



JMT

STRONG ON SERVICE

AD-R

PRESS BRAKES



**It's difficult to compete in today's
world with yesterday's technology.**

We have solutions.



JMTUSA.com

Email: **JMT@JMTUSA.com**

Toll Free: **855-773-7727**
(855-PRESS-BRAKE)

JMT machines are built by the largest volume press brake producer and the most respected manufacturer of sheet metal machinery in the world. This factory is one of the world's most contemporary production plants, with a 1.5 million square foot footprint and over 1500 dedicated employees.

JMT machines are built to extremely stringent standards and the factory has maintained continuous product research and development since 1956. With 75 R&D and product engineers on-staff at the plant, **JMT** products utilize the most modern techniques in design and engineering, and are equipped with proven quality components to fulfill a customer's most exacting requirements. **JMT** combines "accuracy, speed, flexibility, durability, reliability and advanced technology" with the highest performance/price ratio in the world.

A nationwide network of **JMT** distributors and technical support personnel are in place to assist you.

Our machines are built with world-renown components such as Rexroth, Siemens and Schneider, which are available off the shelf from your local supplier, your dealer, or direct from **JMT**.

For more information please visit **JMTUSA.com**.

You can also email us at **JMT@JMTUSA.com** or call toll free to **855-773-7727** (855-PRESS-BRAKE).



MACHINE PARTS INVENTORY



JMT's U.S. HEADQUARTERS



PLANTS BUILDING OUR JMT MACHINES

JMT Press Brakes

JMT press brakes guarantee precision, low maintenance costs, low operating costs, and long-term reliability. These features, along with large investments in modern manufacturing equipment, have made the factory the largest volume press brake producer in the world.

All **JMT** press brakes are produced with modern design technology and incorporate rigid stress relieved frames to increase your productivity with accurate part production. Demanding application requirements are easily met. **JMT** press brakes come in a broad range of sizes with features to satisfy nearly all budgets.

JMT AD-R Series Press Brakes

3-5 Axis CNC • 4'-20' Bending Lengths + Tandem • 66-660 Tons

These value-oriented press brakes have exceptionally large strokes, daylight, and throat depths to allow cost effective production of simple to complex shapes that require large dimensions for ease of handling and removal. An easy-to-use control reduces the required operator skill level.



JMT AD-S Series Press Brakes

5-14+ Axis CNC • 6'-30' Lengths + Tandem/Trio/Quad • 66-4000 Tons

The possibilities are unlimited with these popular press brakes that feature faster setups and part production as well as large daylight opening and working areas.

Features include a stable and fast AC servo motor-driven back gauge system; a powerful, yet simple, 3D graphical viewing controller (standard); automatic CNC table crowning; and outboard-mounted long ram guides (which provide stability while allowing full length between the frames for acute angle bending).



JMT AD-SERVO Hybrid Series Press Brakes

5-14+ Axis CNC • 8'-10' Bending Lengths • 110, 150, 195 Tons

These eco-friendly hybrid press brakes provide fast, quiet, clean, accurate bending operations at a lower cost in an energy-efficient press brake design.

Like the AD-S, the AD-SERVO features a stable and fast AC servo motor-driven back gauge system; a powerful, yet simple, 3D graphical viewing controller (standard); automatic CNC table crowning; and outboard-mounted long ram guides (which provide stability while allowing full length between the frames for acute angle bending).



JMT FBS Press Brakes (Flexible Bending Solutions)

JMT provides the latest technology in "large format" bending and automation with their "Flexible Bending Solutions." This advanced technology allows diversified uses in different industries while avoiding long, expensive welding operations (which also risk the stability of the material).

Features include reduced material handling, compensation for high spring-back sheets, reduced setup times through automated loading and unloading as well as increased employee safety.

The higher tonnage press brakes utilize a unique "box construction" design which provides the most stable machine frame in the industry.



***JMT* AD-R SERIES PRESS BRAKES**

- **3-5 Axis CNC**
- **66-660 Tons**
- **4'-20' Bending Lengths + Tandem**
- Combination of performance, value and simplicity
- Best performance/price ratio CNC press brake in the world
- Easy to use CNC controller
- Specially designed control unit and software provides simplicity and lean operations even for inexperienced operators.
- Perfect bending results with easy angle input and operation of the machine
- Robust construction, same solid foundation of all JMT Press Brakes
- Working with an AD-R is easy and comfortable in all respects. Large daylight opening and large space enables the machine to be put to optimum use along its entire working length.
- Designed and manufactured to meet the challenge of “cost down” manufacturing culture
- Provides CNC control of standard 3 axes (Y1, Y2 and X) with manual R axis (optional CNC R axis available).



