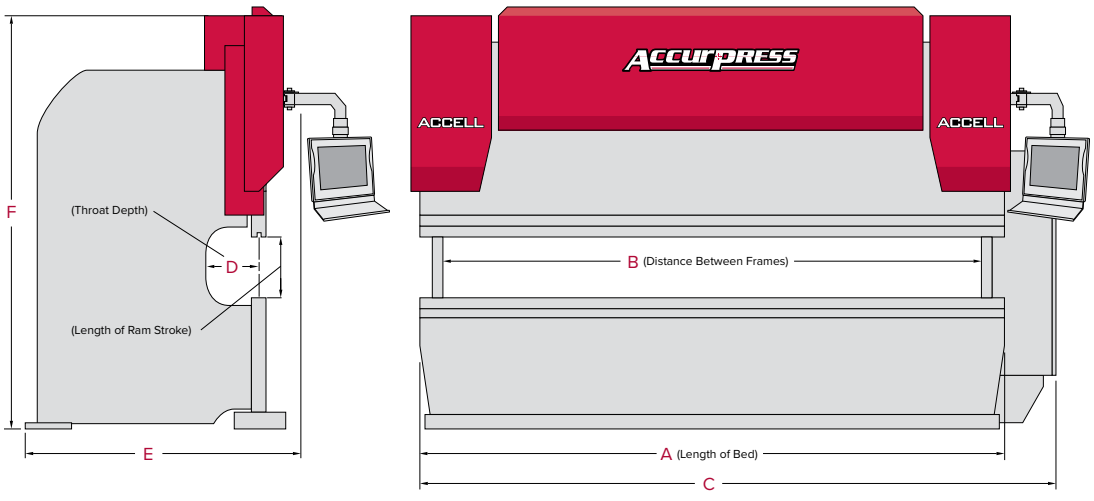
Models 555016 and larger have below-floor-bed configurations.
Contact Accurpress for special flush-floor designs.

ACCELL U Specifications

MODEL NUMBER	MAX TONS	BED HEIGHT	TOP BED WIDTH	RAM OPEN HEIGHT	RAM CLOSED HEIGHT	STROKE LENGTH	OVERALL DIMENSIONS (INCHES)						APPROX. SPEEDS (IN/MIN)			APPROX. SHIPPING WEIGHT (LB)
							A	B	C	D	E	F	APPROACH	BEND	RETURN	
5906	90	34	4.5	22	8	14	72	58	91	16	76	110	500	24-48	320	14,000
5908	90	34	4.5	22	8	14	96	82	115	16	76	110	500	24-48	320	16,000
59010	90	34	4.5	22	8	14	120	106	139	16	76	110	500	24-48	320	18,000
51508	150	34	4.5	22	8	14	96	82	115	16	78	112	490	24-48	320	19,000
515010	150	34	4.5	22	8	14	120	106	139	16	78	112	490	24-48	320	22,000
515012	150	34	4.5	22	8	14	144	130	186	16	78	112	490	24-48	320	25,000
515014	150	34	4.5	22	8	14	168	154	154	16	78	112	490	24-48	320	29,000
519010	190	34	4.5	22	8	14	120	106	139	16	78	118	370	24-48	280	28,000
519012	190	34	4.5	22	8	14	144	130	162	16	78	118	370	24-48	280	32,000
519014	190	34	5.5	22	8	14	168	154	186	16	78	118	370	24-48	280	36,000
519016	190	34	5.5	22	8	14	192	178	210	16	78	118	370	24-48	280	40,000
519020	190	34	5.5	22	8	14	240	216	320	16	78	118	370	24-48	280	48,000
528510	285	36	5.5	22	8	14	120	102	139	16	85	132	320	24-48	280	32,000
528512	285	36	5.5	22	8	14	144	126	160	16	85	132	320	24-48	280	36,000
528514	285	36	5.5	22	8	14	168	150	184	16	85	132	320	24-48	280	40,000
528516	285	36	12	22	8	14	192	174	210	16	85	132	320	24-48	280	44,000
• 528520	285	36	12	22	8	14	240	216	320	16	85	132	320	24-48	280	52,000
538512	385	38	12	22	8	14	144	126	160	18	85	138	320	24-48	240	46,000
538514	385	38	12	22	8	14	168	148	184	18	85	138	320	24-48	240	50,000
538516	385	38	12	22	8	14	192	172	210	18	85	138	320	24-48	240	55,000
• 538520	385	38	12	22	8	14	240	218	320	18	85	138	320	24-48	240	70,000
• 538524	385	38	12	22	8	14	288	218	340	18	85	138	320	24-48	240	80,000
555012	550	38	12	22	8	14	144	124	160	18	92	148	280	24	220	54,000
555014	550	38	12	22	8	14	168	146	184	18	92	148	280	24	220	60,000
• 555016	550	38	12	22	8	14	192	170	210	18	92	148	280	24	220	72,000
• 555020	550	38	12	22	8	14	240	218	320	18	92	148	280	24	220	81,000
• 555024	550	38	12	22	8	14	288	266	340	18	92	148	280	24	220	92,000

Dimensions are for reference only and subject to change. Machine shipping widths and weights may change pending optional accessories.
• MODELS REQUIRE BELOW FLOOR LEVEL BED.

Dimensions



The **ACCELL H**

90 - 500 Ton Models

The **Accell Hybrid** combines power and precision into a sleek design with numerous features to provide the absolute ultimate in functionality, ease-of-operation and perfection in formed parts.

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.

SAFETY LASER GUARDING

Optional Safety Laser Systems are provided to monitor any interference as parts are formed and will immediately stop the ram in the event of inadvertent obstruction.

INCREASED THROAT DEPTH

A large side depth increases flexibility with forming larger parts.

REAR SAFETY DOOR

The backgauge area is completely protected with a rear gate and safety interlock switch for U-Models purchased with Supreme or Titan Backgauges.

HYBRID Technology

HYDRAULIC RAM CLAMPING

All Hybrid models come standard with an American hydraulic ram clamping system. An optional New Standard Ram Clamping System is also available.

