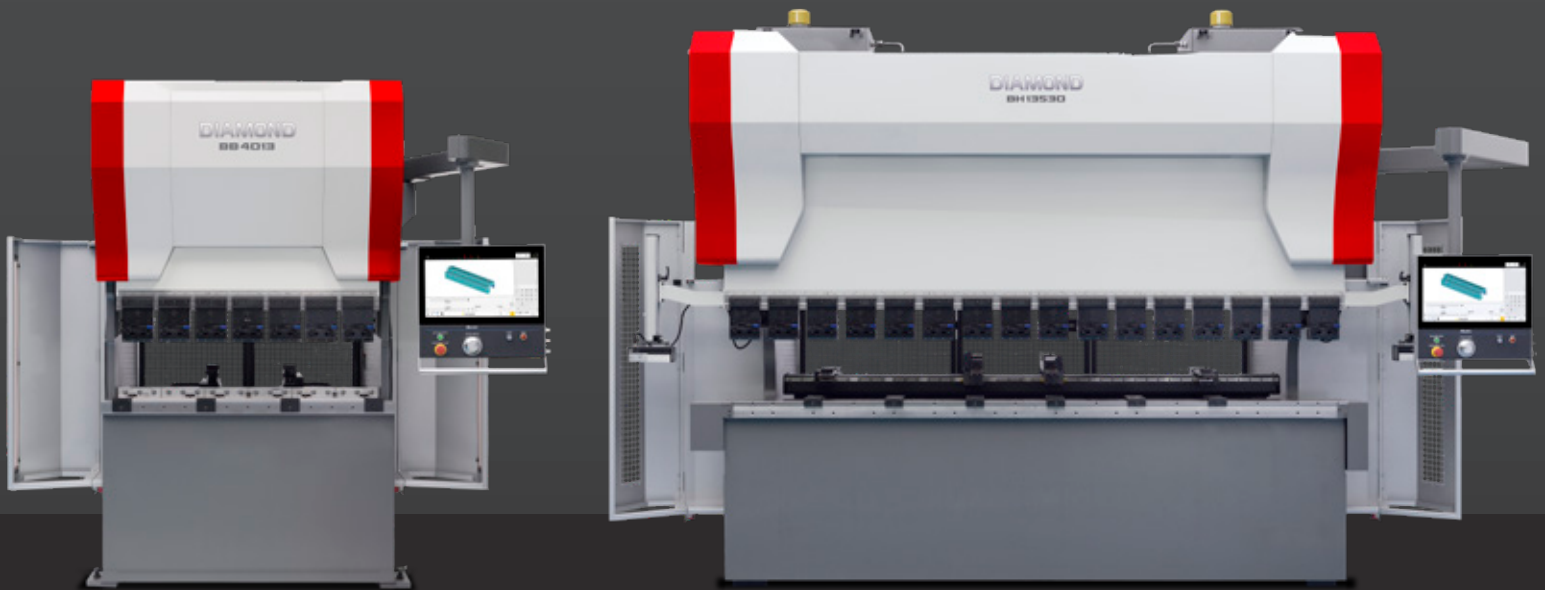


BB/BH SERIES

PRESSBRAKES





Bending Redefined

MC Machinery is leading the way in Press Brake technology. The Diamond series is the premiere product in our press brake line up. It features the new MOS control with enhanced industry leading functionality, but it's much more than just a new controller. Our engineers have paid close attention to how to integrate the best electronics to enhance the bending experience. Mitsubishi Electric is a world leader in industrial electronic controls and components. Part of our mission is to provide the best products and service with unsurpassed quality and reliability.

