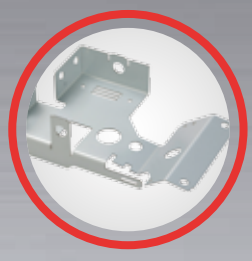
SOLUTION

BENDING

HFE 3i SERIES

ADVANCED BENDING SOLUTION WITH 3D CONTROL



AMADA

HFE 3i SERIES

ADVANCED BENDING SOLUTION WITH 3D CONTROL

COMPLETE RANGE TO COVER ALL OF YOUR BENDING NEEDS

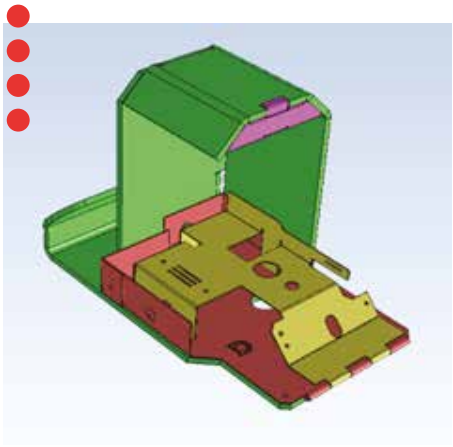
Built on the solid foundation of the HFE series, Amada's HFE3i press brake models include additional production-enhancing features and an innovative touch-screen AMNC 3i interface.

An 18.5" multi-touch display offers multiple modes of data entry (angle, depth, 2D and 3D) for ultimate programming flexibility.

A user-friendly graphic interface and tool library assist operators in the quick setup of complicated parts.

Photograph may include optional equipment

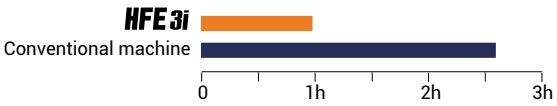
TYPICAL PROCESSING SAMPLES



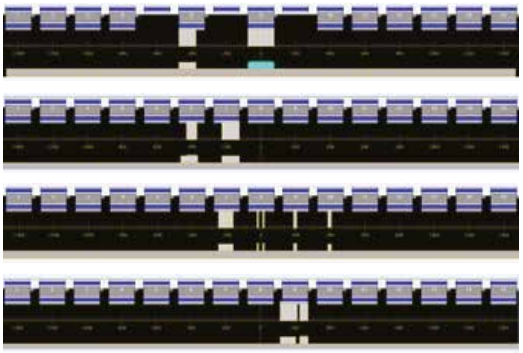
Material: mild steel 0.8 mm, 1.0 mm, 5.0 mm
Dimension: 240 x 142 x 172 mm

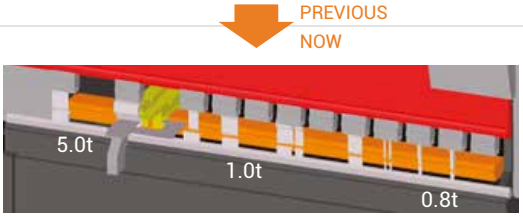
PRODUCTIVITY COMPARISON WITH A CONVENTIONAL MACHINE

62% TIME REDUCTION

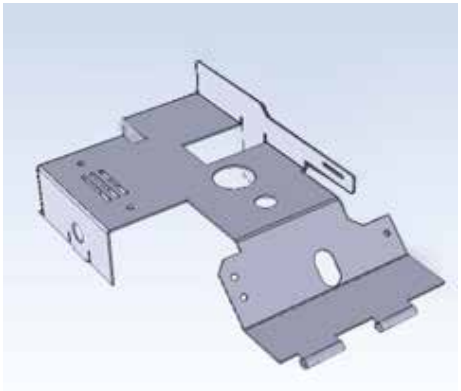


"COMMON TOOL LAYOUT" by automatic software
Example: One layout for 4 workpieces





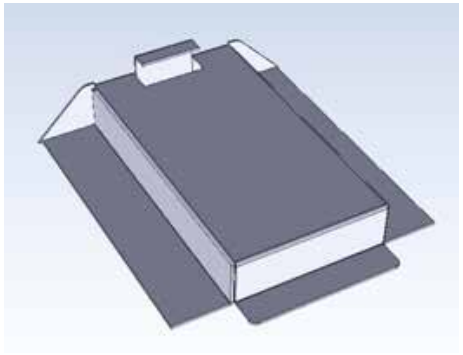
"ONE STROKE TOOLING"
One layout for different thickness assembly



