

■Dimensions

Unit : mm

■ EG-6013

(L : 2495 x W : 1430 x H : 2669)



■Machine specifications

Model	EG6013	
	AGRIP(standard)	AMTS(option)
Total width: L (when pendant is fully open) mm	2495	
Total height: H mm	2669	
Depth: W mm	1430	
Distance between frames mm	1010	
Lower table height mm	947	882
Table length mm	1350	
Open height mm	420	485
Stroke length mm	150	
Tonnage capacity kN	600	
Motor output kW	(2.9+1.3) x 2	
Number of axes axes	2	
Oil capacity L	-	
Machine weight kg	3700	
Approach speed mm/s	220	
Bending speed mm/s	25	
Return speed mm/s	220	
Tilt range (Left-Right)	D-axis mm	±2.0
	L-axis mm	-
Backgauge measurement length mm	300 (300mm, Max. 550mm when using stopper)	
Backgauge height range mm	50 ~ 200	115 ~ 265
Backgauge speed m/min	L-axis: 60, Y-axis: 60, Z-axis: 20	
Primary supply cable mm ²	5.5	
Power requirement kVA	4.2 (200V)	

■AMNC 3i specifications

Display method	18.5" wide multi-touch LCD panel
Number of axes	8 axes: D1, D2, L1, L2, Y1, Y2, Z1, Z2
Input method	Angle/Direct/2D/3D mode
Programming modes	Single stroke or inching (set by program)
Setting unit mm	D-axis: 0.001, L-axis: 0.01, Z-axis: 0.1
External connection terminal	2 USB ports
Memory capacity	Max. 4GB

⚠ For Your Safe Use
Be sure to read the manual carefully before use.

●Use of this product requires safeguard measures to suit your work.

*Specifications, appearance, and equipment are subject to change without notice by reason of improvement.

*The official model names of machines and units described in this catalog are EG6013.

Use these registered model names when you contact the authorities for applying for installation, exporting, or financing.

*The hyphenated spellings EG-6013 is used in some portions of this catalog for sake of readability.

*The specifications described in this catalog are for the Japanese domestic market.

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Inquiry



Those which are highly improved in productivity and energy saving are stated ECO PRODUCTS by Amada.

E061-HQ01en

Jun. 2022



SOLUTION

EG 6013

High speed & High accuracy
Electric Servo Drive Press Brake










Bending



The Engineering AMADA





The Pinnacle of Compact Press Brakes

Fast, Precise, Eco-friendly Machine

Dual Servo Press Brake Ideal for Processing Small Precision Parts

The EG series is the world's first bending machine equipped with a dual servo press (DSP) mechanism that meets requirements with an overwhelming specification.

The DSP mechanism and high rigidity provide excellent high speed, high precision and eco-friendly performance.

Various angle solutions also help inexperienced workers achieve the target angle without test bending from the first shot.

NC unit is equipped with a newly developed user-centered AMNC 3i for ultimate usability.

It has display functions strengthened to allow operators to check forming information in real time and to contribute to intuitive, easier operation and shorter lead times.

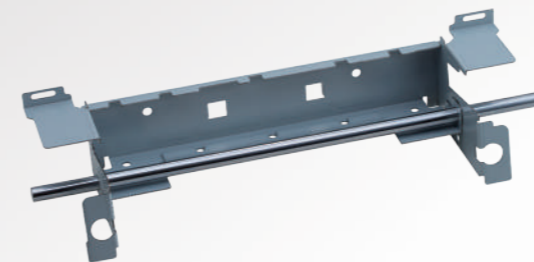


High speed & High accuracy
Electric Servo Drive Press Brake

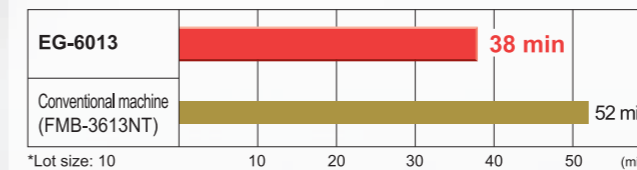
EG 6013

Typical processing samples (Productivity comparison with conventional models)