NEW CONTROL



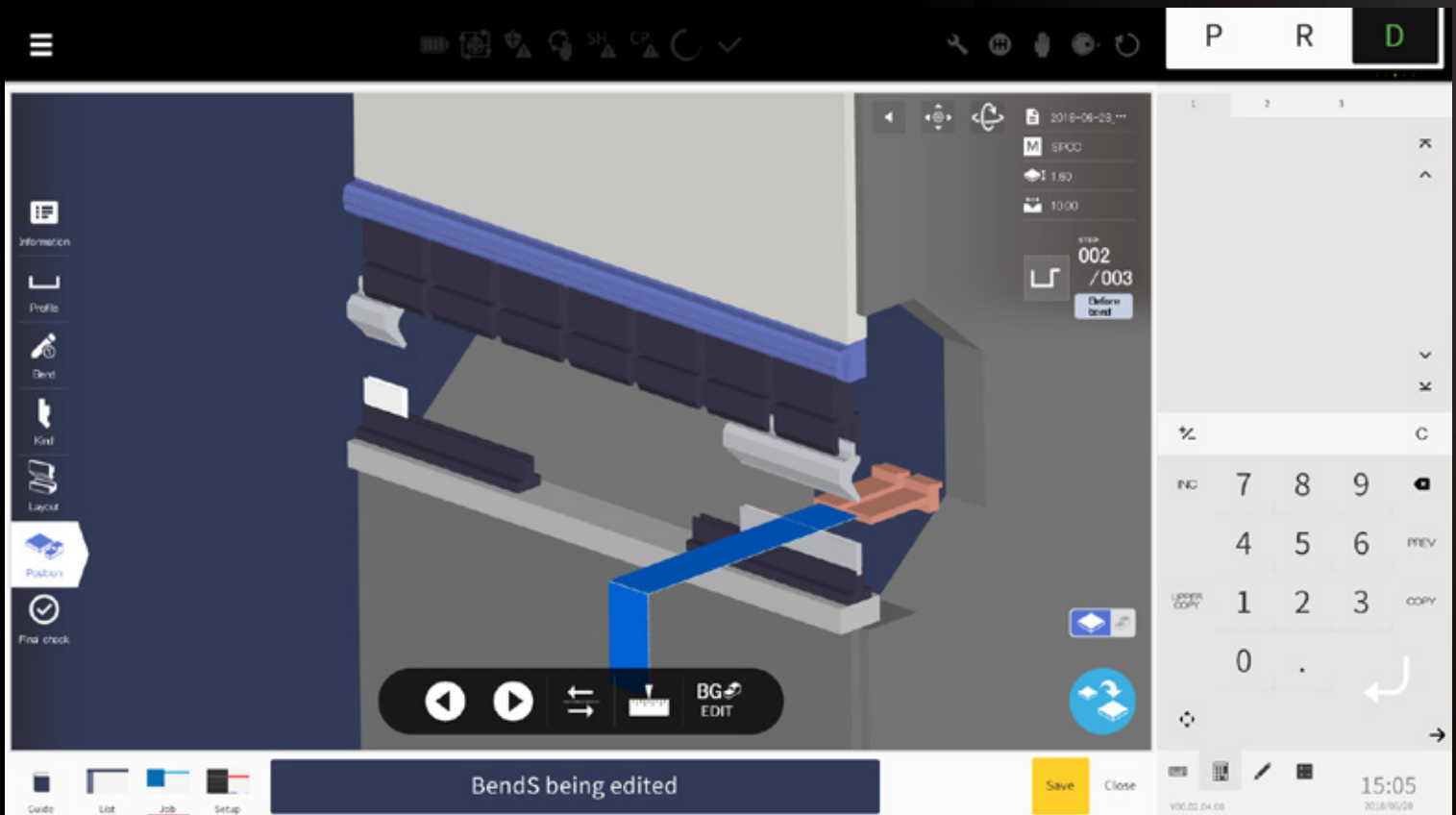


Standard Control Features

- Ethernet
- Automatic Thickness Sensing
- User Friendly Interface
- All Axis Pulse Handle Control
- USB
- Tool Library
- 22" Display
- Dual Foot Pedal RAM Control
- Multi-Language Interface
- Program Folder Management
- Multi Touch LCD Display
- Machine Diagnostics
- Custom Multi-User Interface
- 2D & 3D Draw Function
- 3D Part Simulation
- Work Efficiency Analysis