JMT AD-R PRESS BRAKE FEATURES



Large Working Space (Standard)

Large Stroke + Large Daylight + Large Throat

The large openings and strokes of the AD-R Series facilitate the versatile production of complex large parts requiring increased clearance, such as the production of deep-sectioned four-sided boxes. This provides for more clearance when bending parts with larger flanges. In some cases this allows the buyer to purchase a shorter press brake, as this large clearance allows large flange bending. The wide space can also reduce cycle times.

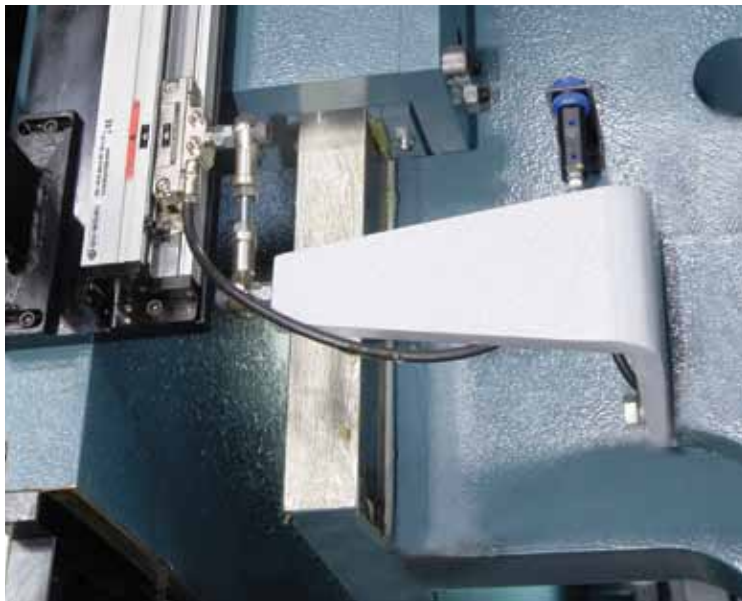


Back Gauge (Standard)

X Axis: Motorized, CNC Controlled

R Axis: Manually Height Adjustable Finger Block

Fingers' depth is calculated by CNC controller and executes X axis. Retraction is also a standard feature to acquire accurate parts. Back gauge fingers are easily adjusted on linear guides by ball integrated motion system.



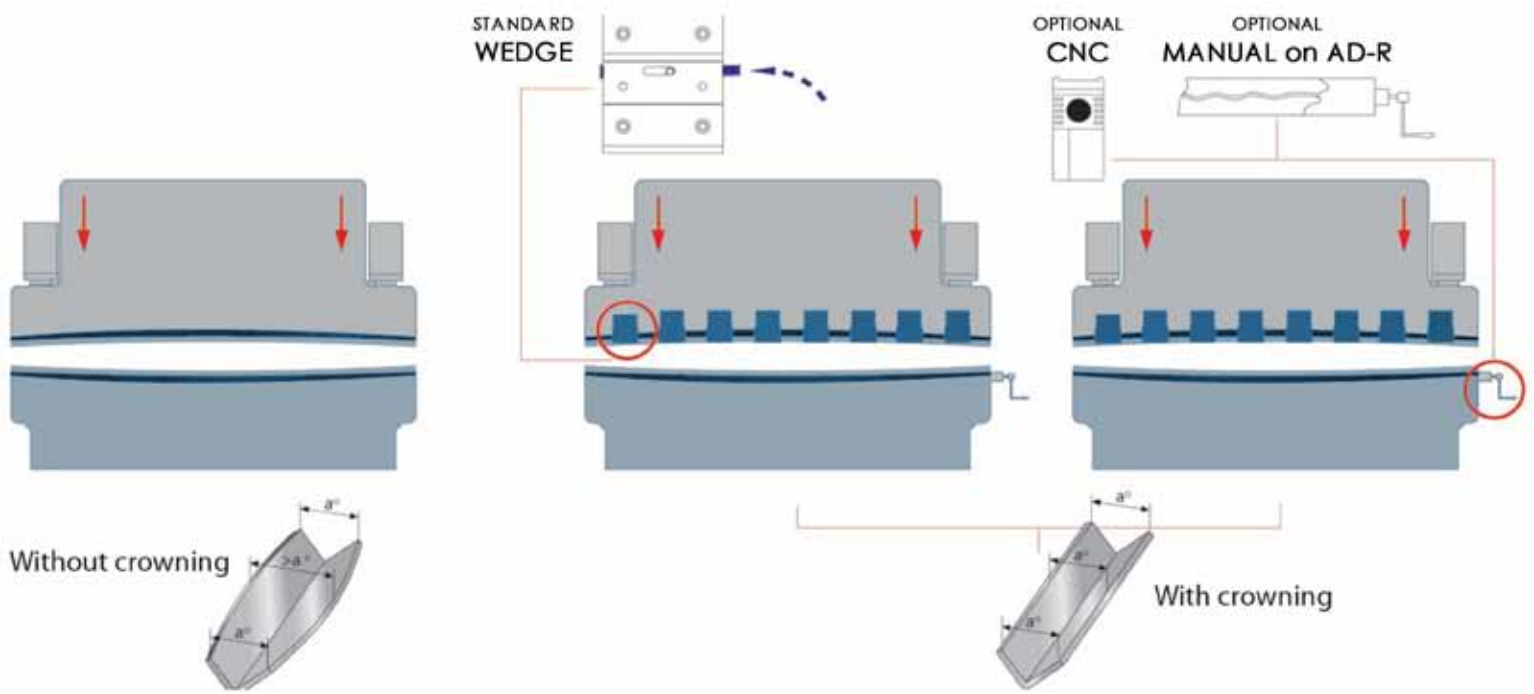
Top Beam Guiding (Standard)

