

SOLUTION

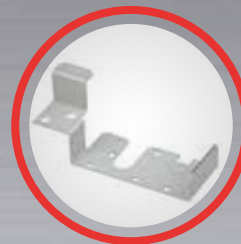
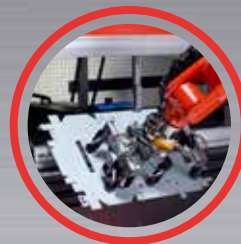
BENDING



HG 1003 ARs



AUTOMATED BENDING SYSTEM



AMADA

HG 1003 ARs

MEDIUM-PART AUTOMATED BENDING SYSTEM

TOTAL FLEXIBILITY AND BENDING EFFICIENCY

VARIABLE VOLUME PRODUCTION OF DIFFERENT SHAPED PARTS

The HG-1003 ARs is based on the proven technology of Amada's cutting edge HG-ATC press brake, utilizing an ECO hybrid drive system and an automatic tool changer for fast and accurate tool set-ups. Material load/unload and bending are all performed by a single 7 axis articulated robot which is capable of a complete range of motions.

The HG ARs system can bend complex shaped parts without multiple set-ups and run continuous production for extended periods of time.



Photograph includes optional equipment

KEY FEATURES

1 FULLY AUTOMATED PERFORMANCE

HG – ATC AND ROBOT COMBINATION

- High speed bending utilizing the new hybrid drive system
- Automatic angle correction at any chosen part position (2 axis Bi-S sensors)
- L-shift function (new backgauge)
- Automatic set up of multi station bending layouts due to the automatic tool changer (ATC)
- Intuitive operation with the 3D AMNC 3i control



2 OFF-LINE PROGRAMMING

DEDICATED CAM SOFTWARE

Dedicated CAM software allows the operator to off-line program and fully simulate the operation of the HG-1003 ARs. This eliminates manual teaching of the robot and enables the machine to operate continuously, thus improving bending productivity.



3 FLEXIBLE PART PRODUCTION

THREE TYPES OF GRIPPERS

Automatic gripper changer (AGC) can store a total of nine combination-type, vacuum-type and mechanical type grippers.



Combination Type



Vacuum Type

Repositioner allows the robot to regrip the parts for full range, automated bending.



Repositioner



Automatic Gripper Changer (AGC)

4 BENDING ROBOT TECHNOLOGY

7-AXIS ARTICULATED ROBOT

The 7-axis articulated robot performs all material loading, material handling during bending and unloading of formed parts.



Material loading



Approach for bending

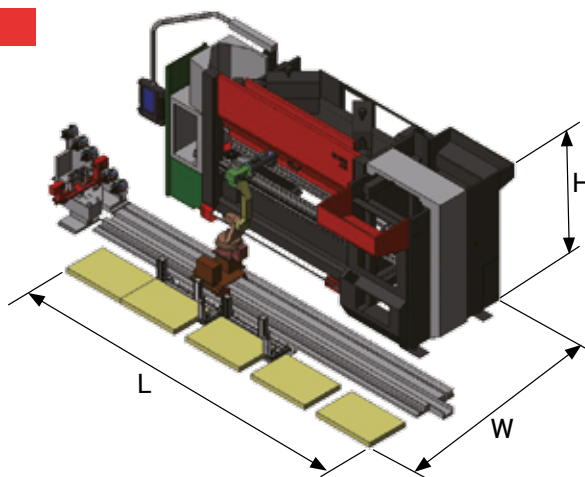


Bending

DIMENSIONS

Unit : mm

HG-1003 ARs
(L) 11200 x (W) 5960 x (H) 2974



MACHINE SPECIFICATIONS

PRESS BRAKE		HG-1003 ARs	
Capacity	kN	1000	
Open height	mm	596	
Stroke length	mm	250	
Approach speed	mm/s	220	
Bending speed	mm/s	20	
Angle sensor		Bi-S angle sensor, 2-axis	
ATC	Number of punch stockers	15	
	Number of die stockers	18	
ROBOT			
Axis composition		Robot: 6 axes, Travel axis: 1	
Payload	kg	20 (with gripper)	
Workpiece size	Max.	1000 x 800	
	Min.	150 x 150	
Workpiece thickness	mm	0.5 ~ 6.0	
Travel axis	Stroke length	m	4 / 6.4 / 8.8
Number of grippers	Combination type		3
	Vacuum type		3
	Mechanical type		3
Loading	Number of positions		1 or 2 depending on track length
	Stacking height	mm	300
Unloading	Number of positions		1, 2 or 3 depending on track length
	Unloading method		Flat or vertical Conveyor option also available

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 HG-1003 ARs. 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

