

SOLUTION

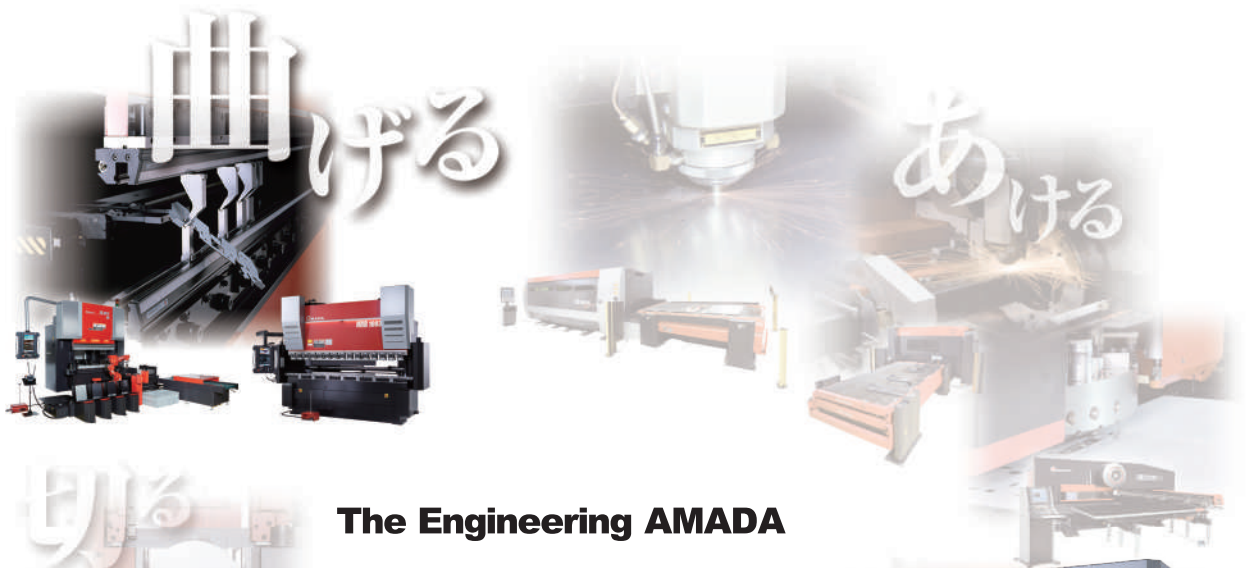
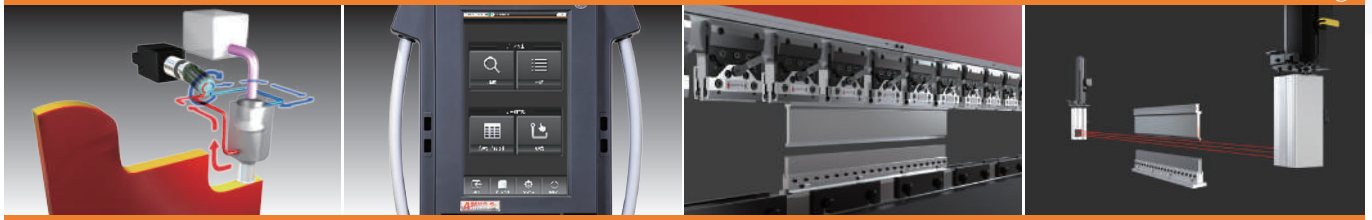


Retrofittable press brake with hybrid drive system

HRB SERIES

HRB-5020/8025/1003/1303/2204

Bending



The Engineering AMADA



Easy to operate

Next-generation press brake

The HRB series is AMADA's next-generation press brake that provides new input modes on the AMNC 3i control, and is retrofittable to streamline a customer's bending process. AMADA's IoT solution "V-factory" is supported.



Retrofittable press brake with
hybrid drive system

HRB SERIES

*Retrofit: Options that can be installed additionally after machine installation.

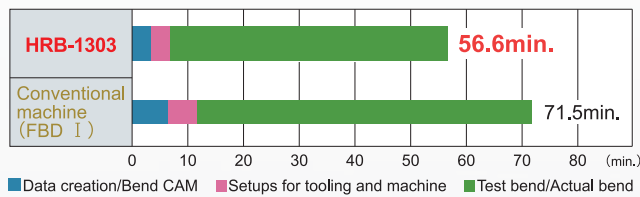
Processing examples with HRB-1303 (Productivity compared to a conventional press brake)