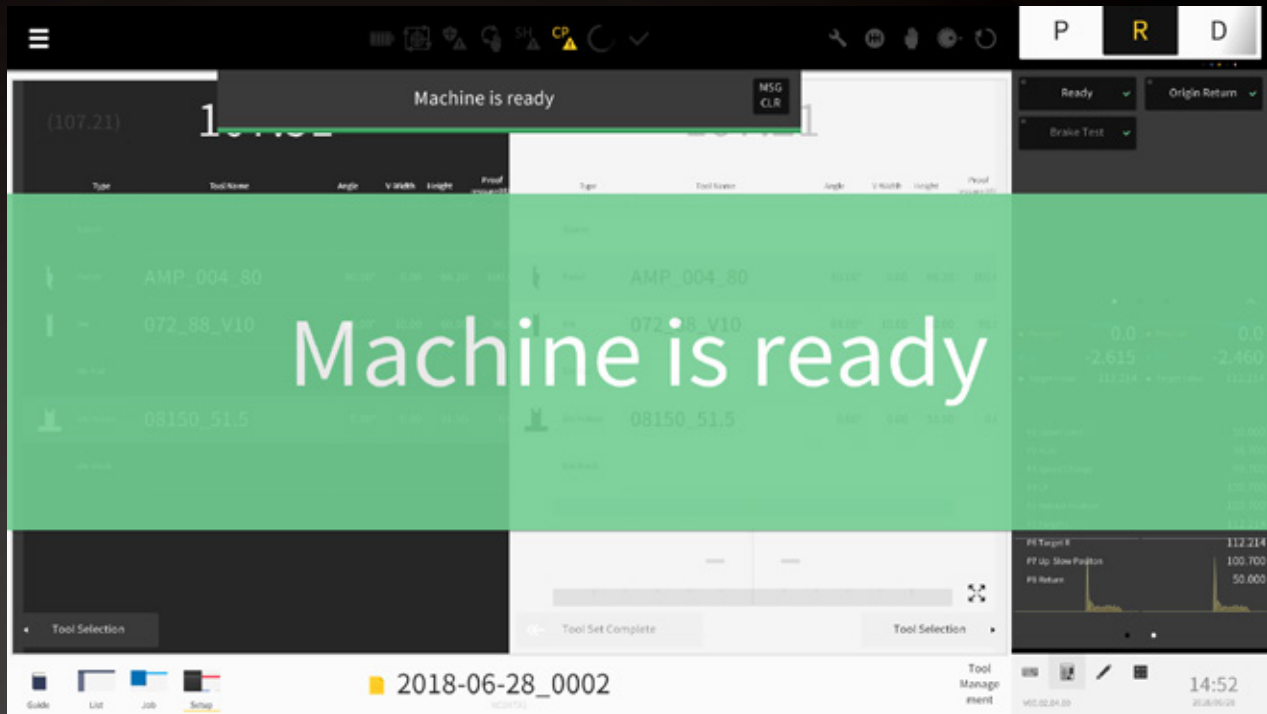


30% Improvement in response time than previous models



Easy Process Operation

Ability to see full screen simulation in real time with full zoom/tilt. Any operation can be accessed from this page.



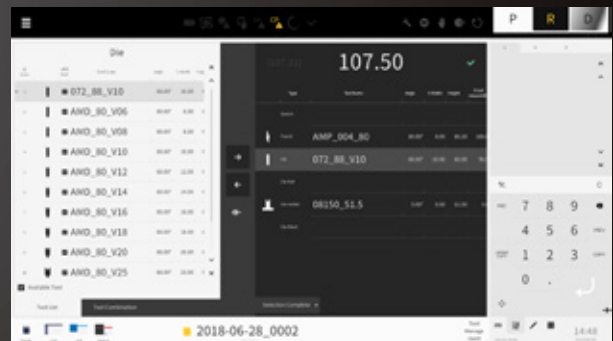
Improved Operator Support

Smarter Operator Experience or Intelligent Operator Experience Redsigned UI advances the level of operator support from announcement indicators to predictive programming.



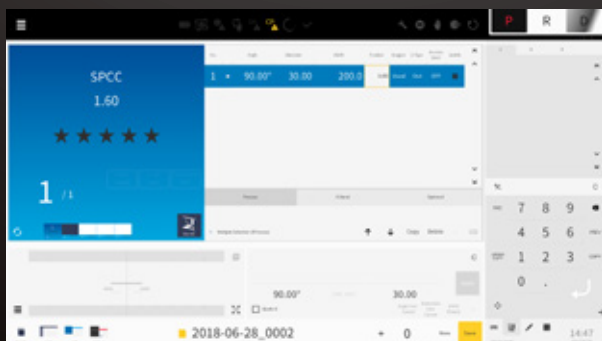
Improved CAD/CAM

Whether you're programming off line or at the press brake, the operator has greater visibility and editing functions at the control.



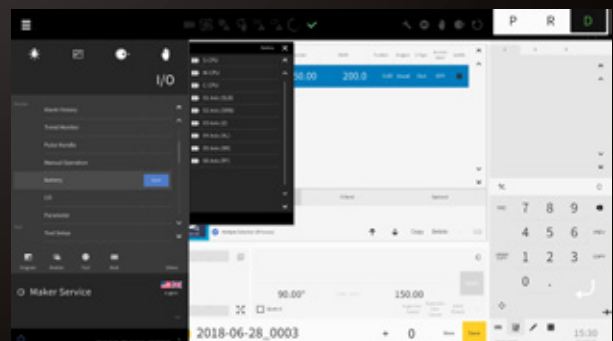
Tool Library

Complete tool library can be set up by manufacturer, common layout, set favorites, or available tooling



Predictive Programming

Enhanced user friendly features such as predictive programming, auto tool confirmation, auto tool layout saves operator time at the control for greater productivity.



Onboard Maintenance

Check everything from battery level, alarm history, trend monitors, or machine results.

BB SERIES

- High Accuracy (± 1 micron)
- Intuitive Control
- Highly reliable / High uptime
- Cost efficient operation
- World class productivity
- Ecological (all electric/oil less)