Double guides are long and accurate for easy guiding of top beam.



Sliding Front Arms (Standard)

Quickset support arms are mounted on a linear guide way and ball bearing system that allows "finger tip" lateral adjustment of the front support arms. Vertical adjustment is quick and easy.



Shimless Bending (Optional)

JMT offers both manual and automatic controlled crowning systems. The manual style is equipped with single point adjustment and position readout. The CNC style automatically calculates the position and setting from normal program information and sets them via the CNC.

JMT AD-R Press Brake Safety Systems



Safety Systems: Laser Guard (Optional)

Because of the versatility of press brakes and their uses, safety at the point of operation is the responsibility of the owner and operators. **JMT** offers the ram-mounted AKAS-LC Safety Light Guard. Located at the bending level and based on the location of the punch tip, this system helps prevent injuries. Transmitter and receiver are fixed to the ram of the machine and form a laser-optical safety light grid that follows the ram.



Safety Systems: Rear & Side Doors (Standard)

The AD-R press brake is designed with variety of safety features, such as rear and side doors. Other features, such as the guards, hydraulics and electronics are designed to safely protect operators and the machine itself.

JMT AD-R Press Brake Tooling and Tool Holders



American/European Box Clamping (Standard)

Because of their deep sectioned characteristics, our standard American/European style clamps are very useful in deep box forming. They are designed with an integrated wedge which allows vertical adjustment to offset deflection and tool wear.



Hydraulic New Standard Clamping (Optional)

Wila's hydraulic New Standard clamping is a state-of-the-art system that operates quickly and easily without any external moving parts. This type of clamping is especially suitable for automatic tool changeovers.



Hydraulic Euro-Style Clamping (Optional)

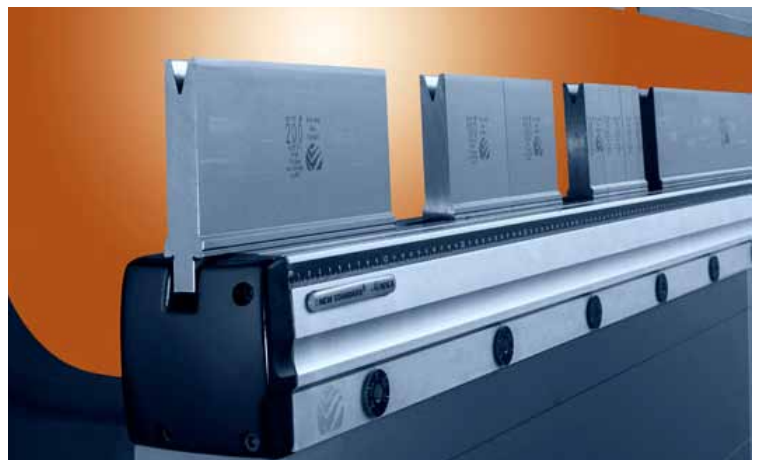


JMT Tool Clamping (Optional)



Hydraulic Punch Clamping (Optional)

JMT offers several styles of hydraulic punch clamping. Each automatically centers and seats the punch and allows vertical removal. Setup times can be dramatically reduced. It is available for American and New Standard style concepts.



Hydraulic Die Clamping (Optional)

Hydraulic die clamping provides an equally fast method of securing the lower dies. It is available for both American/European and New Standard style dies.