VISION CONTROL

The powerful and easy to use Vision Control comes standard with all Accell Hybrid models.

CONTROL HEAD WORK STATION

The Vision control display has a convenient area for a keyboard and mouse, and is equipped with 21.5” industrial quality wide screen monitor with an inductive touch screen.

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 [See P. 25]

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 [See P. 24]

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

OFF CENTER FORMING

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

The ACCELL H

1 The Bold Choice

Accurpress makes it easy to go Hybrid by utilizing the same frame sizes as the U-Models along with the complete and full line of optimum accessories. This means Hybrid machines up to 500-ton capacities.

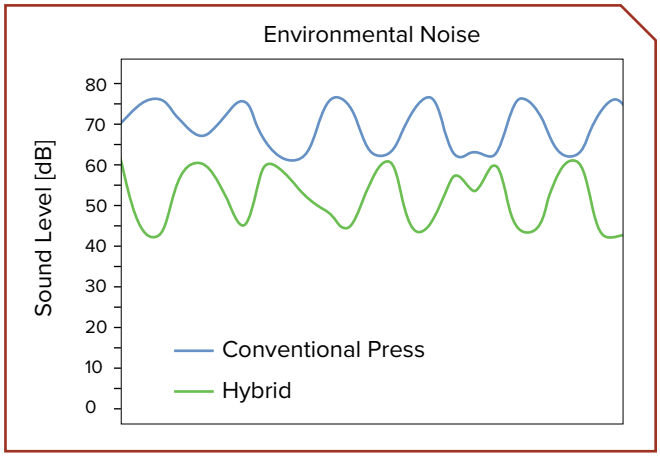
2 High Energy Efficiency

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. 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.

3 Low Noise

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

Prospective owners should note that the average noise reduction for hybrid models is about 15-20dB. Thus, the overall shop environment noise levels are affected in very positive ways for operator protection.



4 Reduce Maintenance Concerns

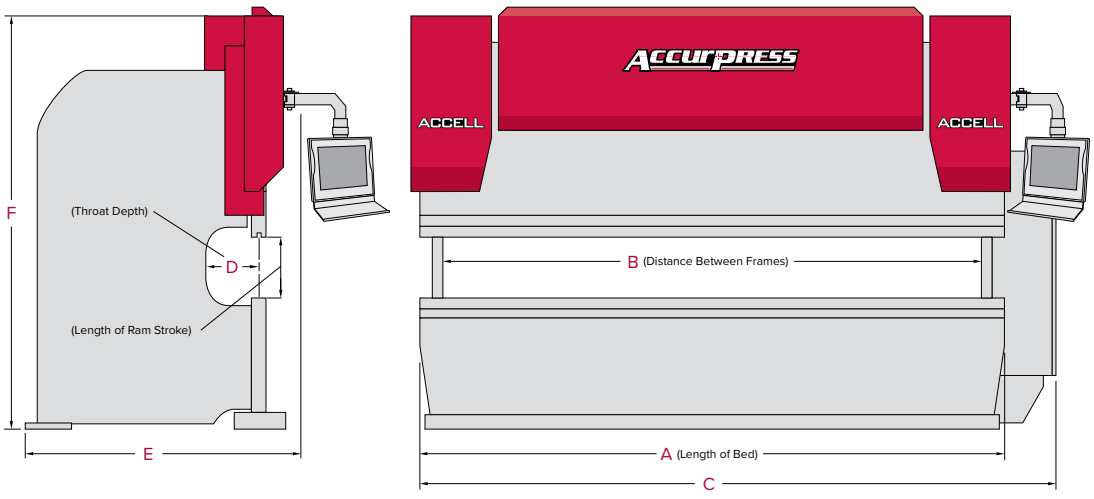
Hybrid machines eliminate many of the conventional hydraulic components including large hydraulic oil reservoirs. This effectively lowers long-term expenditures requiring oil changes and general wear and tear on hydraulic components in order to achieve ultimate machine accuracies for decades of press brake usage.

ACCELL H Specifications

MODEL NUMBER	MAX TONS	BED HEIGHT	TOP BED WIDTH	RAM OPEN HEIGHT	RAM CLOSED HEIGHT	STROKE LENGTH	OVERALL DIMENSIONS (INCHES)						APPROX. SPEEDS (IN/MIN)			APPROX. SHIPPING WEIGHT (LB)
							A	B	C	D	E	F	APPROACH	BEND	RETURN	
5906	90	34	4.5	22	8	14	72	58	91	16	76	110	540	24-48	440	13,000
5908	90	34	4.5	22	8	14	96	82	115	16	76	110	540	24-48	440	15,000
59010	90	34	4.5	22	8	14	120	106	139	16	76	110	540	24-48	440	17,000
51508	150	34	4.5	22	8	14	96	82	115	16	78	112	540	24-48	440	18,000
515010	150	34	4.5	22	8	14	120	106	139	16	78	112	540	24-48	440	21,000
515012	150	34	4.5	22	8	14	144	130	186	16	78	112	540	24-48	440	24,000
515014	150	34	4.5	22	8	14	168	154	154	16	78	112	540	24-48	440	28,000
519010	190	34	4.5	22	8	14	120	106	139	16	78	118	540	24-48	440	27,000
519012	190	34	4.5	22	8	14	144	130	162	16	78	118	540	24-48	440	31,000
519014	190	34	5.5	22	8	14	168	154	186	16	78	118	540	24-48	440	35,000
519016	190	34	5.5	22	8	14	192	178	210	16	78	118	540	24-48	440	39,000
519020	190	34	5.5	22	8	14	240	216	320	16	78	118	540	24-48	440	47,000
528510	285	36	5.5	22	8	14	120	102	139	16	85	132	440	24-44	440	31,000
528512	285	36	5.5	22	8	14	144	126	160	16	85	132	440	24-44	440	35,000
528514	285	36	5.5	22	8	14	168	150	184	16	85	132	440	24-44	440	39,000
528516	285	36	12	22	8	14	192	174	210	16	85	132	440	24-44	440	43,000
• 528520	285	36	12	22	8	14	240	216	320	16	85	132	440	24-44	440	51,000
538512	385	38	12	22	8	14	144	126	160	18	85	138	440	24-31	440	45,000
538514	385	38	12	22	8	14	168	148	184	18	85	138	440	24-31	440	49,000
538516	385	38	12	22	8	14	192	172	210	18	85	138	440	24-31	440	54,000
• 538520	385	38	12	22	8	14	240	218	320	18	85	138	440	24-31	440	69,000
• 538524	385	38	12	22	8	14	288	218	340	18	85	138	440	24-31	440	79,000
550012	500	38	12	22	8	14	144	124	160	18	92	148	340	22	340	53,000
550014	500	38	12	22	8	14	168	146	184	18	92	148	340	22	340	59,000
• 550016	500	38	12	22	8	14	192	170	210	18	92	148	340	22	340	71,000
• 550020	500	38	12	22	8	14	240	218	320	18	92	148	340	22	340	80,000
• 550024	500	38	12	22	8	14	288	266	340	18	92	148	340	22	340	91,000