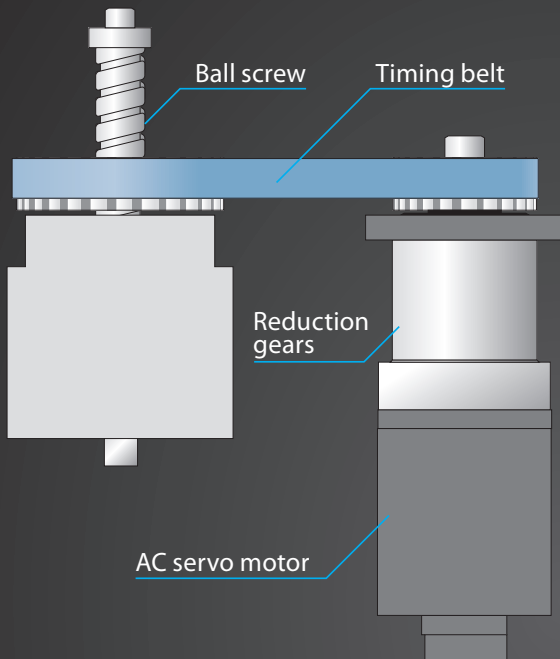
Machine Features

-  All Electric Ball Screw Drive
-  Eco Friendly
-  Low Profile Back Gauge Design
-  Mitsubishi Components
-  Cost Efficient Operation
-  Rigid Frame Design
-  Safety Interlocked Rear Gate
-  High Precision Back Gauge Accuracy
-  Fast Cycle Time: 2.1s
SPH: 1714
-  High Precision Ram Accuracy
-  Multi Axis Back Gauge

The BB Series ball screw press brake is driven by an AC servo motor and ball screw drive mechanism. It maximizes productivity with high speed ram and high precision repeatability (1 micron). This drive method is superior to all other electric/hydraulic performance and is quiet in operation. When you want the 1st part the right part let the BB bring you profit thru precision.

BB SERIES

Ball Screw Drive Mechanism



- High-speed movement by the ball screw drive
- Stable high repeating accuracy by the ball screw drive
- Environmental performance
(oil less and noise reduction by the reducer)

1714 SPH (Strokes Per Hour)

- More strokes per hour than competitive machines
- Fastest ram response time in its class (2.1sec)

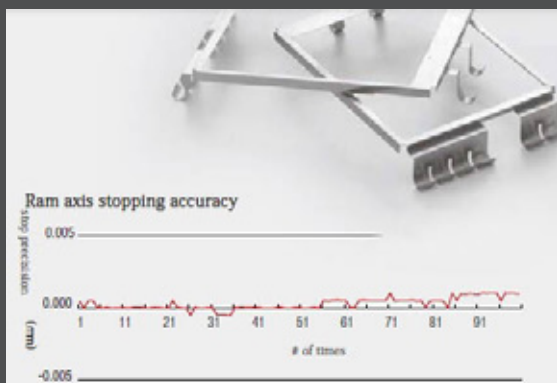




Back Gauge

- With up to 5-axis available, the most complex parts can be easily formed.
- High speed movement combined with high accuracy drives (± 0.01 mm) ensures the back gauge is positioned quickly and precisely every time for the operator
- Low profile back gauge enables part positioning on top of the back gauge
- Independent servo drive (FF axis) allows for bending a wide variety of part shapes (option)

Accuracy you can measure.



All Electric

The BB Series brakes are designed with a broad spectrum of ultra-modern features, high performance requirements, accuracy you can measure and a cost efficient operation our customers have come to expect in today's modern production machinery.

- High speed ram stroke by AC Servo motor and ball screw drive for fast approach, bending, and return speeds
- High quality stop accuracy by AC servo motor and ball screw for unequalled ram positioning ± 1 micron (± 0.001 mm)
- Environmental performance (oil less and noise reduction by reducer)
- Single AC servo motor per ram axis provides faster cycle times resulting in more parts per hour.

BH SERIES

- Superior Accuracy (± 1 micron)
- Intelligent Intuitive Control
- Highly Reliable
- Cost Efficient
- World Class Productivity
- Innovative Dual Drive system