Material: mild steel 1.0 mm
Dimension: 189 x 99 x 50 mm

TIME SAVING FROM BI-S USAGE

62% TIME REDUCTION



Material: mild steel 0.8 mm
Dimension: 99 x 86 x 22 mm

TIME SAVING FROM COINING MODE USAGE

64% TIME REDUCTION

EASY OPERATION

AMNC 3i

The AMNC 3i control is optimized for ease of use.

Intelligent
Interactive
Integrated

- Multi-touch LCD panel with a user-friendly design provides intuitive smartphone like operation.
- The 18.5 inch vertical display means you can view all the necessary program and bend information on one screen.

1 Program call

2 Bend sequence

3 Setup

4 Processing

ANGLE CONTROL AND ANGLE MEASURING SYSTEMS

Bi-S

Bi-M

DIGIPRO

The Amada Digipro is a highly-accurate, electronic angle measuring device that transmits the measured angle wirelessly to the press brake's NC.

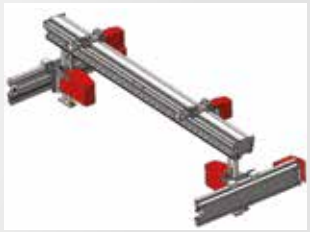
The program is then automatically corrected as required, providing a precise bend angle.

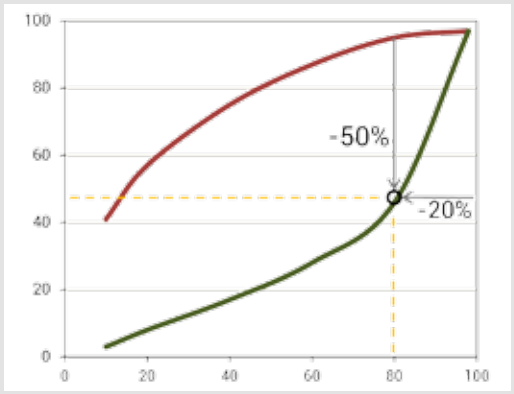
Bi-S & Bi-M

Automatic angle adjustment ensures highly accurate bending even when material thickness and properties vary from part to part.

This removes the need for test bending and adjustment of the initial bend angle, eliminating scrap and reducing setup time.

BACK GAUGE AND ECO DRIVE SYSTEMS





NEW BACK GAUGE SYSTEM

The 5 axis back gauge has a tool navigation system whereby the finger indicates the precise position to place the tools.

The Delta X finger is a useful feature when bending asymmetrical work pieces.

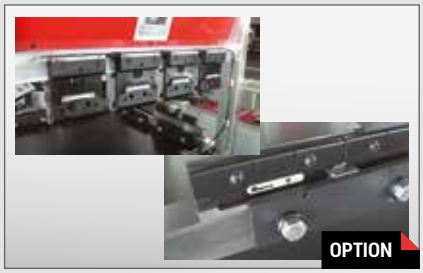
THE ECO DRIVE SYSTEM

The Eco drive system continually monitors and self-adjusts bending requirements – providing benefits such as 20% less energy usage, reduced maintenance, less oil consumption, lower noise levels and increased reliability.

FUNCTIONS AND OPTIONAL EQUIPMENT

Manual grip

- Front installation/front removal
- Close the space between grips
- Manual rear plate (option)

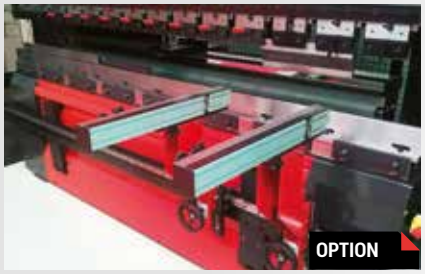


Pneumatic auto grip

- Front installation/front removal
- Automatic pull up function
- Easy to reposition and remove grips
- Manual rear plate (option)
- Close the space between grips
- No tubes on rear side