Dimensions are for reference only and subject to change. Machine shipping widths and weights may change pending optional accessories.
• MODELS REQUIRE BELOW FLOOR LEVEL BED.

Dimensions



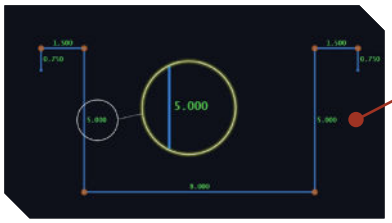
VISION Control

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.

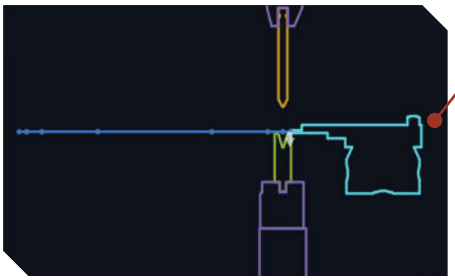
FEATURES

- 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

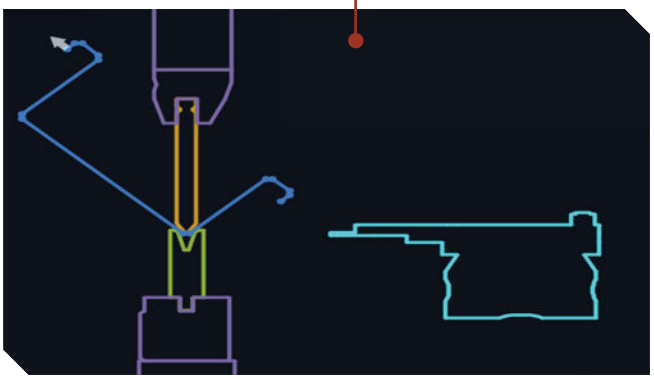


Easily add dimensions and angles



Confirm bend sequence and tooling

Begin forming



OPTIONAL 3D PACKAGE

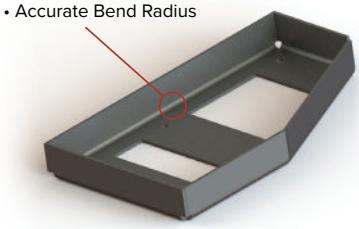
VISION 3D

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.

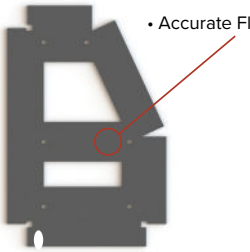
Use VISION in your part models

FEATURES

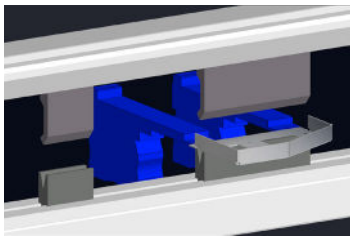
- Accurate Bend Radius



- Accurate Flat Patterns



- Dynamic 3D Bend Simulation



- Run 3D programs on the ETS3000

OPTIONAL BARCODE READER

BARCODE READER

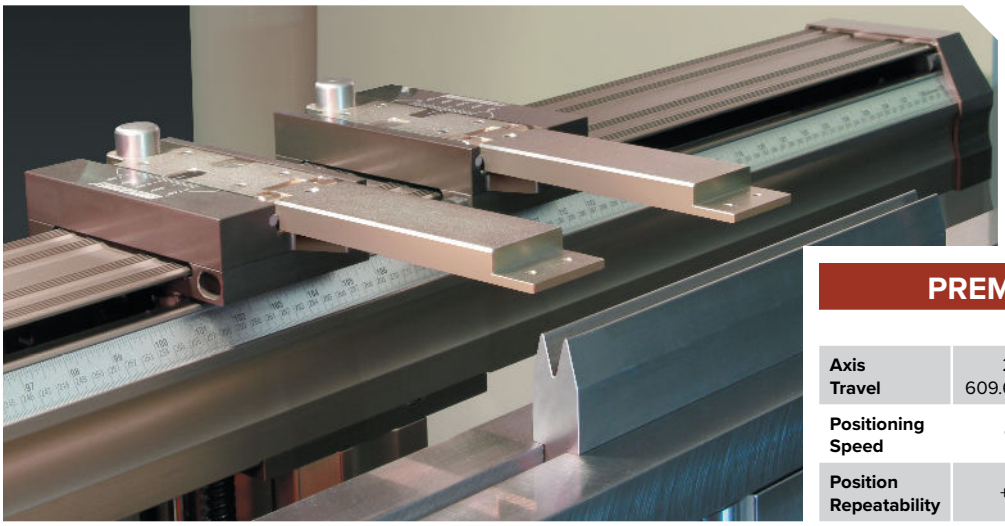
Two models available:
1) Paper-read
2) Paper-read/barcode etched in metal

NOTE: Vision Control required.

BACKGAUGE Options

Accurpress manufactures a variety of excellent Backgauge Systems to best satisfy all bending needs.