Duct cover

New product lot size : 5
Number of parts : 4



Process time comparison
20.9% Reduction

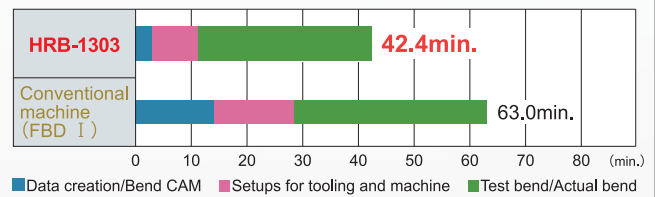


Switchboard Case

New product lot size: 1
Number of parts: 3



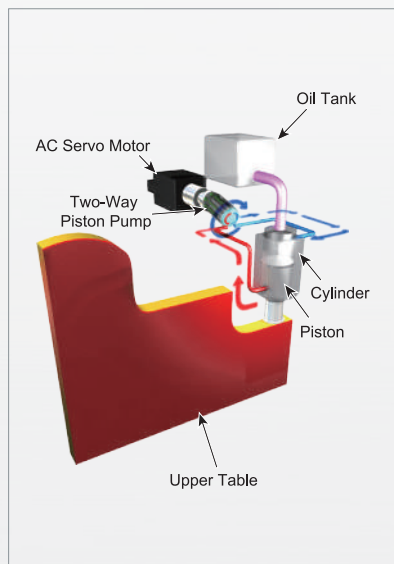
Process time comparison
32.7% Reduction



Features for high quality processing

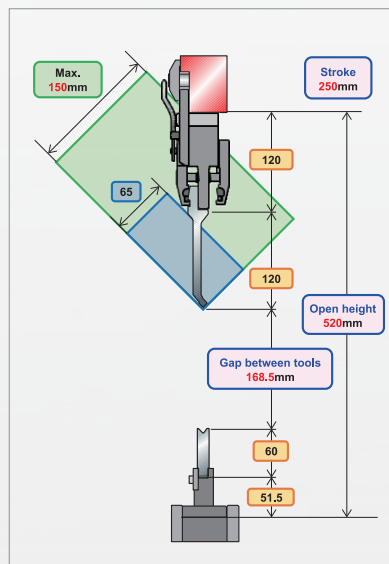
Hybrid drive system

·Achieves high speed and stable operation



Larger open height and stroke

·Expansion of processing range Unit: mm



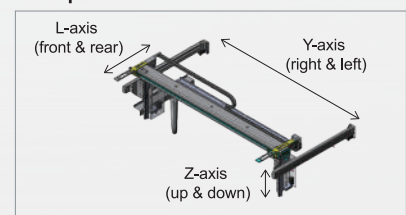
Natural crowning

·Achieves stable longitudinal accuracy



6-axis backgauge

·Setup reduction



AMADA's most advanced AMNC 3i operation

1 Selectable modes

Switch the mode according to operators' skill

AMNC 3i FULL mode



Mode with all functions including the new function, "2D input"*1

AMNC 3i LITE mode



Simple mode with limited functions such as operation navigation*2

*1 Draw directly on the screen's cross-section while viewing the program. Also, available in LITE mode.

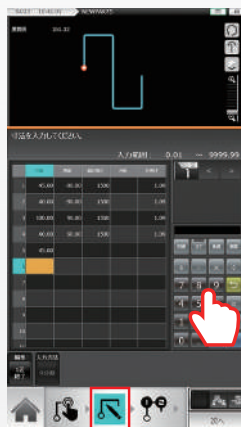
*2 Only offline setup data can be processed for 3D.

Easily create programs with LITE mode

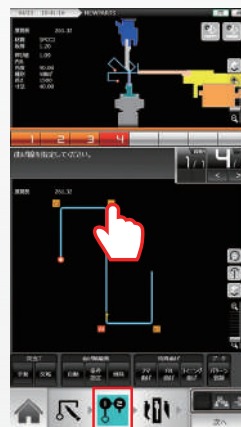
The cross-section allows operators to correct mistakes associated with bend direction, sequence and tool collision. Reduction of input time to NC can be achieved.



Draw in the screen's cross-section while viewing the program.



Enter the flange dimension while viewing the program.



Decide bend sequence (Auto function is available)



Select tool (collision check)



Navigate input order*

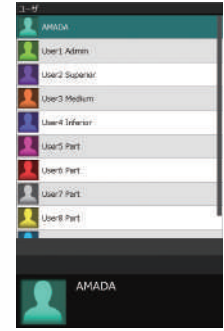
Start bending

*Not displayed in FULL mode.

Change screen and language for each operator

Screen setup for each operator is determined by user authentication. This allows the operator to view their ideal screen and language.

