DUAL SERVO POWER PRESS BRAKE

EG Series

EG 6013, EG 6013 AR

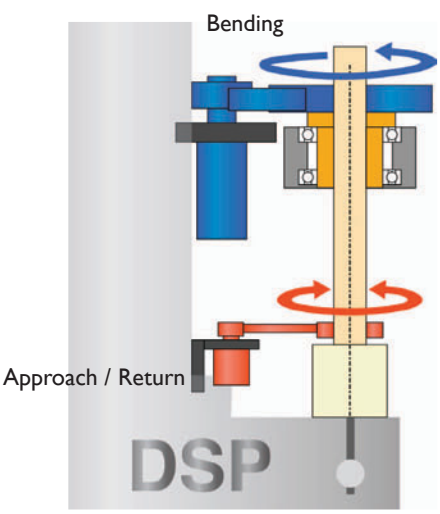
VPSS
Virtual Prototype Simulation System

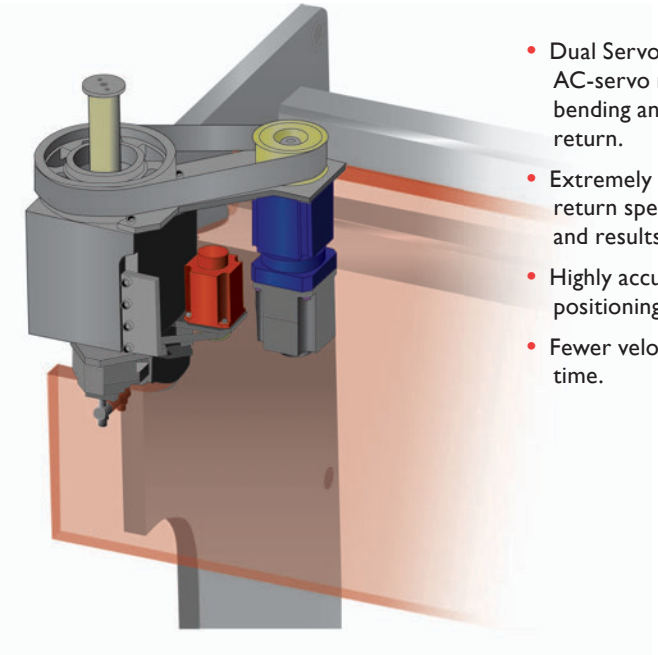
AMADA

EG Series Press Brake

An ultra-high precision, high-speed compact bending solution featuring an advanced and precise Dual Servo Power drive system.

Dual Servo Power (DSP) Drive





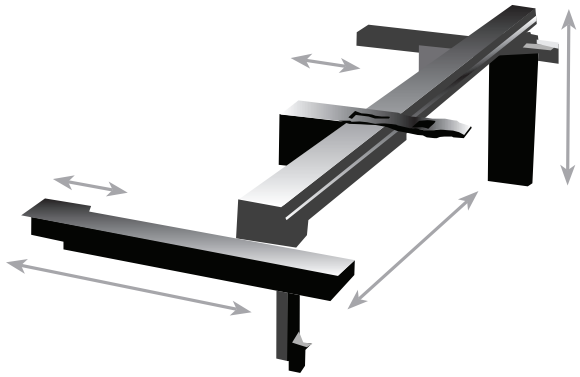
- Dual Servo Power drive contains two AC-servo motors - a 2.9 kW motor for bending and 1.3kW motor for approach / return.
- Extremely fast approach, bending and return speeds – provide faster cycle times and results in more parts per hour.
- Highly accurate position detection and positioning.
- Fewer velocity changes at bending start time.