PREMIUM Backgauge



PREMIUM SPECIFICATIONS			
	X-Axis	R-Axis	Z1/Z2-Axes
Axis Travel	24" - 39" 609.6 - 990.6 mm	10" 254 mm	Distance between side frames minus 16"
Positioning Speed	900 ipm	900 ipm	900 ipm
Position Repeatability	+/- 0.001"	+/- 0.001"	+/- 0.003"
Holding Force	1500 lbf X1 X-Axis Drive		

The **Premium** backgauge available for Accell E/U/H models offers excellent value and a highly reliable system with power X&R-axes and optional powered Z1/Z2. This gauge is precision-built with solid extrusions, roller carriage castings, and with world-renowned Servo Electric motor/drive packages to offer long-term reliability with minimal maintenance. Additional optional accessories such as extended 39-inch X-axis travel and X-Prime fingers provide increased flexibility for bending applications.

Optional for PREMIUM Backgauge

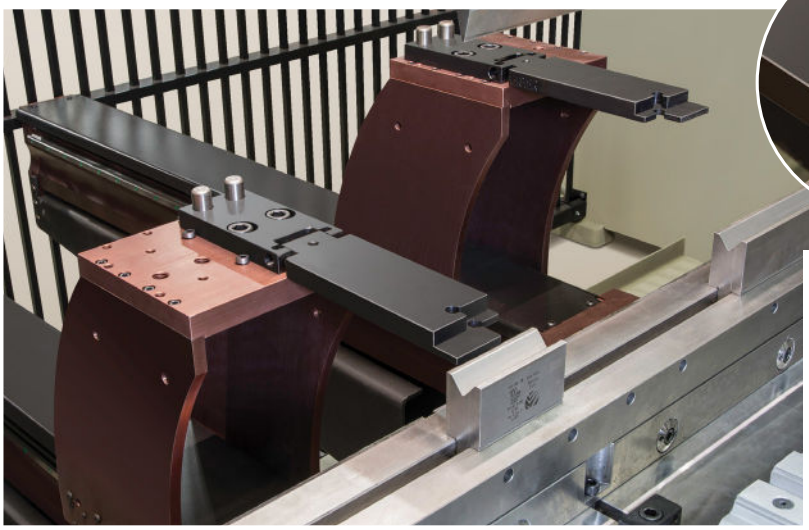
MANUAL X-Prime

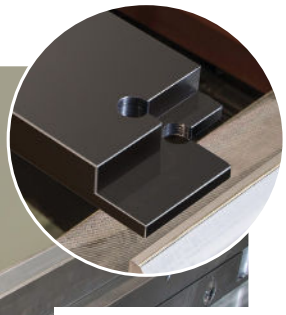
Provides +/- 1" of adjustment via the rotary dial. May be purchased in addition or in lieu of the standard fingers.

POWERED X-Prime

Provides +/- 2" of adjustment via a Schneider motor/drive package and programmed at the Vision or ETS3000 Control.

ELITE Backgauge





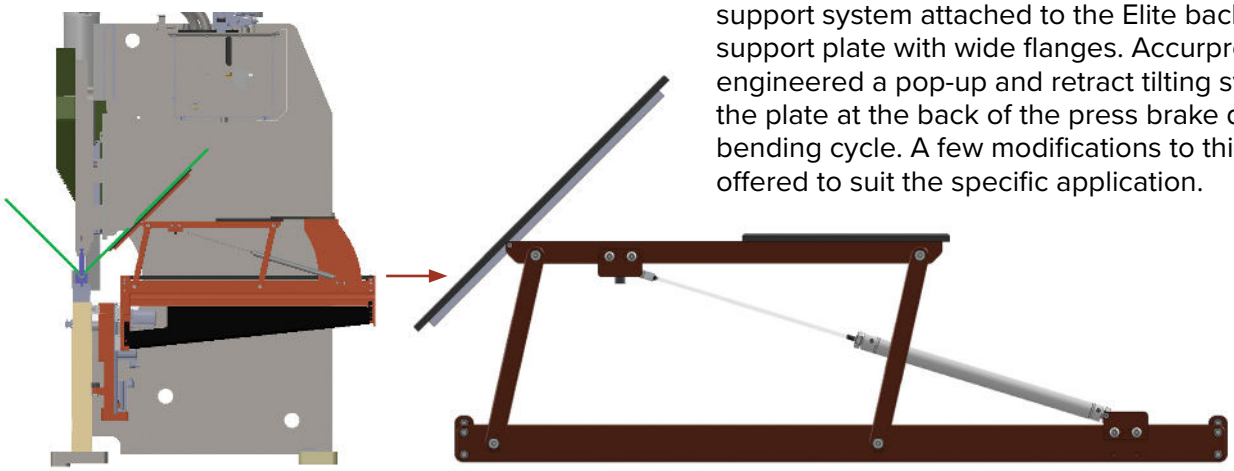
Finger tip contoured for tapered gauging applications

ELITE SPECIFICATIONS			
	X-Axis	**R-Axis**	**Z1/Z2-Axes**
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	1500 lbf X2 X-Axis Drives		

The **Elite**, also offered for the Accell E/U/H models is a powered 6-axis (X1/X2, R1/R2, Z1/Z2) gauge offering increased upgrade flexibility but at affordable pricing levels. This robust design also incorporates world-renowned Schneider Electric motor/drive packages along with two independent gauging platforms mounted on a linear rail to provide efficiency, accuracy, and longevity. Included with the Elite upgrade package is a gate attached to the back of the Accurpress inclusive of a safety interlock switch to meet all applicable safety standards.

Optional for ELITE Backgauge

POP-UP & RETRACT TILTING Sheet Support



Some forming applications may necessitate a sheet support system attached to the Elite backgauge to support plate with wide flanges. Accurpress has engineered a pop-up and retract tilting system to support the plate at the back of the press brake during the bending cycle. A few modifications to this option are offered to suit the specific application.