One press brake can be used by multiple people



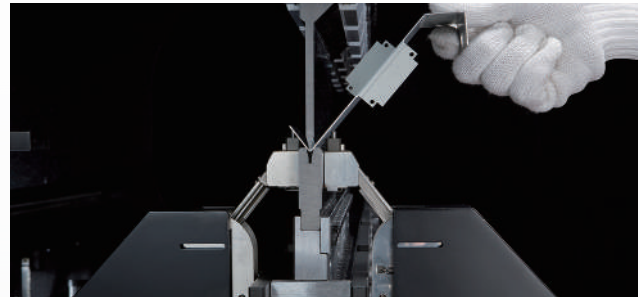
2 Options for immediate use

Many options are available to support inexperienced operators.

Angle sensor Bi-S (Auto 1-axis/2-axis)

Achieve target angle with less test bend

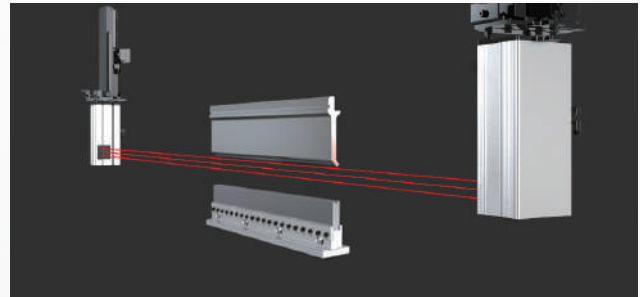
- Contact type angle sensor measures both sides of the part
- High speed & high accuracy
- Two-point measurement is available for long object processing on both auto 1-axis and 2-axis



Laser type safety device AS-01

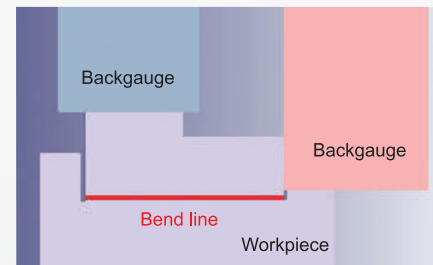
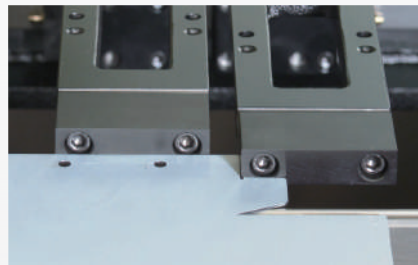
Reliable bending operation

- Normal mode
- Box mode
- Slow closing mode



L-shift function

Stable backgauge with lateral positioning



Wireless Digi-Pro

This device easily achieves accurate angle measurement, correction input, and obtuse angle measurement.

- 2-point angle measurement is available to accommodate longer parts



There is a type without a communication function.

3 Retrofit, a new idea of "adding later"

- Productivity-enhancing features can be purchased after the machine is installed to compensate for a skilled operator's absence.
- Purchase at a lower initial cost. Optional functions can be installed later.
- Productivity-enhancing features can be installed after the machine is purchased to complete a new job.

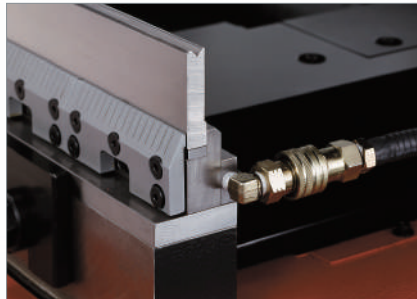
AGRIP-A

- For tapered/grooved punch
- Hydraulic drive type
- Easy installation, securely fixed
- Loading/unloading from the front side is available



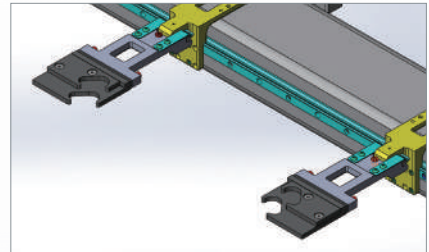
Hydraulic 1V Die Holder

- Open and close all at once with the hydraulic drive
- Lightweight and easy installation
- Alignment not required for die change
- Sectionalized tool is also securely fixed.



Double-clamp backgauge

- Stable backgauge with lateral positioning
- Easy setting on NC/CAM



*Double-clamp backgauge is 110mm wide.
*Tip color is black.