Machine Features



Dual Drive Hybrid



Eco Friendly



Low Profile Back Gauge Design



Mitsubishi Components



Cost Efficient Operation



Rigid Frame Design



Safety Interlocked Rear Gate



High Precision Back Gauge Accuracy



Fast Cycle Time: 2.3s
SPH: 1560



High Precision Ram Accuracy



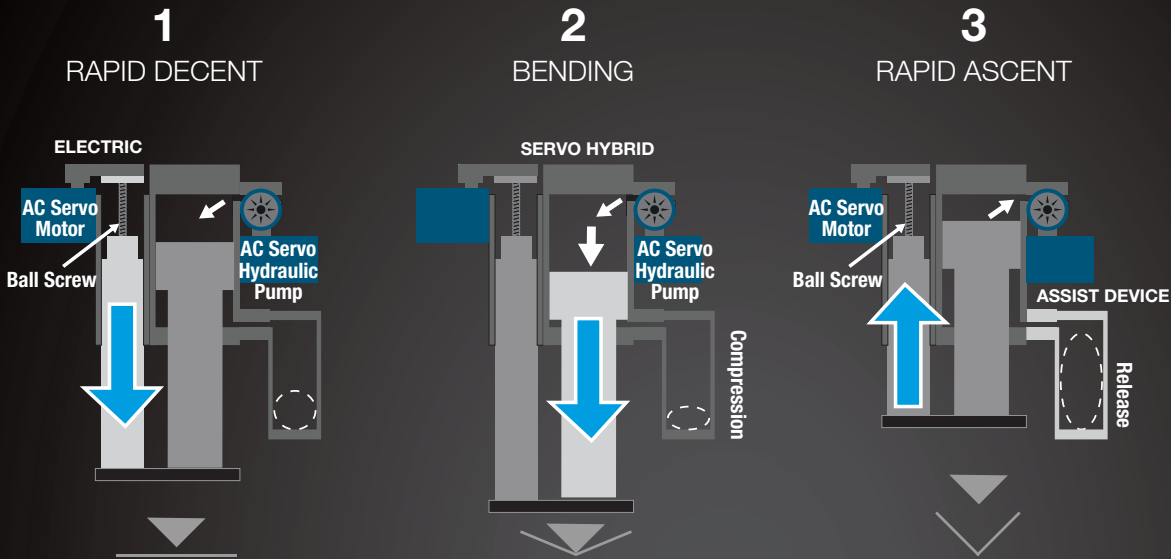
Multi Axis Back Gauge



The BH Series utilizes an innovative and leading edge Dual Drive System with improvements in productivity, extremely precise positioning accuracies, and superior energy savings over conventional as well as hybrid press brakes. This new technology allows high speed movement of the ram at 200 mm/s with remarkable accuracy and repeatability. Our proprietary technology results in greater reliability, machine uptime, reduced operational cost and ease of operation – part after part, year after year.

BH SERIES

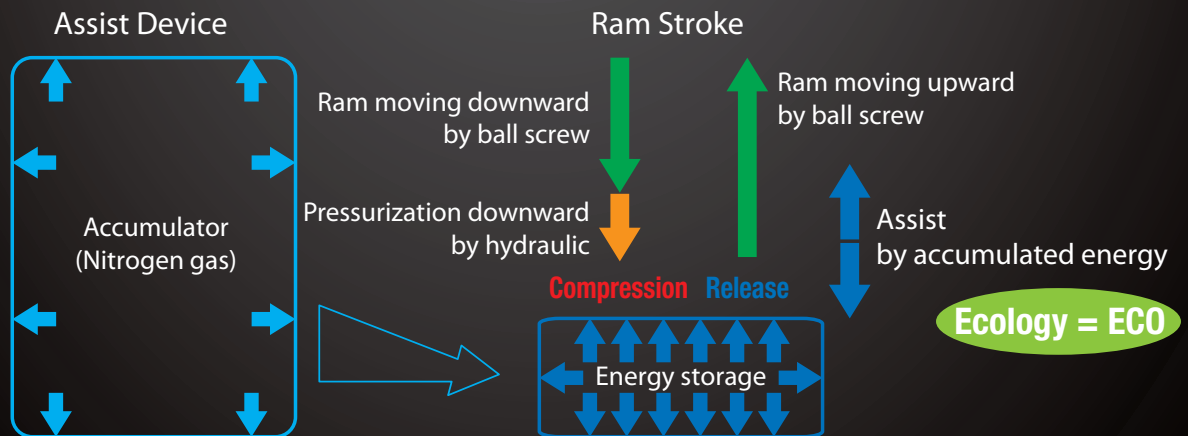
Dual Drive Technology

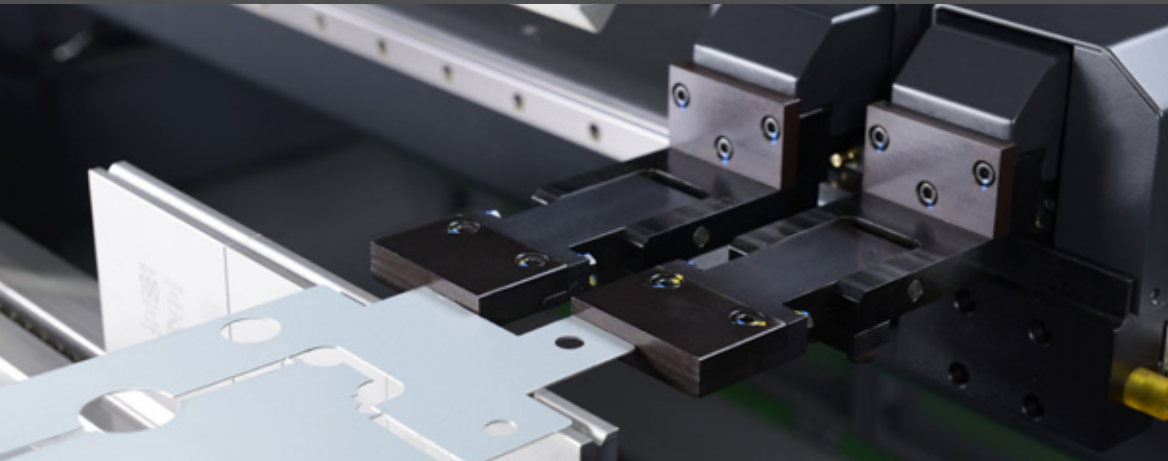


1560 SPH (Strokes Per Hour)

- More strokes per hour than competitive machines
- Fastest ram response time in its class (2.3 sec)

- High speed ram stroke with AC servo motor and ball screw drive for extreme approach, bending, and return speeds
- High quality stop accuracy by servo hydraulic mechanism for unequalled ram positioning ± 1 micron (± 0.001 mm)
- Ecology operation by assist device, less hydraulic oil with fewer oil changes required, and very low noise level in stand by and production.
- Lowest power consumption in its class – hydraulic pump motors are on only when the ram is moving for on demand power.