SUPREME Backgauge

SUPREME SPECIFICATIONS

	X1/X2-Axes	R1/R2-Axes	Z1/Z2-Axes
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	+/- 0.001”	+/- 0.001”	+/- 0.002”
Holding Force	1700 lbf X2 X-Axis Drives		

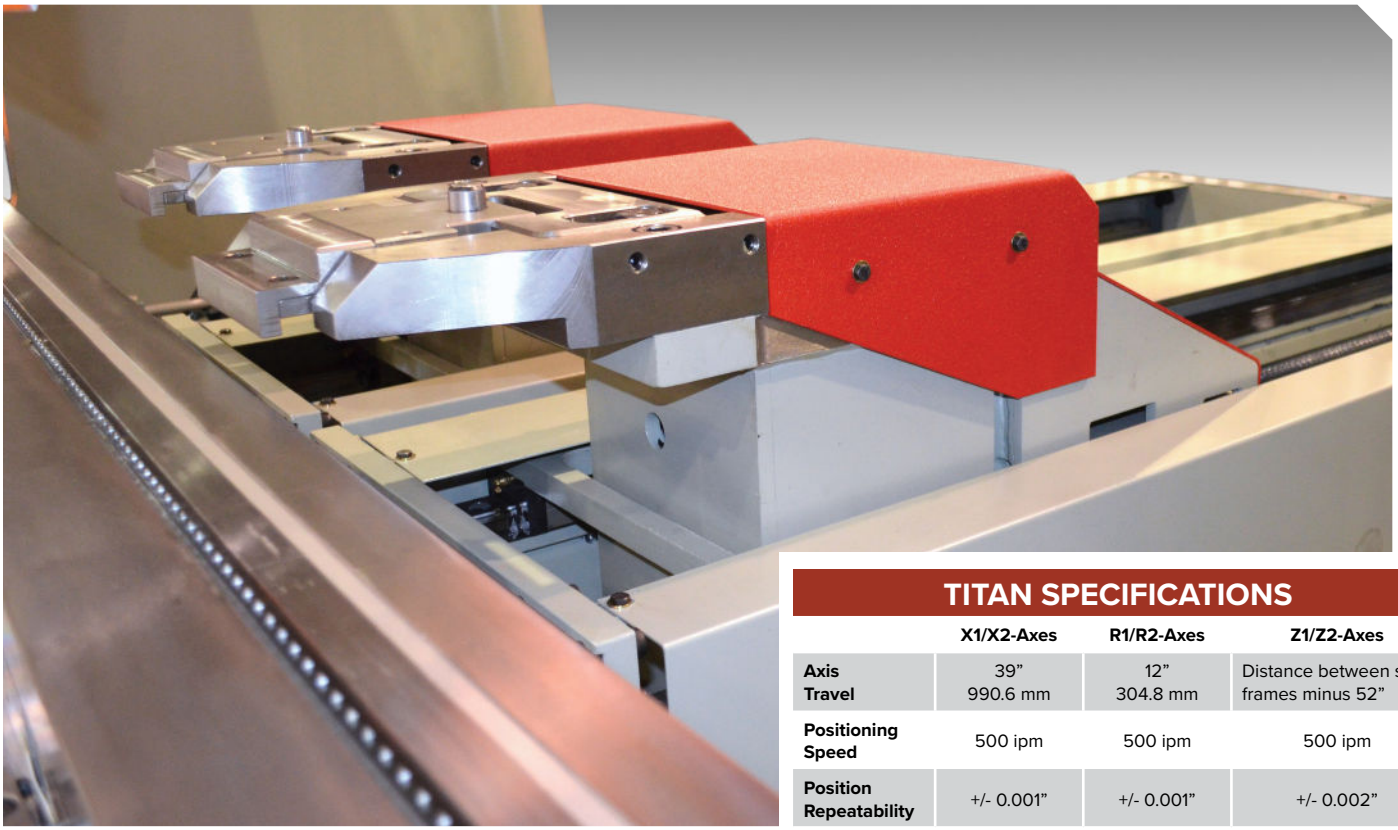
For applications demanding the most complex sheet metal parts and in high production shops, Accurpress offers the Supreme backgauge available for the Accell-U and H models. Constructed from a one-piece rugged steel platform that is isolated from the press brake ram movements, the Supreme backgauge is built for optimum accuracy, high speeds on all 6-axes (X1/X2, R1/R2, Z1/Z2) and for years of minimal service requirements. Included with the Supreme backgauge is a rear gate attached to the back of the Accell-U inclusive of a safety interlock switch to meet all applicable safety standards.

To ensure compliance to applicable safety standards, Accurpress installs rear guarding inclusive of a gate with a safety interlock switch on all Accurpress models sold with the Supreme Backgauge.

SUPREME BACKGAUGE

Available with the Accell U Upgrade Package.

TITAN Backgauge



TITAN SPECIFICATIONS

	X1/X2-Axes	R1/R2-Axes	Z1/Z2-Axes
Axis Travel	39” 990.6 mm	12” 304.8 mm	Distance between side frames minus 52”
Positioning Speed	500 ipm	500 ipm	500 ipm
Position Repeatability	+/- 0.001”	+/- 0.001”	+/- 0.002”
Holding Force	5000 lbf X2 X-Axis Drives		

The Titan 6-Axis (X1/X2, R1/R2, Z1/Z2) is the world’s heaviest and strongest gauge built specifically for larger Accell E/U/H models that are fabricating the most extreme parts! Each component including the oversized fingers have been engineered to withstand the most extreme conditions, shock loads and massive forces from placement of large plates in preparation for final gauging and forming. This rugged backgauge features servo-drive motors, lifetime lubricated precision linear bearings and an unsurpassed ability to handle the heaviest of structural plate applications.

To ensure compliance to applicable safety standards, Accurpress installs rear guarding inclusive of a gate with a safety interlock switch on all Accurpress models sold with the Titan Backgauge.

TITAN BACKGAUGE

The Titan Backgauge is available for larger Accell E and U models.

PRECISION BEND MEASUREMENT SYSTEMS

KeMes A20x

The KeMes A20x system is a laser angle measuring device that is integrated into the Accurpress Vision Control.

