

SOLUTION

BENDING



HFE *M2* SERIES



THE PRESS BRAKE REFERENCE



MADA

HFE M₂ SERIES

THE PRESS BRAKE REFERENCE

PRECISION, AN AMADA PRINCIPLE

More than 125,000 press brakes and 1,500 bending cells installed. Apart from AMADA, which manufacturer can boast of this?

The reasons for this are simple: excellent technical knowhow, being responsive to customer needs and producing reliable and accurate machines. We meet our customer's expectations by listening carefully to their needs and responding accordingly.

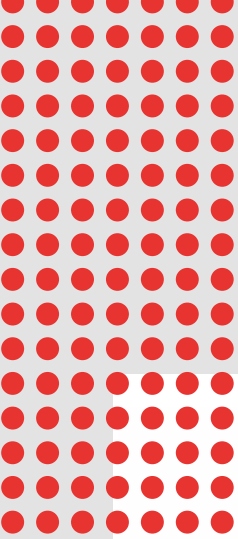
In addition, we have equipped this model with the latest technological developments, useful to both the operator and the investor: a new digital touch screen control, new man-machine interface, energy and oil saving, with a new range of labour and time saving accessories.

The goal is to make the HFE M2 more efficient and easier to operate but also environmentally friendly.



Made in Europe

The expertise acquired by the technicians of our Château du Loir factory is the best guarantee of quality which we can offer. In the last 45 years over 38,000 press brakes have left the production lines, proving the degree of this site.



TYPICAL PROCESSING SAMPLES



XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX



XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX



XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX



XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX



XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX



XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

EASY OPERATION



NC AB Pad

The new Amada Bending Pad NC introduces a new, intuitive man/machine interface based on a touch-screen.

The care taken in developing the ergonomics and our technical know-how have combined to produce a simple, friendly and efficient interface.

To implement this system, Amada has partnered with B&R, the market leader who operates in 50 countries and who has more than 10 years experience in this field.

Maintenance was considered from the outset of this project. It is possible to remotely monitor the operation of the machine, transfer programs and perform diagnostics.



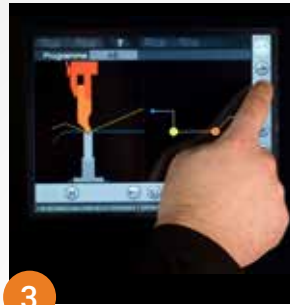
1

Drawings can be made directly into the NC by using the new touch-screen technology



2

The operator enters the dimensions into a pop-up window. It is also possible to indicate bending priority



3

The NC control is capable of generating programs automatically. It takes into account bending constraints and ergonomics, including gauging position, component handling, bend order and required tolerance



4

For special applications, manual mode programming allows the operator to create personalised programs.



ANGLE CONTROL AND ANGLE MEASURING SYSTEMS



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.



OPTION
Bi-J



OPTION
Bi-M

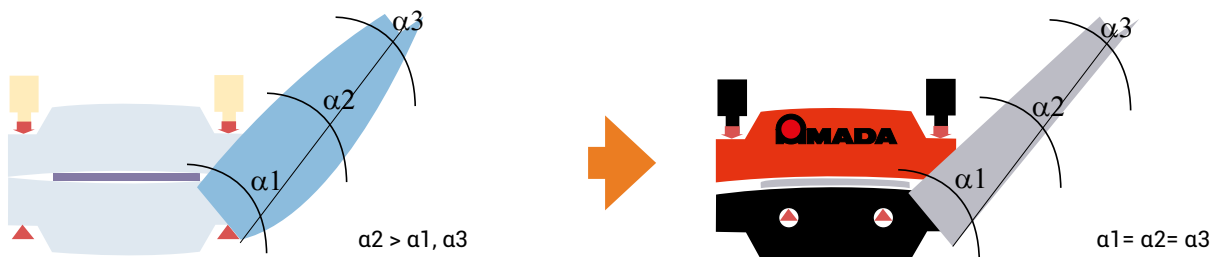
Bi-J / Bi-M

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.

BENDING PRECISION

CONSTANT ANGLE WITH PARALLEL BEAM DEFLECTION

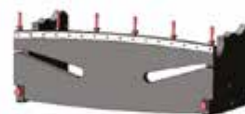


The bend accuracy of a press brake is affected by, among other factors, the deflection of the upper and lower beams. Conventional press brakes deflect in opposite directions. In fact, the penetration of the punch into the dies is not constant and the angle is not uniform along the length of the machine.

Amada's solution: using the principle of parallel deformation. The HFE M2 press brakes are equipped with the AMADA's patented lower beam as standard, giving "Parallel Deflection" under all bending loads. This concept ensures consistent punch penetration into the vee die, over the full bending length under all loads and conditions.