AMNC3i - PC CONTROL with Network Capabilities

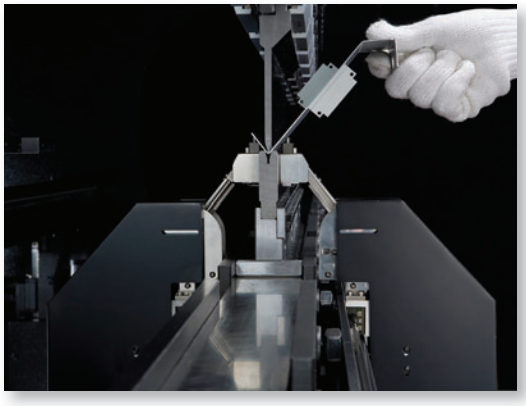
- User-friendly graphic interface and tool library assist operators in the quick setup of complicated parts.
- 18.5" multi-touch display offers multiple modes of data entry (angle, depth, 2D and 3D) for the utmost in programming flexibility.
- Automatic program creation from a 3D representation of the work piece.
- Amada's SDD software database provides program storage on the control or on a server when the control is networked, allowing secure storage of machine setup and program data.
- Adjustment of all machine axes can be accomplished through use of the control mounted handwheel.
- Built-in bar code reader.
- Dual foot pedal ram control.

L-Shift Back-Gauge

- 5-axis back gauge speeds setup for complex parts.
- High-speed movement on all axes ensures that the gauge fingers are positioned as quickly as the operator positions the part.
- Standard Independent L-Axis Servo Drives (L-Shift) handle bending of a wide variety of part shapes.
- Tool navigator software positions backgauge where each tool needs to be installed, shortening the tool installation process.
- Low profile design enables part positioning over the top of the backgauge.



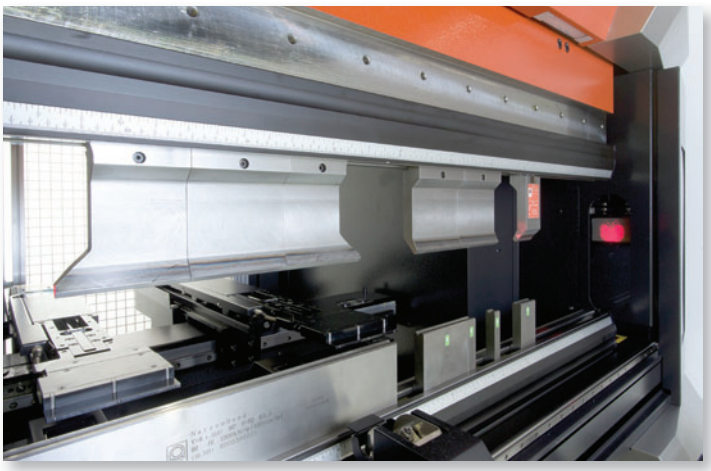
Optional BI-S Angle Solution



- The BI-S is a high-speed, high-precision, probe-style bend angle sensor that measures and adjusts the bend angle "on the fly."
- Eliminates the need for test bending and adjustment of the initial bend angle eliminating scrap and reducing setup time.
- Automatic angle adjustment ensures high-quality production bending even when material thickness and hardness varies from part to part.
- Overcomes any environmental factor that affects bend angle to produce high-accuracy bends even if the operator lacks experience.

High Rigidity & Larger Open Height

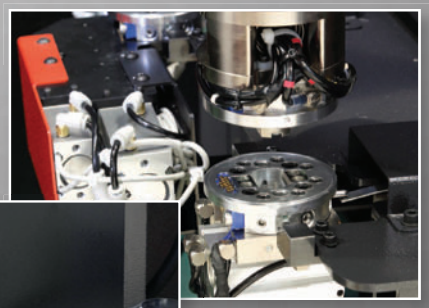
- High-rigidity frame allows for a larger open height and stroke.
- Larger open height allows deep box bending and easier retraction of parts with large down flanges.
- The frame is constructed from high-tempered steel plate and eliminates welding stress, ensuring long lasting performance.

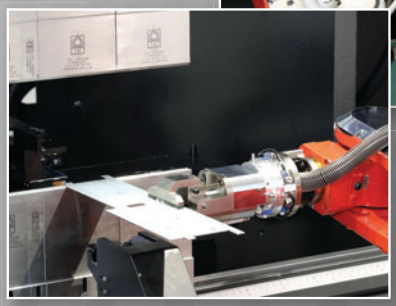


EG AR Press Brake

A fully-automated bending solution featuring a precision bending robot and automatic tool changer.

The EG 6013 AR is a automated robotic bending system offering high-speed precision bending for compact sheet metal components. This system combines the EG series press brake, an advanced bending robot, a high-capacity automatic tool changer and hand changer. Together they provide outstanding precision for unattended production runs. Its compact foot print saves valuable floor space while offering increased productivity, efficiency, and profitability.