The operator can use this device to either measure bend angles by hand, or magnetically attach the sensor to the upper tooling for measuring parts as they are formed.

MEASURED ANGLE CAN BE SENT TO THE CONTROL

The angle of the bend is measured against the desired angle in the program. The angle difference is then applied as a correction.

Note that this sensor is not dynamically measuring spring back. Vision has a setting to apply a suitable “ram-up” distance to release the spring back of the part. This distance value can be changed to suite different materials and applications.

CORRECTED ANGLE IS ACHIEVED ON THE NEXT BEND

This sensor also needs a small gap in the upper punch tooling in order for the laser to measure the part.

MATERIAL COMPENSATION

INCLUDED WITH THE ACCELL U AND H MODELS

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.

Teach Crowning
The Teach Crowning feature eliminates the need to manually adjust crowning values via a crowning sensor, which measures machine deflection in real-time and automatically updates the system for the next bend.

Pressure Compensation
During the bending process, the Accell 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.

SUPPORT FIXTURES

FRONT SUPPORT ARMS

The Accurpress Front Support Arms are available in two sizes:

- 24” Standard
- 36” Heavy Duty

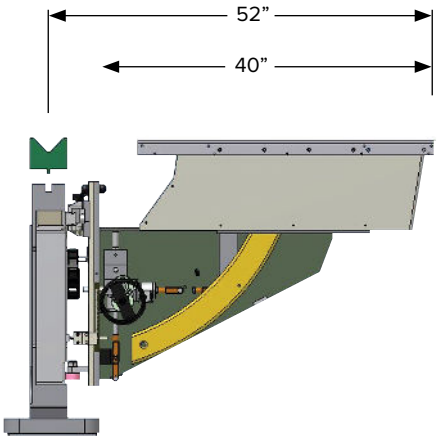
The arms are fully adjustable for different tooling heights and thicknesses. The bottom Foot Disk allows the operator to easily adjust the height of the support arm while the top support piece can be adjusted front to back depending on the desired position. These support arms are mounted on a linear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

24” standard size with a protractor. Suitable for models up to and including 4250xx, 5285xx.

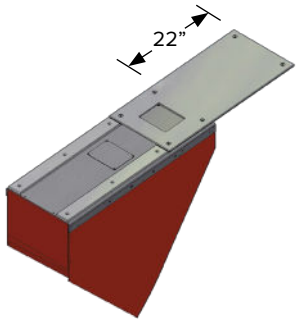
36” heavy duty size with a protractor. Recommended for larger models.

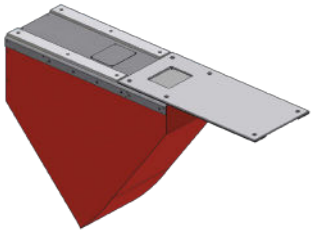
SHEET FOLLOWER

The Accurpress Sheet Following System is a movable 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.



SHEET EXTENDER

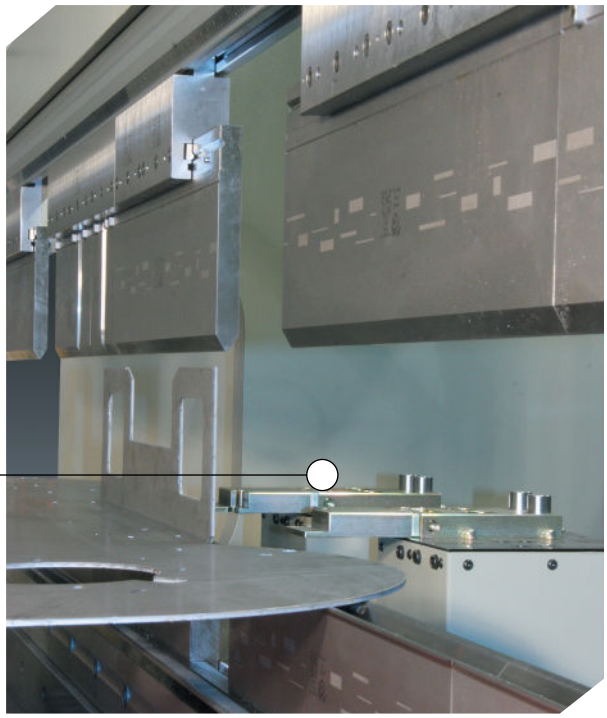


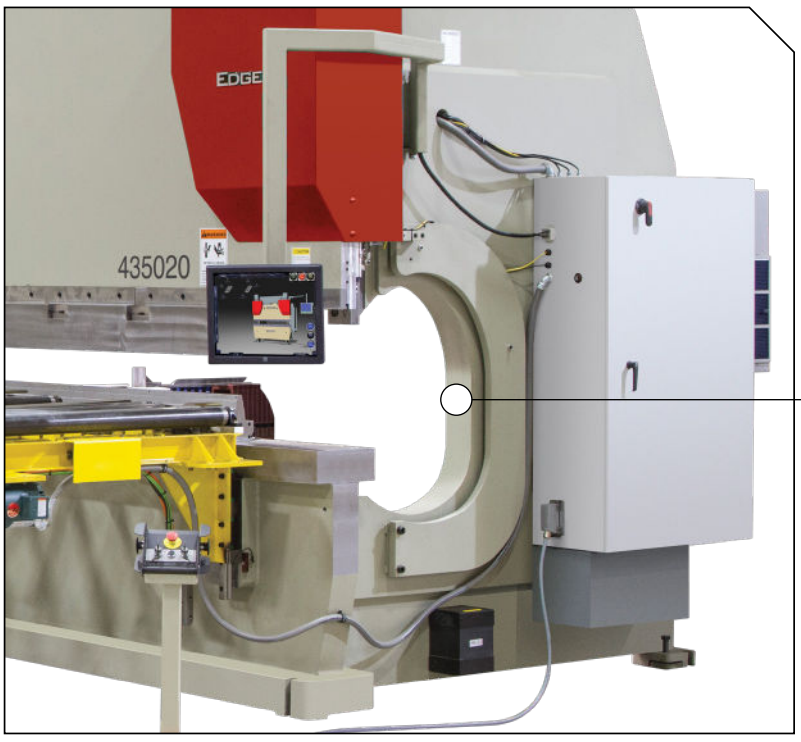


SPECIAL CUSTOM Machine Modifications

EXTENDED RAM STROKE & OPEN HEIGHTS

To satisfy the bending requirements for deep box forming or additional special forming needs, Accurpress offers optional extended Ram Stroke Lengths—available on the Accell-U and H models. The Accell-E model may be ordered with additional Ram Open/Closed Heights to enable the optimum height for specific applications and tooling requirements.