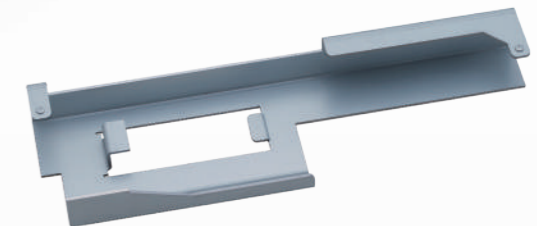
Material: SECC 1.0mm
Size: 445.4 x 138.2mm



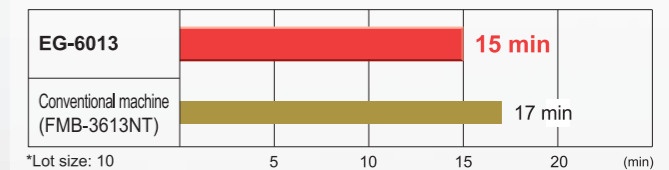
Process time comparison
26.9% DOWN



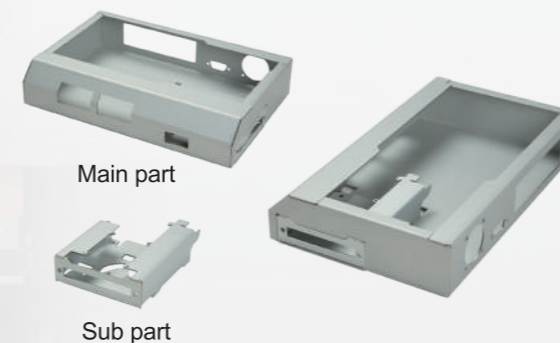
Material: SECC 1.6mm
Size: 250.0 x 162.3mm



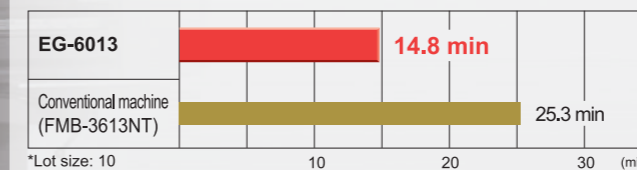
Process time comparison
12% DOWN



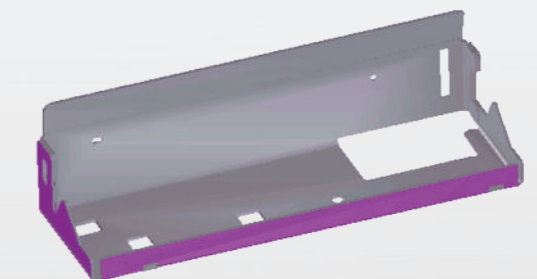
Main part
Material: SECC 1.6mm
Size: 375.1 x 443.9mm
Sub part
Material: SECC 1.6mm
Size: 161.7 x 210.1mm



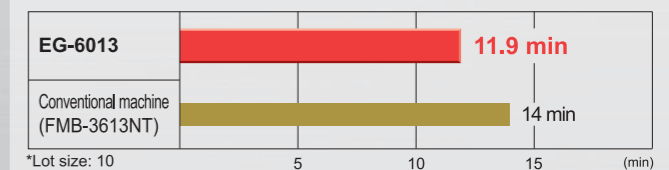
Process time comparison
41.5% DOWN



Material: SECC 1.6mm
Size: 153.4 x 321.4mm



Process time comparison
15% DOWN



EG-6013 New Technologies

1 Easy Operation

AMNC 3i

Adopts a multiple touch LCD screen and incorporates a user-centered design philosophy. Operators can operate the machine intuitively from the touch screen as when they do with a smart phone and with greater ease. The display size is increased from a conventional horizontal 15 inch display to a vertical 18.5 inch wide display. Operators can check programs and necessary bending information at a glance. The augmented display functions allow forming information to be displayed in real time.



