HD 1703 NT – Standard Tonnage Press Brake

With models varying in capacity from 88-243 tons, Amada's new HD NT press brake series can handle a full range of applications in bend lengths from 101 to 161 inches. This high-performance series features a Hybrid Drive system that is engineered for low energy consumption and requires less hydraulic fluid than conventional machines.

Available on most models, Amada's patented variable slit crowning feature ensures consistent angle accuracy. Larger models are equipped with an auto-crowning feature that provides precise results based on calculations create by the AMNC-PC control. Additional features of the new HD series include:

- High-speed, high-precision bending sensor that eliminates test bends.
- Increased distance between tooling and greater stroke length provides for a larger processing area.
- Expanded processing area enables deep box bending.
- Increased distance between punch and die allows for safe and easy processing of heavy materials.
- 187-ton capacity
- 122" maximum bend length
- 18.5" open height (without clamps)
- 7.87" stroke

<li ">±.00004" ram repeatability

To maintain bending accuracy while processing materials that vary in type, thickness and grain direction, Amada's HD series can be equipped with BI (Bend Indicator) sensors that utilize probe and laser technology. BI-S (probe type) or BI-L (laser type) result in trial-free bending. Bend angles are measured and adjusted on the fly to provide the correct angle on the first bend and to monitor and adjust angles throughout the run. BI technology boosts bending repeatability and reduces QA inspection and rework.

Fabricators processing thin sheets will benefit from the HD's consistent accuracy and ease of use. The combination of an eco-friendly, Hybrid drive system and BI sensor technology ensures precision bending even if the operator lacks experience. Fabricators processing medium and thick sheets will profit from consistent angle accuracy, fewer trial bends, reduced material handling and the ability to perform deep box bending. Additionally, fabricators processing thick and large sheets will welcome safe and easy processing of heavy materials, easy to adjust angles plus simplified tool changes.

A wide variety of part geometries can be accurately processed thanks to a high-precision (± .0004") tapered backgauge. For precise bending control, the backgauge provides continuously updated feedback to the AMNC/PC NT-based control where exact positioning can be viewed at any time.

To provide maximum productivity, the HD's intelligent control digitizes the bending process and delivers highly efficient offline programming. Enhanced network functions within the AMNC control allow operators to call up complete sets of bending data from the server. In addition, the AMNC control can create 3D images from DXF, DWG and IGES files. Programming bending data using 3D images makes programming a more intuitive process. More importantly, 3D simulation enables the identification of problems before they can occur.

In summary, Amada's full line HD series boasts enhanced bending features for a wide range of applications. The new series is engineered to expand fabricator's processing range, reduce energy consumption, ensure angle accuracy, eliminate trial bends, improve operability and bring digital processing to new markets. As a result, the HD NT series is another example of Amada's commitment to the ongoing development of new machine technologies that achieve the highest levels of performance while reducing operating costs and environmental impact.

HD 1703 NT – Press Brake	
Tonnage (US)	187
Maximum Bend Length	122 inches
Distance Between Frames (A)	106.3 inches
Stroke Length	7.87 inches
Open Height w/Holders	11.75 inches
Open Height	18.5 inches
Throat Depth	16.50 inches
Table Height	39.2 inches
Approach Speed	4.72 inches/second
Bending Speed	0.39 inches/second
Return Speed	4.72 inches/second
Oil Capacity	18 gallons
Machine Length (B)	172 inches
Machine Width (C)	115 inches
Machine Height (D)	118 inches
Approximate Weight	19,800 lbs
Motor Power	7.8 HP
Backgauge Range	27.5 inches
Backgauge Vertical Range	9.84 inches
Control Type	Amada AMNC-PC
Program Capacity	Unlimited via network
Axis Under CNC Control	7
RAM	D1 & D2
Backgauge	L1 & L2
Backgauge Horizontal	Y1 & Y2
Backgauge Vertical	Z
Ram Repeatability	± 0.00004 inches
Backgauge Speed (L-axis)	1,181 inches/min
Backgauge Speed (Y-axis)	2,362 inches/min
Backgauge Speed (Z-axis)	393 inches/min

HD 3504 NT – High Capacity Press Brake

With models varying in capacity from 55-600 tons, Amada's new HD NT press brake series can handle a full range of applications in bend lengths from 79 to 276 inches. This high-performance series features a Hybrid Drive system that is engineered for low energy consumption and requires less hydraulic fluid than conventional machines.