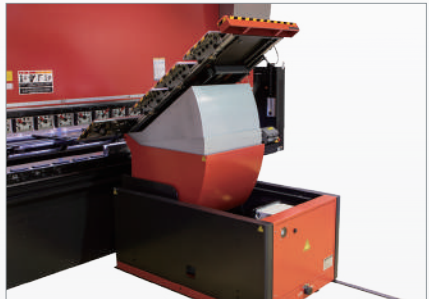
SF-1224TL

- Simple sheet follower
- Reduce burden, easy & safe
- Material deformation prevention/Safety processing
- Simple manual operation/Program not required
- Max. workpiece weight 50kg/1-axis (100kg/2-axis)



SF-1548H

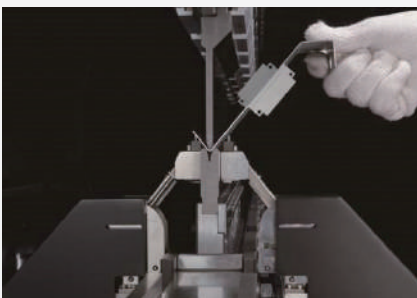
- Heavy-duty sheet follower
- Max. workpiece weight 150kg / Max. workpiece size 1250x2500mm
- Prevents material deformation and supports deep bending operations.
- Followers can be moved to the side when not in use.



Bi-S (Auto 1 axis/2 axis)

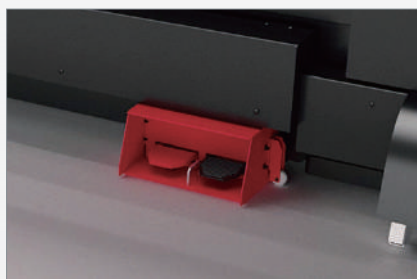
- Contact type angle sensor measures both sides of the part
- Bend angle: 80~165°*
- Material thickness: 1~6mm

*Depending on the tool condition or if the spring back is large, correction may not be possible.



Slide foot pedal (Automatic/Manual)

- Smooth lateral movement of pedal
- 3-position foot pedal (ON/OFF/Press to the bottom end)
- Apply pressure to the pedal to control the machine's speed. Machine stops when pressed to the bottom.
- Foot pedal moves automatically
- Move foot pedal manually

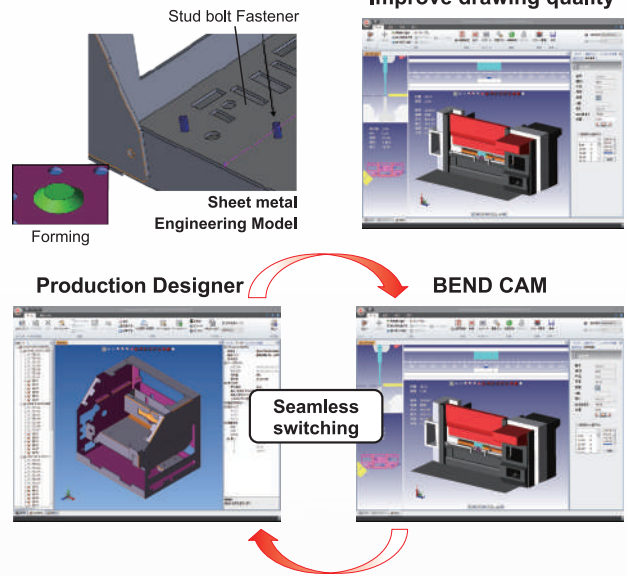


4 Software

VPSS 3i BEND

Highly accurate bending simulation

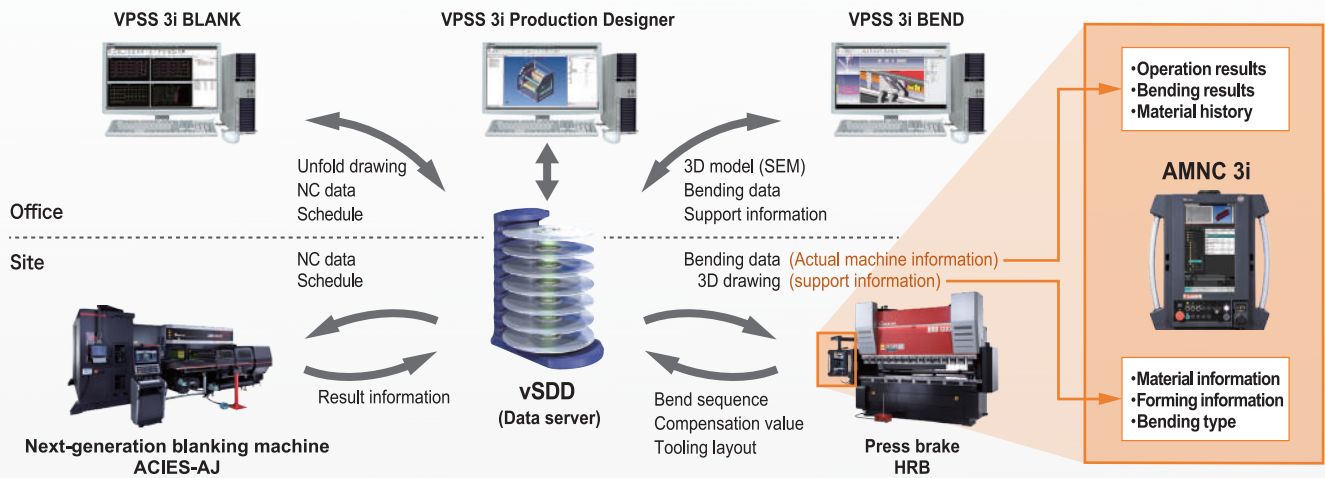
Realistic drawing and processing simulations including non-sheet metal components such as forming, bolts, and fasteners are available. The reliability of the simulation results has been greatly improved.