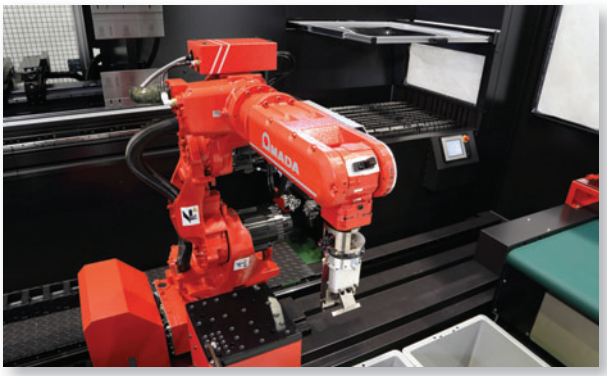


Automatic Hand Changer

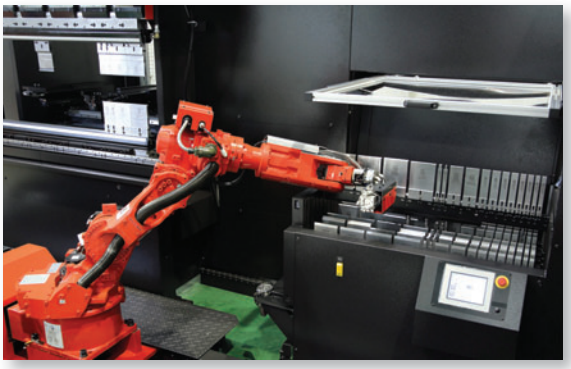
AMADA

Precision Bending Robot

- Single robot for quick loading / unloading, bending and tool change.
- Dedicated bending grip tools are specifically designed for small components and can be changed automatically at the Automatic Hand Changing station.
- Robot can execute downward tracking and rear tracking between the punch and die reducing repositioning.
- Dual Servo Power (DSP) drive system's rapid motion works in tandem with the bending robot for efficient and precise automated production.



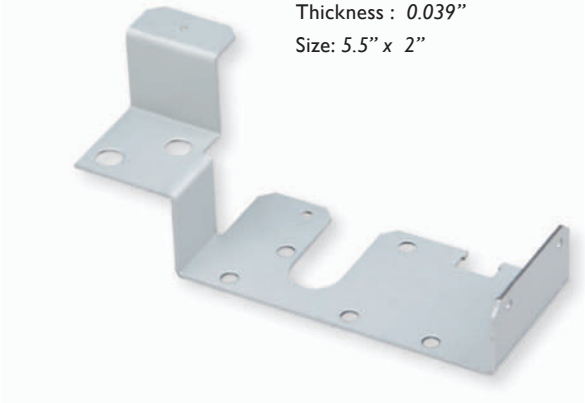
Auto Tool Changer / Auto Hand Changer



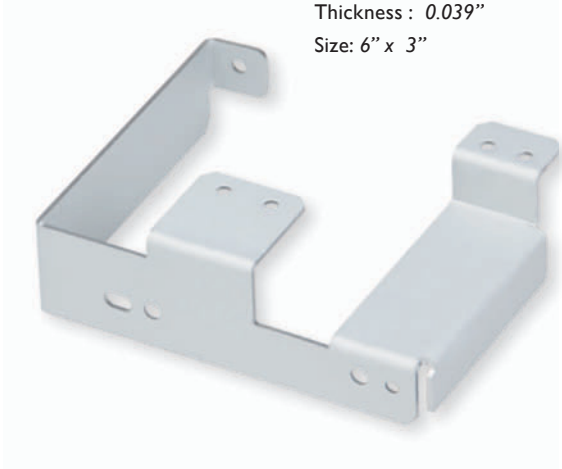
- Quicker and more precise tool setup compared to manual operation.
- Equipped with Automatic Hand Changing station for switching between tool changing and bending operations.
- Continuous automated operation is possible due to the ATC (maximum 10 racks of tools) and AHC (3 types of hands).
- Punch can be reverse mounted.
- Space-saving & cost efficient automatic loading / unloading system.