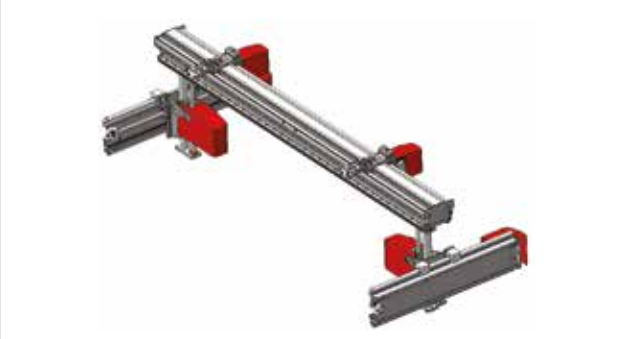
The lower beam (A) is secured to the machine frame (B) by means of two pins (C) in the centre of the lower beam, this allows for a certain degree of movement. Thus, when the cylinders exert the bending force at the extremities of the machine, the beam deflections are parallel.



For the machines below 130 tonnes the same result is obtained using a specially designed lower beam.

BACK GAUGE SYSTEM

BACK GAUGE SYSTEM



The back gauge of HFE M2 is available in two forms : 2 axes X, R and 5 axes X1 X2, R, Z1 Z2.

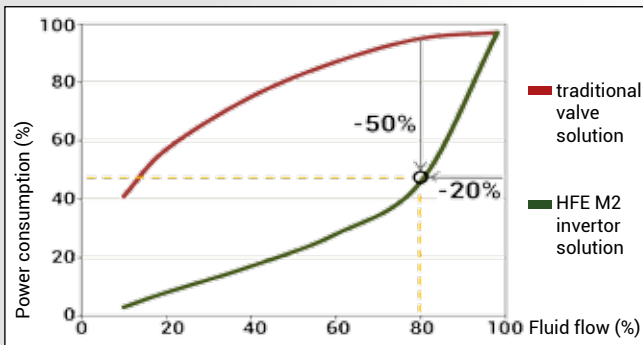


OPTION

The Delta X finger is a useful feature when bending asymmetrical work pieces. This option complements both 2 and 5 axes versions. It allows the creation of an offset between the two X-axis fingers, even when they are close together.

ECO DRIVE SYSTEM

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.

Depending on the configuration, this equipment can be optional.



LINE UP



HFE-8025 M2



HFE-1703 M2



HFE-2204L M2

FUNCTIONS AND OPTIONAL EQUIPMENT



Manual grip

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



S- grip

- Front installation/front removal
- Prevent falling tools by mechanical groove
- Can be installed tightly and continuously
- Enables to clamp the tools by lever operation
- Wedge adjustment by dial mechanism



Automatic grip

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



Hand wheel

- Adjust all axis
- Easy and flexible manual adjustments



Finger pin

- Flexible position with pin exchange



Safety device

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



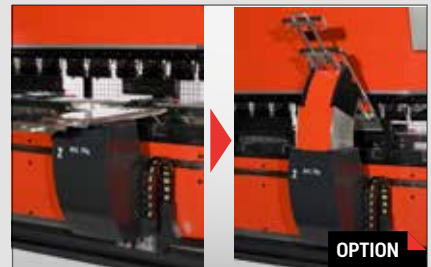
LED light (rear)

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



Front support

- Front workpiece support



Sheet follower

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

DIMENSIONS

Unit : mm



HFE M2		5020	8025	1003	1303	1703	1704	2204
Total length (L)	mm	3340	3800	4385	4440	4470	5530	5560
Total width (W)	mm	2450	2445	2430	2625	2625	2625	2625
Total height (H)	mm	2450	2540	2680	2815	2900	2890	3085
Total weight	kg	4600	5600	6600	8150	11600	13900	17100

MACHINE SPECIFICATIONS

HFE M2		5020	8025	1003	1303	1703	1704	2204
Capacity	kN	500	800	1000	1300	1700	1700	2200
Beam length	mm	2090	2570	3110	3140	3170	4230	4280
Table width	mm	60		90		180		
Distance between frame	mm	1665	2125	2705	2700	2700	3760	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
Power consumption	kW	7	10.5	10.5	14	18	18	21.5
Approach speed	mm/s	100 (200)**			100			
Maximum bending speed	mm/s	10 (15)***			10			
Return speed	mm/s	100 (150)***			100			

*(Long Stroke) ** HI-SPEED model *** HI-SPEED model,75% tonnage limitation

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 HFET2. 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.

AMADA UK LTD.

Spennells Valley Road,
Kidderminster,
Worcestershire DY10 1XS
United Kingdom
Tel: +44 (0)1562 749500
Fax: +44 (0)1562 749510
www.amada.co.uk

AMADA SA

Paris Nord II
96, avenue de la Pyramide
93290 Tremblay en France
France
Tél : +33 (0)1 49 90 30 00
Fax : +33 (0)1 49 90 31 99
www.amada.fr

AMADA GmbH

Amada Allee 1
42781 Haan
Germany
Tel: +49 (0)2104 2126-0
Fax: +49 (0)2104 2126-999
www.amada.de

AMADA ITALIA S.r.l.

Via Amada I., 1/3
29010 Pontenure
(Piacenza)
Italia
Tel: +39 (0)523 872111
Fax: +39 (0)523 872101
www.amada.it