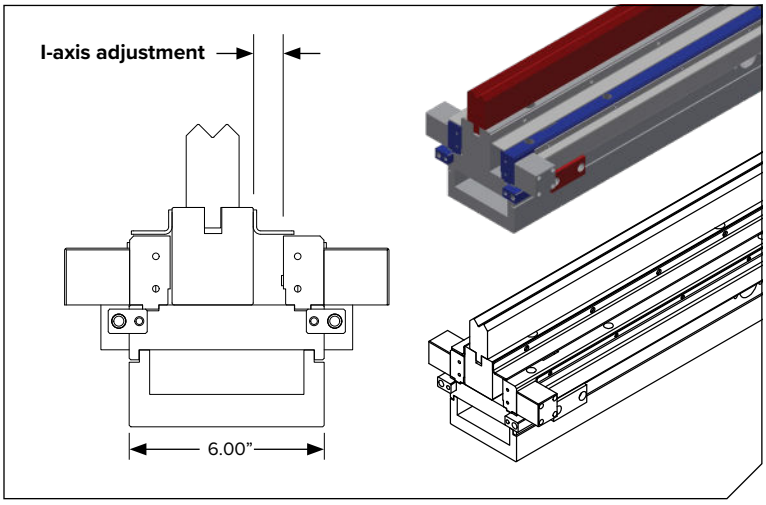


EXTENDED THROAT DEPTH

Extended deep throats may be requested for special applications requiring deeper flange lengths. This same customized feature may also be a big benefit for machines purchased in tandem or trident configurations.

CUSTOMIZED HORN EXTENSIONS

Accurpress offers customized features such as bed/ram horn extensions for one end or both ends of the Accell models, providing an economical means of adding more bending length and flexibility for the special forming jobs. Optional “Drop-down Vision Control Panel” may be considered in lieu of the “Swing-arm Pendent Mount.”

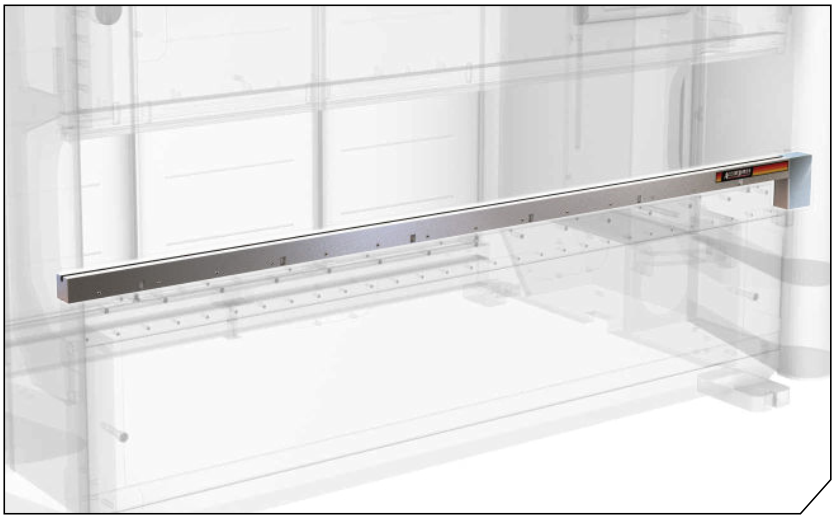


I-AXIS

The I-axis option is advantageous for unique and specialized high production applications that necessitate forward/reverse movement on the Tooling System. Accurpress offers a CNC controlled and air-powered package that provides up to 1” of adjustment in conjunction with the 6” wide Accurcrown. Customization of the I-axis package with wider than 6” Accurcrown Holders and I-axis adjustment greater than 1” are also available upon review of the specific forming job.

RAM CLAMPING AND CNC-CROWNING

Efficient upper tooling changes are made easy via the hydraulically operated Ram Clamping System fully integrated to the press brake during the manufacturing processes. Accurpress offers the renowned high precision “Wila” or “Wilson” systems and are available to suit “American” tang-style or “New Standard” punch configurations.



Accell-E and U-models are sold with an integrated CNC Crowning Die Holder as a standard feature, interfaced to the Vision Control. Choices for the Crowning Holder range from the Accurcrown manufactured by Accurpress to optional selections from Wila or Wilson to meet any and all requirements. Crowning Holders provide a uniform crown and include localized adjustments to compensate for minute variations in tooling or press brake tolerances. Lower tool clamping is accomplished manually via set screws or hydraulically when ordered as an option.

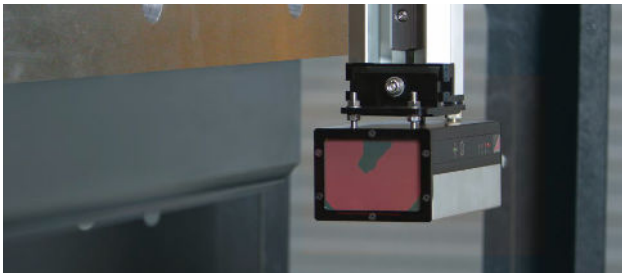
SAFETY GUARDING Systems

LAZERSAFE SENTINEL

Lazersafe Sentinel is a Safety System offered on the Accurpress models that incorporate a continuous dual-beam laser field protection zone directly below the punch tip. The Accurpress will immediately stop if any obstruction is detected when the ram is in motion. This system is most efficient up to 32' ram/bed lengths.