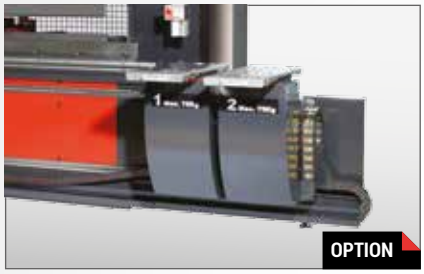
Hydraulic tool holder

- Front installation/front removal
- Easy setting of complicated tool layouts
- No tubes on rear side



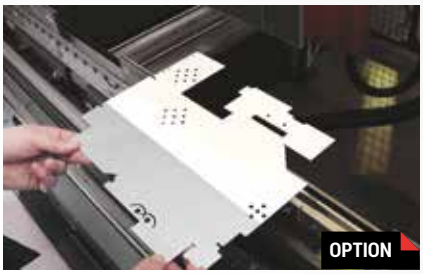
Front support

- Front workpiece support



Sheet follower

- Improves accuracy and safety
- Assists the operator
- Eliminates the need for a second operator

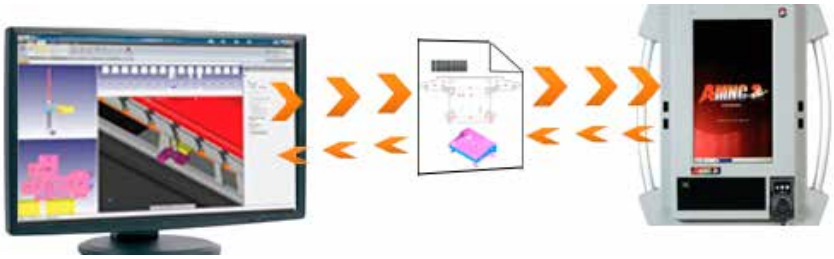


LED light (rear)

- An LED light is installed to the rear side of the upper beam to increase operator visibility

BENDING CAM SOFTWARE

Dr ABE Bend automatically selects tools, creates tool layouts and bend sequences.



Auto Batch Mode
CAM software makes programs without operator intervention.

Common Tool layout
CAM software utilises a common tool layout for a maximum of 99 parts.

The AMNC 3i control uses offline programs to reduce setup time and increase machine efficiency.

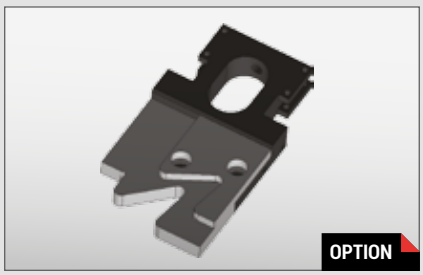
VIRTUAL PROTOTYPE SIMULATION SYSTEM

VPSS 3i is the Intelligent, Interactive and Integrated software environment that surrounds the new Amada solutions. This system considers the complete assembly and manufacturing process from the very beginning.

Intelligent
Interactive
Integrated

Finger pin

- Flexible position with pin exchange



Additional finger shapes

- Uses special shaped fingers for flexible gauging positions

Sensor fingers

- Eliminates gauging errors
- Sensor pauses the bend process when the part is separated from the gauge.