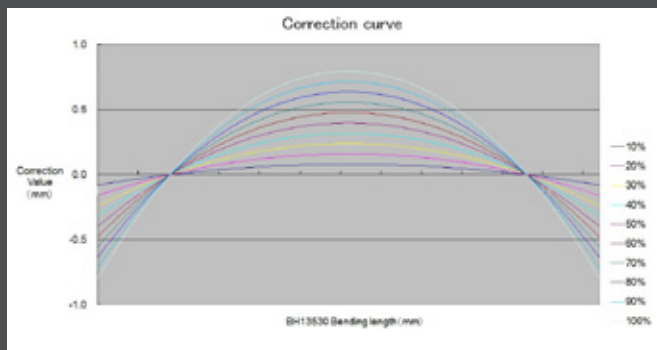


Multiple Axis Back Gauge

- With up to 9-axis available, the most complex parts can be easily formed.
- High speed movement combined with high accuracy drives (± 0.01 mm) ensures the back gauge is positioned quickly and precisely every time for the operator
- Low profile back gauge enables part positioning on top of the back gauge
- Independent servo drives for “Y” axis allow for tapered flanges
- Dual servo drive (FF axis) allows for bending a wide variety of part shapes (option)

Micro Wedge Crowning System

Automatic crowning adjustment is made quickly for each bending step without the need for operator input. Simple and fine adjustments by the operator at the touch of a finger without stress or confusion.



- Hydraulic assisted crowning bed design automatically provides consistent angular accuracy.
- Combining the angular accuracy from the crowning system with Automatic thickness detection through PSP and CP detection angular irregularities are minimized due to material thickness and off center bending.
- Easily program complete work flow in one handling through staged tool setups anywhere along the bed.

OPTIONS



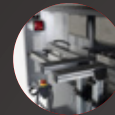
Available for all BB and BH Models



Small Punch Holder



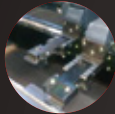
Universal
Punch Holder



Sheet Support



Interlocked Side Gate



FF Axis



Safety Device



Touch Sensor



Open Height Increase



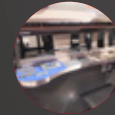
Moveable Foot Pedal
*Available for all BH models,
but ONLY the BB 6020



Angle Measurement



Available for BB Models Only



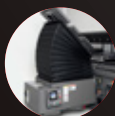
Front Support Table



Available for BH Models Only



Tandem Foot Pedal



Sheet Follower

Additional Options

Clamp Spacer

Punch Holder Extension

Remote pulse handle

Bar Code Reader

Finger Tip Styles (Flat tip, Step
Tip, Magnetic Tip, Crab Claw,
Touch Sensor)

SPECIFICATIONS



BB SPECIFICATIONS

			BB4013	BB6013	BB6020
Press Force	Kn		353	539	539
	ton		36	55	55
Bending Length	mm (in)		1260 (50)	1300 (51)	2100 (83)
Table Length	mm (in)		1400 (55)	1300 (51)	2100 (83)
Distance Between Frames	mm (in)		1300 (51)	900 (35)	1700 (67)
Table Width	mm (in)		100 (4)	100 (4)	100 (4)
Open Height	mm (in)		430 (17)	430 (17)	430 (17)
Gap Depth	mm (in)		100 (4)	400 (16)	400 (16)
Ram Stroke	mm (in)		150 (6)	150 (6)	150 (6)
Ram Speed	Approach	mm/sec (in/min)	100 (236)	95 (225)	95 (225)
	Bending	mm/sec (in/min)	20 (47)	20 (47)	20 (47)
	Return	mm/sec (in/min)	100 (236)	95 (225)	95 (225)
Power Requirement	kVA		15	20	20
Weight	ton		3.5	4.5	5