Program call

Bend sequence

Setup

Processing

Intelligent 智能化

Interactive 双方向

Integrated 融合



2 High speed and high accuracy bending of small parts

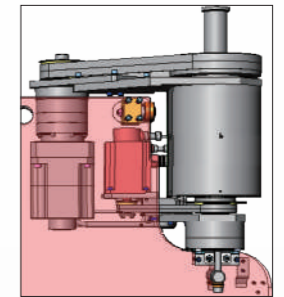
Maximum productivity with minimum energy

1 New hybrid drive system

Two servo motors; one for high power processing and the other for high speed stroke, provide faster cycle times, results in more parts per hour, and even energy saving.

Speed/Stroke length comparison

	EG-6013	Conventional machine (FMB-3613)
Approach speed mm/s	220	100
Bending speed mm/s	25	20
Return speed mm/s	220	100

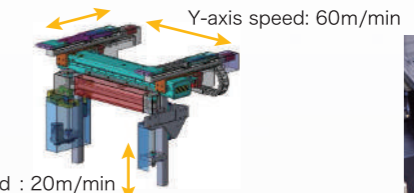


DSP

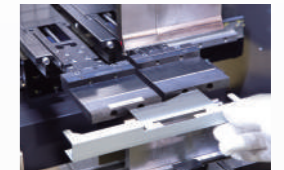
2 New backgauge system

A new backgauge system is installed to accomplish still higher accuracy and productivity. The L-axis repeatability is $\pm 0.003\text{mm}$.

L-axis speed: 60m/min
Measurement length: 300mm (Max. 600mm when using 300mm stopper)



Z-axis speed : 20m/min
Stroke length: 150mm
Travel range : 50 to 200mm (Punch holder spec.)
115 to 265mm (AMTS spec.)



L-shift

3 New high rigidity frame

Pursue the optimum shape by structural analysis. Higher rigidity frame enables to perform thicker thickness process, coining bend and improvement of the longitudinal accuracy.

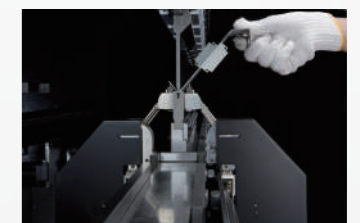
Solutions for stable processing without test bending

1 Angle sensor (Option)

The Bi-S angle sensors help to achieve the desired bend angle from the first part without test bending.

Bi-S angle sensor (contact type)

- Applicable angles: 80° to 165°
- Applicable material thicknesses: 1 to 6mm
- Applicable material types: Mild steel, stainless steel, aluminum
- Applicable V-openings: 6 to 40mm (AFH)
6 to 25mm (AMTS)
- Number of sensor axes: Auto 1axis/2 axes



Bi-S

2 Force control

Target angle can be obtained automatically by controlling the table by monitoring the pressure, not the D value position, and by setting the force to get 90°. Stable and high quality processing is achieved and the impacts of plate thickness and grain is reduced.



Force control

3 Thickness detection system (TDS)

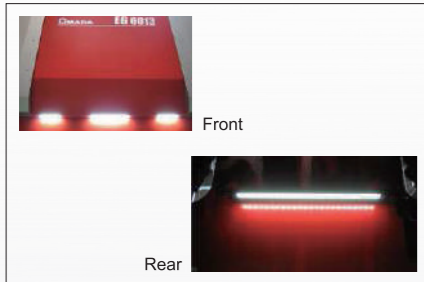
TDS reads variance of material thickness and compensates depth position automatically for stable and correct bending.

Other functions (including options)

Option

LED lights (front and rear)

LED lights are installed at the front and rear of the upper table. They illuminate the hands of the operator brightly so that the operator can work more efficiently.



Front table

A work table that can be adjusted to the tooling height. It is also equipped with a side stopper to support small part processing. It can be used with photoelectric safety device.



Height adjustment block

Base blocks for adjusting the working height are available for large operators and customers who mainly work standing.