Sample Parts

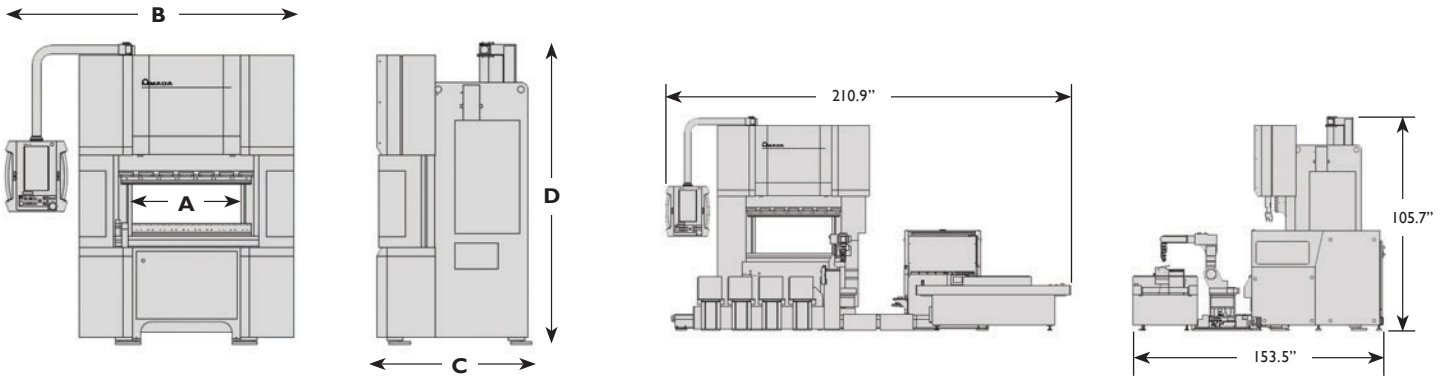
Material : *Steel*
Thickness : *0.039"*
Size: *5.5" x 2"*



Material : *Steel*
Thickness : *0.039"*
Size: *6" x 3"*



Dimensions



Specifications

EG 6013	
Tonnage (US)	67
Bend length	53.1″
Distance Between Frames (A)	39.8″
Stroke Length	6″
Open Height (w/o PHL)	16.5″
Open Height (with A-Grip)	11.81″
Open Height (with AMTS)	15.67″
Number of Drives	2
Approach Speed	8.7″ / second
Bend Speed	1″ / second
Return Speed	8.7″ / second
Machine Length (B)	97.2″
Machine Width (C)	56.1″
Machine Height (D)	104.7″
Weight	8,200 lbs
Motor Power	(2.9 + 1.3) kW x 2
D-Axis Tilt	± 0.08″
Connected Load	12 A
Power Requirement	4.2 kVA at 208
VAC	± 10%
Backgauge Stroke	9.8″ mm (Max 21.6″) use Step Gauging
Backgauge Stroke (Z-axis)	2″ to 8″
Backgauge Speed (L-axis)	2,362″ / min
Backgauge Speed (Y-axis)	2,362″ / min
Backgauge Speed (Z-axis)	787″/min
L-Shift Value	Max 9.8″

EG 6013 AR	
Robot	
Type	MH6S-10 (Yaskawa)
Axis	DX100L (Yaskawa robot controller)
Payload	22 lbs.
Carriage Axis	10 ft.
Maximum Reach P-Point	39.25″
Repeatability	± 0.003″
Weight	265 lbs.
S-Axis Speed	200° / sec.
L-Axis Speed	200° / sec.
U-Axis Speed	200° / sec.
R-Axis Speed	270° / sec.
B-Axis Speed	270° / sec.
T-Axis Speed	400° / sec.
Tool Clamp	
Punch/Die	AMTS Type III-S
Tool Holder Length	49.2″
Tool	Modular tool STC spec. Height= 6″
Tool Stocker	
Tool Handling	Robot
Stocker Length	31.5″
Number of Stockers	12 Stocker (total: Punch + Die)
Stocker Location	RH Side
Tool Weight (Total)	635 lbs (Average 6.6 lbs / 0.12″)
Axis Speed	7.9″/ second (2400rpm)
Acceleration	0.2 seconds
Stroke	0 (No.1Pos) ~ 23.4″ (12 Position)
Soft OT	-10 ~ 23.8″
Hard OT	-15 ~ 24″
Load / Unload	
Load	4 Load tables 12″ x 12″
Unload	Drop in box or pass through conveyor

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