Hand wheel

- Adjust all axis
- Easy and flexible manual adjustments

Bar code reader

- Built-in bar code reader
- Eliminates program search time and errors

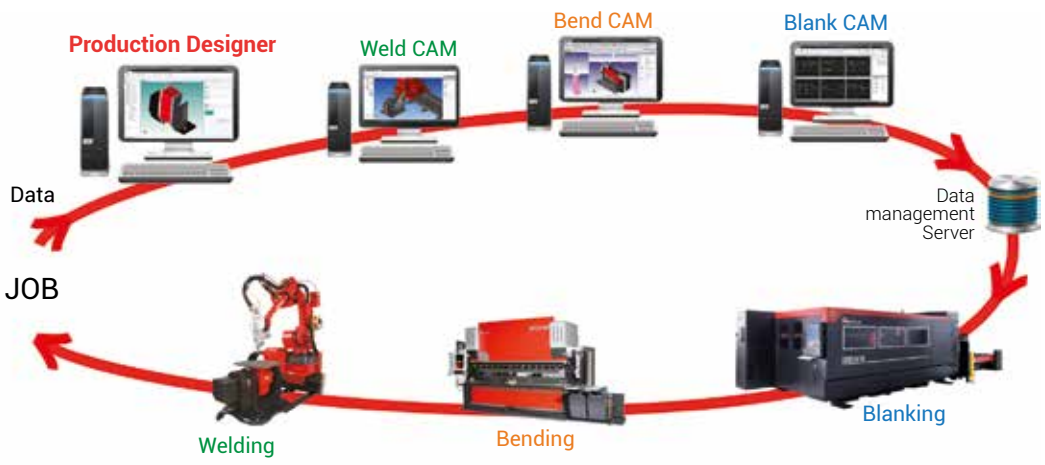
Safety device

- Laser beam type (AKAS III P)
- Light curtain type (SICK)

THE SHEET METAL DIGITAL FACTORY

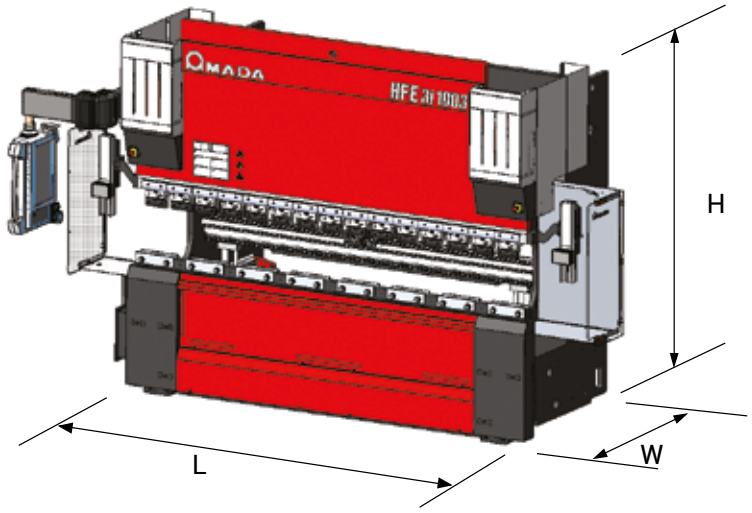
Amada proposes digital manufacturing using VPSS (Virtual Prototype Simulation System).

All data is created in the office and utilised in the workshop via a network.



DIMENSIONS

Unit : mm



HFE3i		5020	8025	1003	1303	1703	1704	2203	2204
Total length (L)	mm	3340	3800	4385	4440	4470	5530	4470	5560
Total width (W)	mm	2450	2445	2430	2625	2625	2625	2625	2625
Total height (H)	mm	2450	2540	2680	2815	2900	2890	2900	3085
Total weight	kg	4600	5600	6600	8150	11600	13900	13750	17100

MACHINE SPECIFICATIONS

HFE3i		5020	8025	1003	1303	1703	1704	2203	2204
Capacity	kN	500	800	1000	1300	1700	1700	2200	2200
Beam length	mm	2090	2570	3110	3140	3170	4230	3170	4280
Table width	mm	60			90	180			
Distance between frame	mm	1665	2125	2705	2700	2700	3760	2700	3760
Throat depth	mm	420							
Open height	mm	470 (620)*							
Stroke	mm	200 (350)*							
Working height	mm	960							
Oil capacity	liter	55	90	110	150	235	235	295	295
Power consumption	kW	4	7.5	7.5	11	15	15	18.5	18.5
Approach speed	mm/s	200			100				
Maximum bending speed	mm/s	15**			10				
Return speed	mm/s	150			100				

**75% tonnage limitation

*(Long Stroke)

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

For Your Safe Use
Be sure to read the operator's manual carefully before use.
When using this product, appropriate personal protection equipment must be used.

The official model name of machine described in this catalogue is HFE3i. Use the registered model name when you contact the authorities for applying for installation, exporting, or financing.
Hazard prevention measures are removed in the photos used in this catalogue.

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