AGRIP

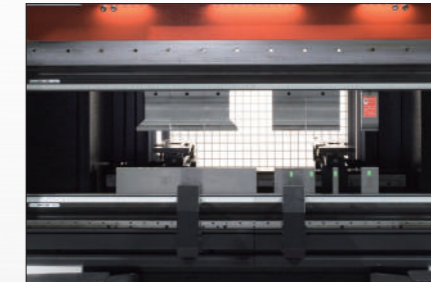
AMADA standard holders for punches with tapered grooves to prevent the punch from falling.

AGRIP-M: Manual type
AGRIP-A: Hydraulic drive type



AMADA modular tooling system (AMTS)

The clamp pin in the tool holder is hydraulically operated to clamp AMTS tools with one touch. The AMTS tools can be installed in any position and need not be aligned. The safety click prevents the punch from falling and firmly secures the punch.



Reversible 1V die holders

Reduce the time to change and setup dies. Prevent sectionalized dies from falling and shifting and obviate the need for aligning the dies each time they are changed.



Side table

Enable to use as a temporary storage rack of blank material for small bending and completed product, which provides efficient bending work. Height and rotation adjustments are available.
*Compatible with operation chair



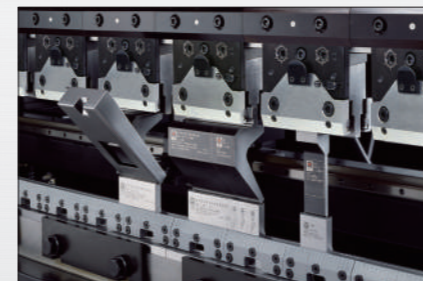
Operation chair

This makes it possible to work while sitting in a chair, and the height of the chair can also be changed freely. This releases the operator from the standing work. The foot pedal can be placed in front of you without distorting your body, allowing you to work more efficiently in close proximity to the tooling.



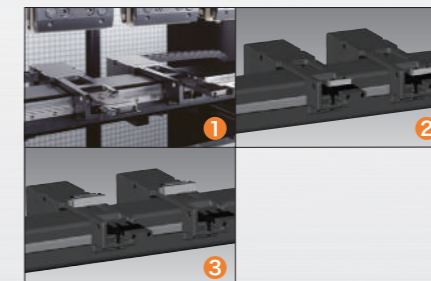
Hydraulic 1V die holders

Clamp sectionalized 1V dies and AFH dies hydraulically and automatically. Can clamp and unclamp the dies with one touch. The clamp plates are slit to firmly secure thin sectionalized dies.



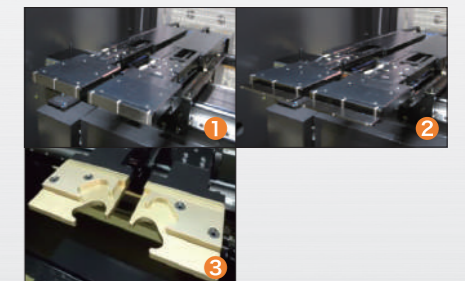
Backgauge fingers

- 1 Step finger
- 2 90mm support
- 3 300mm stopper



Special backgauge fingers

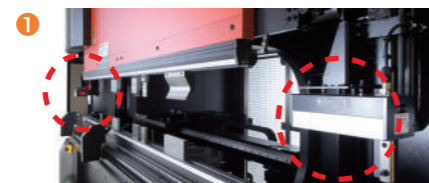
- 1 Work sensor finger (standard)
- 2 Work sensor finger (stepped)
- 3 W clamp finger



Safeguarding devices

1 New laser guard device

Ensures that the operator can work safely while maintaining productivity.



2 Side guard (without interlock)

Prevents access through the side gap.



3 Rear guard

Prevents access from rear.



4 Emergency stop buttons

Located on the control pendant.



5 Interlock (OFF mode)

The mode selector keyswitch has an OFF mode. When the OFF mode is selected, all axis movements stop.



Network system diagram

AMADA processes digital manufacturing based on the core of a virtual prototype simulation system (VPSS). Processing data are created in the office and saved in a data server. These data can be called from the data server through a network and used on the shop floor.