Cooperation with Production Designer

Production Designer verifies processing feasibility with bending simulation.

Network Systems



AMADA's IoT: V-factory

Visualize



My **V**-factory

- Visualized machine operation status



Monitor



IoT Support Front

- Machine operation assistance

V-factory: AMADA proposes the new IoT solution to "visualize" customer's factories and achieve high value-added production.

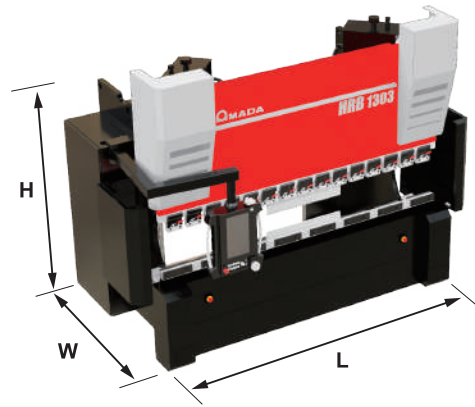
■ Dimensions

Unit: mm

HRB-1303

L : 4960 × W : 1865 × H : 2940

(With L-shift W: 1980)



■ Machine specifications

Model	HRB-5020	HRB-8025	HRB-1003	HRB-1303	HRB-2204
Registered model name	HRB5020	HRB8025	HRB1003	HRB1303	HRB2204
Total width: L (when pendant is fully open) mm	3935	4445	4945	4960	6080
Total height: H mm	2770	2770	2795	2940	3105
Depth: W (Machine: with L-shift) mm	1750(1935)	1755(1940)	1785(1950)	1865(1980)	1895(2025)
Distance between frames mm	1700	2210	2700	2700	3760
Lower table height mm	990				
Table length mm	2150	2600	3110	3110	4300
Open height (with/without punch holder) mm	400/520				
Stroke length mm	250				
Pressure capacity kN	500	800	1000	1300	2200
Motor output kW	1.8×2	2.9×2	2.9×2	4.4×2	5.5×2
Number of cylinders pcs	2				
Hydraulic oil capacity L	34	34	48	48	80
Machine weight kg	5300	6300	7500	9300	16000
Approach speed mm/s	150	150	150	150	120
Bending speed mm/s	15	15	15	15	12
Return speed mm/s	150	150	150	150	120
Tilt range (left-right)	D-axis mm	±5	±10	±15	±25
	L-axis mm	±320	±500	±500	±500
Backgauge measurement length mm	700				
Backgauge height range mm	250(30 – 280)				
Backgauge speed m/min	L-axis: 30, Y-axis: 60, Z-axis: 10				
Primary supply cable mm ²	8	14	14	22	22
Power requirement kVA	6.2	8.3	9.4	15.6	20.1

■ AMNC 3i specifications

Display method	18.5" wide multi-touch LCD screen
Axes under CNC control Axes enclosed in parentheses are optional.	7-axes: D1, D2, L1, L2, Y1, Y2, Z (LS1, LS2)
Input method	Angle/Direct/Shape/3D
Process selection	Single-action/inching (set by program)
Setting unit mm	D-axis: 0.001, L-axis: 0.01, Z-axis: 0.1, Y-axis: 0.1
External connection terminal	2 USB ports
Memory capacity GB	Maximum 4



For Your Safe Use

Be sure to read the operator's manual carefully before use

● Use of this product requires hazard prevention measures to suit your work

For details, see the safety guide on the homepage of AMADA (www.amada.co.jp)

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

*Please use registered model name for applications related to the administration of the machine or device described in this catalog (installation notification, export, financing, etc.).

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

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inquiry



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