Available on most models, Amada's patented variable slit crowning feature ensures consistent angle accuracy. Larger models are equipped with an auto-crowning feature that provides precise results based on calculations create by the AMNC-PC control. Additional features of the new HD series include:

- High-speed, high-precision bending sensor that eliminates test bends.
- Increased distance between tooling and greater stroke length provides for a larger processing area.
- Expanded processing area enables deep box bending.
- Increased distance between punch and die allows for safe and easy processing of heavy materials.
- 385-ton capacity
- 161" maximum bend length
- 24.4" open height (without clamps)
- 13.77" stroke
- ±.00004" ram repeatability

To maintain bending accuracy while processing materials that vary in type, thickness and grain direction, Amada's HD series can be equipped with BI (Bend Indicator) sensors that utilize probe and laser technology. BI-S (probe type) or BI-L (laser type) result in trial-free bending. Bend angles are measured and adjusted on the fly to provide the correct angle on the first bend and to monitor and adjust angles throughout the run. BI technology boosts bending repeatability and reduces QA inspection and rework.

Fabricators processing thin sheets will benefit from the HD's consistent accuracy and ease of use. The combination of an eco-friendly, Hybrid drive system and BI sensor technology ensures precision bending even if the operator lacks experience. Fabricators processing medium and thick sheets will profit from consistent angle accuracy, fewer trial bends, reduced material handling and the ability to perform deep box bending. Additionally, fabricators processing thick and large sheets will welcome safe and easy processing of heavy materials, easy to adjust angles plus simplified tool changes.

A wide variety of part geometries can be accurately processed thanks to a high-precision (± .0004") tapered backgauge. For precise bending control, the backgauge provides continuously updated feedback to the AMNC/PC NT-based control where exact positioning can be viewed at any time.

To provide maximum productivity, the HD's intelligent control digitizes the bending process and delivers highly efficient offline programming. Enhanced network functions within the AMNC control allow operators to call up complete sets of bending data from the server. In addition, the AMNC control can create 3D images from DXF, DWG and IGES files. Programming bending data using 3D images makes programming a more intuitive process. More importantly, 3D simulation enables the identification of problems before they can occur.

In summary, Amada's full line HD series boasts enhanced bending features for a wide range of applications. The new series is engineered to expand fabricator's processing range, reduce energy consumption, ensure angle accuracy, eliminate trial bends, improve operability and bring digital processing to new markets. As a result, the HD NT series is another example of Amada's commitment to the ongoing development of new machine technologies that achieve the highest levels of performance while reducing operating costs and environmental impact.

HD 3504 NT – High Capacity Press Brake	
Bending Length	161 inches
Capacity	385 tons
Maximum Stroke Length	13.77 inches
Open Height (w/o clamps)	24.4 inches
Rapid Closing Speed	4.72 inches/second
Bending Speed	.394 inches/second
Opening Speed	4.72 inches/second
Number of Cylinders	2
Output Power	7.5×2 (kW)
Tank Capacity	45 liters
Machine Mass	35 tons
Primary Power Supply Cable	50 (mm^2)
Load Current (A)	107.5
Receiving Capacity	38.3 (kVA)
Ram Tilting	.984 inches
Maximum Offset Load	50% of capacity
Crowning	Auto crowning
Backgauge	Heavy-duty
BendNavi	3D programming system

	HFE-3i 2203
Weight (kg)	13750
Press capacity (kN)	2200
Press beam length (mm)	3170
Stroke (mm)	200
Distance between the frames (mm)	2700
Throat depth (mm)	420
Bending speed (mm/s)	10
Approach speed (mm/s)	100
Return speed (mm/s)	100
Open height (mm)	470
Table width (mm)	180
Table height (mm)	960
Controller	AMNC 3i

	HFE-3i 2203
Display size	19“
Length (mm)	4470
Width (mm)	2625
Height (mm)	2900
	HFE-3i 2203L
Weight (kg)	13750

	HG-5020
Weight	5400 kg
Press capacity	500 kN
Press beam length	2150 mm
Stroke	250 mm
Distance between the frames	1700 mm
Throat depth	450 mm
Bending speed	20 mm/s
Approach speed	220 mm/s
Return speed	250 mm/s
Open height	520 mm
Table width	60 mm
Table height	950 mm

	HG-5020
Drive	Servo hydraulic
Controller	AMNC 3i
Length	4157 mm
Width	2802 mm
Height	2768 mm
	HG-5020
Weight	5400 kg

	HG-2203
Weight	18500 kg
Press capacity	2200 kN
Press beam length	3110 mm
Stroke	250 mm
Distance between the frames	2700 mm
Throat depth	450 mm
Bending speed	20 mm/s
Approach speed	220 mm/s
Return speed	250 mm/s
Open height	520 mm
Table width	90 mm
Table height	950 mm

	HG-2203
Drive	Servo hydraulic
Controller	AMNC 3i
Length	5258 mm
Width	2920 mm
Height	3196 mm