LAZERSAFE SENTINEL PLUS

The Lazersafe-Plus is a dual beam system incorporating a camera as a receiver that recognizes and monitors the silhouette of the punch. The added benefit of the LS-Plus allows the Accurpress to operate at fast speeds closer to the pinch point. For convenience of bracket height adjustment, optional "motorized" units may be purchased in lieu of the "manual" brackets.



FIESSLER AKAS 3F

The Fiessler Laser Guarding System protects the operator from the pinch point hazard of closing tooling. 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, thereby protecting the operator.

LIGHT CURTAIN GUARDING

Some applications may be best suited to a Light Curtain Guarding System. Accurpress will work with you to recommend a safety system that will provide a secure working environment.

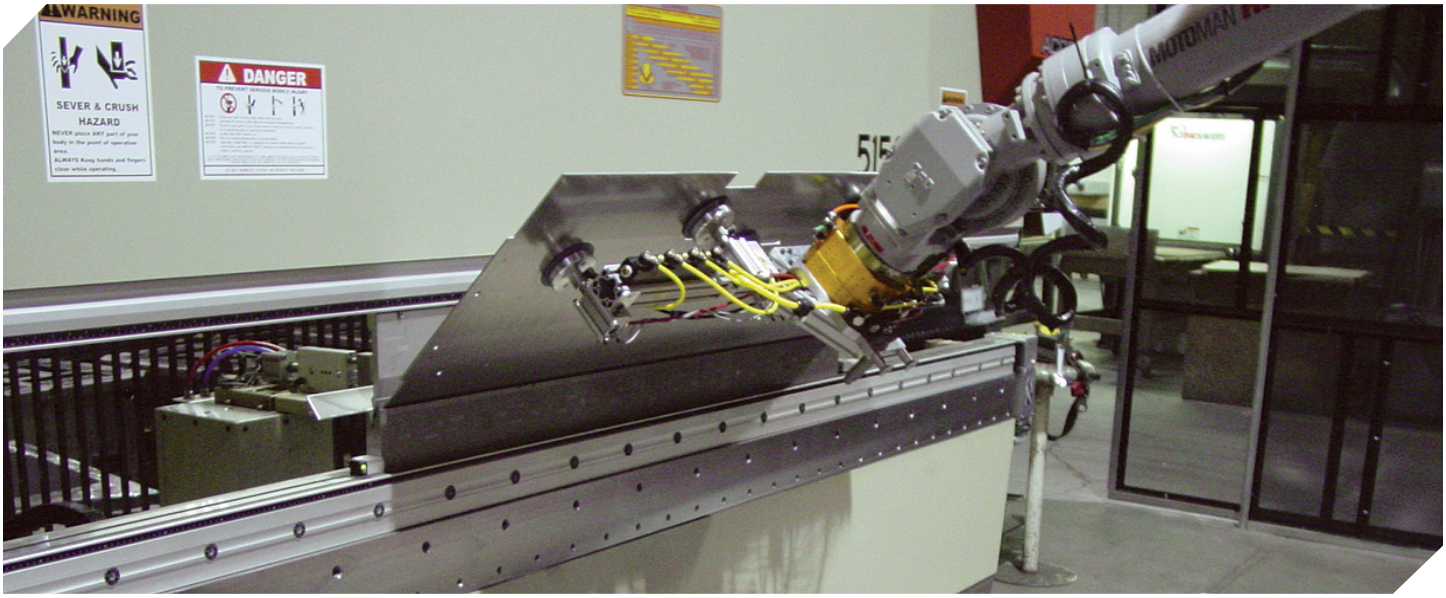
REAR GUARDING

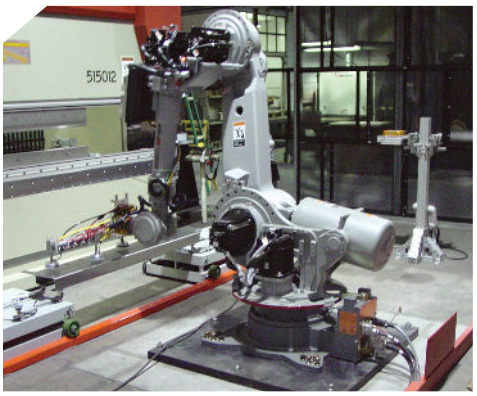
Rear Guarding is included on the E/U/H models as a standard feature when ordered with the Elite, Supreme or Titan backgauge. The Guarding is available as an option for Accurpress machines purchased with the Premium backgauge. In the case of smaller models, a sliding gate is installed with a safety interlock switch, or in the case of larger models, a safety gate as pictured is installed along with the interlock switch to provide the necessary safe-operation. When the machine operator needs to access the back of the machine, the interlock switch will prevent the machine from turning on once the door is opened.

ROBOTICS Integration

The variations and possibilities of forming parts, along with production challenges, logistics and visionary ambitions has led to many robotic press brake operations across North America. To address the needs for automated bending, Accurpress offers solutions, which combine the Accell Press Brake with experienced partners in Robotics and Offline Software.

To further enhance optimization for heavy plate forming, contact Accurpress regarding the Automized OctoCrane System to address large crane needs and manage materials, parts, skids and much more!





TANDEM OR **TRIDEM** OR **MORE**

Accurpress is an excellent solution for operating machines in parrallel.

The press brakes are installed to operate as a single machine to form long parts, or may be operated independently. It's as simple as a selector switch, thus, offering the maximum flexibility to address special customized plate forming in longer lengths by operating the machines as one, or tending to shorter production runs with each machine operating on its own.

Regardless of the number of Accurpress machines installed together, the Vision Controls and Crowning Systems are electronically connected to exchange information for highly precise synchronized forming.

DEALER SUPPORT NETWORK

Accurpress Sales & Service is provided by an Authorized Dealer Network. All of our Dealers are factory trained and supported to provide you with knowledgeable competent, and local service

For more information about our products, please refer to our comprehensive brochures or visit our site www.accurpress.com

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ACCURPRESS

PRECISION FORMING SYSTEMS