BH SPECIFICATIONS

			BH8525	BH13530	BH18530	BH18540	BH25030	BH25040
Press Force	Kn		833	1323	1813	1813	2450	2450
	ton		85	135	185	185	250	250
Bending Length	mm (in)		2600 (102)	3100 (122)	3100 (122)	4100 (161)	3100 (122)	4100 (161)
Table Length	mm (in)		2700 (106)	3200 (126)	3200 (126)	4200 (165)	3200 (126)	4200 (165)
Distance Between Frames	mm (in)		2200 (87)	2700 (106)	2700 (106)	3700 (146)	2700 (106)	3700 (146)
Table Width	mm (in)		170 (7)	170 (7)	170 (7)	210 (8)	210 (8)	210 (8)
Open Height	mm (in)		530 (21)	530 (21)	530 (21)	530 (21)	530 (21)	530 (21)
Gap Depth	mm (in)		400 (16)	400 (16)	400 (16)	400 (16)	400 (16)	400 (16)
Ram Stroke	mm (in)		250 (10)	250 (10)	250 (10)	250 (10)	250 (10)	250 (10)
Ram Speed	Approach	mm/sec (in/min)	200 (472)	200 (472)	200 (472)	200 (472)	200 (472)	200 (472)
	Bending	mm/sec (in/min)	10 (23.6)	10 (23.6)	10 (23.6)	10 (23.6)	10 (23.6)	10 (23.6)
	Return	mm/sec (in/min)	200 (472)	200 (472)	200 (472)	200 (472)	200 (472)	200 (472)
Power Requirement	kVA		9	12	22	22	27	27
Weight	ton		7	8.9	16	20	17.5	22



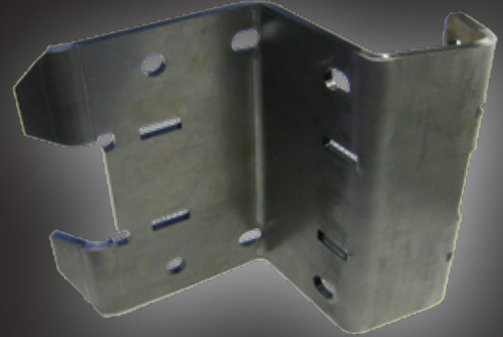
DIAMOND BEND

OFFLINE SOFTWARE

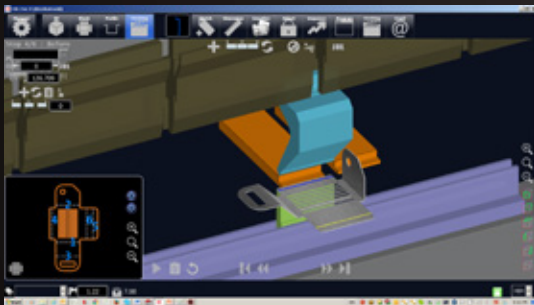
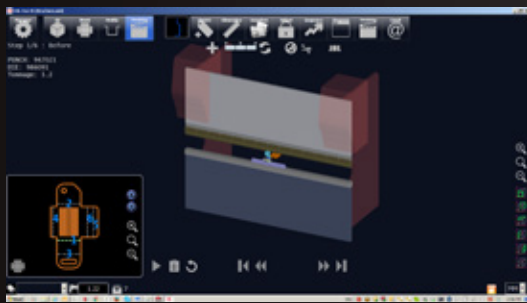


“Know Before You Bend”

- ✓ Know You Have a Workable Design
- ✓ Know You Have the Accurate Flat Blank
- ✓ Know You Have the Tools for the Job
- ✓ Know You Have a Good Program and Setup



Eliminate Wasted Production Time from trial and error programming on the machine.
DiamondBEND offline Press Brake CAM provides the ability to program and fully simulate the bending process before parts are laser cut and formed



Key Features

- Automatic Tool Selection and Bend Sequencing
- Full Collision and Tonnage Checking
- Easy Editing of Bend Sequence and Machine/Tool Setup
- Utilize all Press Brake Tool Styles and Suppliers
- Build and Share an Accurate Bend Database
- Interfaces with SolidWorks, Inventor and SpaceClaim CAD Systems
- Fully Integrated with New Murata Press Brakes



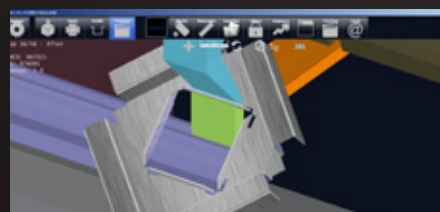
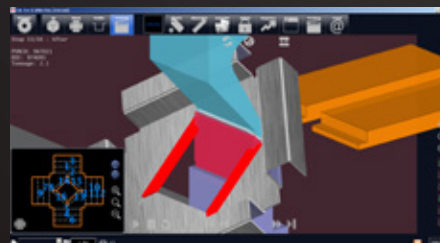
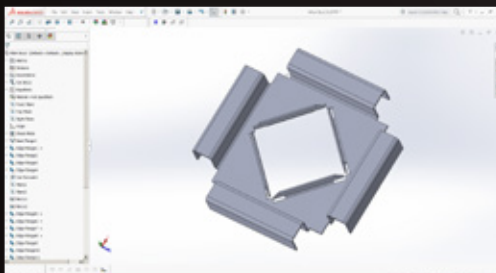
Get Up To Speed

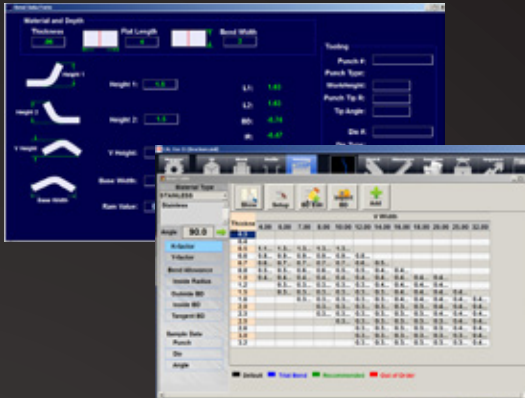
DiamondBEND is designed to be easy to learn and use, featuring a modern Game Style User Interface. This clear and uncluttered interface makes it easy to program and follow the bending process.



Verify Your Design

DiamondBEND allows engineers and CAD operators to make a quick Go/No Go Bending Check to assure that their design is manufacturable with your tools and equipment.





Get the Right Flat Blank

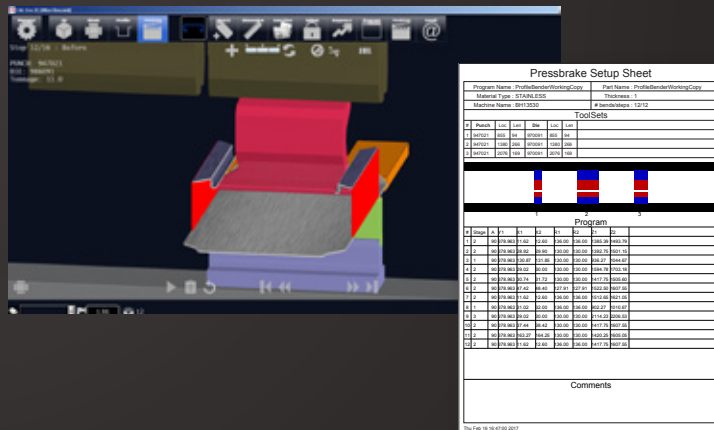


DiamondBEND provides a comprehensive set of tools for creating and maintaining an accurate bend database. Build your bending information based on sound real life bending experience. The database can be shared with your CAD system and Murata press brake controls for consistency and ease of maintenance.

Organize Your Tooling



With DiamondBEND you can work with any tool supplier. We supply the standard online catalogs, you build your exact inventories. You can also design standard tools or import CAD geometry for special shapes. Use supplier's Catalogs to analyze new tools before purchasing



Verify Your program



DiamondBEND allows for the full simulation of bend operations before parts are sent to your press brakes. Any collisions, tooling shortages and over tonnage conditions are detected offline avoiding mistakes and lost production on the shop floor. Tooling setup information can be viewed on the machine control or with paper reports

DiamondBEND is part of the Mitsubishi Factory Network



Plug in and take control of your Bending Operation

- Optional Features for Monitoring, Scheduling and Controlling Production From Your Desktop
- Integrate and Coordinate with Upstream/ Downstream Operations
- Optimize Machine Loading and Work Flow
- Customized Shop Floor Documents Printed On-The-Fly



Financing Solutions

MAC FUNDING CORPORATION

a subsidiary of  Mitsubishi Corporation

Simple, Fast & Easy

Being a fellow Mitsubishi Corporation company, MAC Funding is an integral part of MC Machinery Systems. We work closely with MC Machinery to ensure every transaction is fast and simple, saving you time, effort, and most importantly money.

Fast Track

For loans up to \$350,000, a signed loan application is all we need! The easy, one page application allows you to be approved within 24 hours. We also offer pre-approvals, allowing you to have your financing in place before you even decide on a machine!

630-860-4218 • info@macfunding.com



 **OVER 60 SERVICE LOCATIONS IN NORTH AMERICA**

THE INDUSTRY'S MOST RESPONSIVE SERVICE AND SUPPORT

With more than 200 employees, our regionalized Service Network is the most advanced and responsive team in the industry. We're here for you with phone support, operation training, on-site service, parts inventory and a robust, interactive website. With 20 locations throughout North America, and more scheduled to open, we can respond promptly to your service needs. For the best on-site customer service capabilities, we have more than 25 vans in the field – three times more than any other company in the industry.

From installation and on-site training to support and service throughout the life of your system, our national service network is just a phone call away. No other company has a greater depth of experience and resources than Mitsubishi and MC Machinery Systems. Access 24/7 support with our interactive website, a detailed interactive parts catalog, printable machine manuals and software.



ABOUT MC MACHINERY SYSTEMS

MC Machinery Systems customers get the best of both worlds: A single source for a diverse arsenal of manufacturing technologies and our expansive and knowledgeable support network. Our expertise spans virtually every aspect of metalworking—from simple fabrication to CNC-driven, automated manufacturing cells.