JMT Laser-Hardened Tools (Optional)

Typically machines 350 tons and over are equipped with a large multi-V die with five or more v-openings. The opening sizes are dependent on the machine tonnage.



Precision Ground 4-Way Die (Optional)

JMT offers an economical, versatile precision ground tooling package that consists of a four way bottom die (openings: 0.625"/88°; 0.866"/88°; 1.37"/85°; 1.96"/85°), a four way die holder, and a 75° punch with a 0.030 radius. The longest punch/die is 32".



New Standard Style Tooling (Optional)

The New Standard concept is also available. This concept is generally a little harder and utilizes the patented "hour glass" tang for self seating.



American Style Tooling (Optional)

Both precision ground and sectionalized tooling, as well as conventional full length style tooling is available.



**Wila's Multi-V-Matic
Automatically Adjustable
Die System**

Multi-V Adjustable Die Systems (Optional)

Multi-V dies are your most versatile solution in today's demanding market.

JMT AD-R Press Brake CNC Control Units

Delem DA-56 (Standard)

Standard Configuration

- Synchronized / conventional press brake control
- Color LCD display
- 10.4" TFT, 800 x 600
- 500 MHz processor
- Memory capacity 128 MB
- Product memory 32 MB
- Tool library:
 - 30 punches
 - 60 dies
- Data back-up / restore via USB
- Power-down memorization

Factory Option

- Integrated valve amplifier

Field Options

- Automatic bend sequence calculation
- Windows® Networking

Features

- 2D graphical programming
- Bend sequence determination
- Developed length calculation
- Crowning control
- USB peripheral interfacing
- Servo, frequency inverter and AC control
- Advanced Y-axis control algorithms for closed-loop as well as open-loop valves

The compact DA-56 provides easy CNC programming with the Delem 2D graphical product design tool. Machine adjustment and test bends are reduced to a minimum because of the quick and easy to use bend sequence determination tool.

The CNC program is generated with a one touch key stroke. You are ready to make the first part since all axes positions are automatically computed and the bend sequence has already been simulated on the screen with the machine and tools in real scale.

In the production mode of the DA-56 the operator can graphically simulate the bend process of the product guiding him during the press brake operation.

The basic machine control functions are Y1-Y2 and X axis, optionally a second back gauge R axis can be used.

The CNC control is based on the latest technology giving flexibility to use. On board USB interfacing gives a fast product and tool backup medium.

With the color TFT LCD screen and the modern User Interface, the user has a clear and fast programming facility. Offline programming is possible with the DA-Offline solutions.



Technical Specifications

Mechanical

- Design aluminium edge
- IP54

Interfaces

- Opto-isolated digital I/O
- Encoder inputs (single/diff. 5 V/12 V)
- Optional integrated valve amplifier Y1/Y2
- RS232 port
- USB port
- Network interface (100 Mb/10 Mb)

Control

- Servo- / 2 speed AC control
- Unipolar / frequency inverter control
- Direct pressure valve control
- Direct proportional valve Y1/Y2 control (VA version)
- Up to 5 digital function outputs
- Tandem operation

Programming Functions

- 7-digit program number
- 20-character drawing number
- Stock counter (up to 9999)
- Step repetition (up to 99)
- Millimeter / Inch
- Programmable axis speed per step
- Programmable material properties
- 2D product programming and visualization
- Graphical bend sequence determination
- Fast collision check
- Free programmable tools
- Graphical tool programming

Back Gauge Configurations

- X, R

Computed Functions

- Tooling safety zones
- Press force
- Bend allowance
- Crowning adjustment
- Bottoming force
- Angle correction database
- Developed length
- Auto bumping calculation

Miscellaneous

- Diagnostic program
- Sequencer functionality (PLC)
- Error messaging system
- On board analysis
- Operator selectable dialogue languages
- Help texts via online support



Delem

JMT CNC Advantage (Optional)

While **JMT** includes the Delem DA-56 as a standard control on all of its AD-R press brakes, for a small discount they can be ordered with the CNC Advantage CNC Control.

- 2D graphic display (7.4") & work piece in programming page
- Easy bend function
- Automatic bending sequence
- Part calculation
- Safety guard PLC communication
- Offline software (programming and edit features)
- Diagnose of I/O
- Tandem working
- USB interface for backup and restore programs/tools/parameters
- Maintenance free
- 85 programs (up to 12 steps each program); $12 \times 85 = 1020$ steps
- 32 Punches & Dies
- Programs, Punches, Dies and Parameters can be copied using USB Disk or Off-Line software.
- Wide language options



JMT AD-R 37220

12' x 242-Ton Press Brake

JMT AD-R Press Brake Optional Configuration



Tandem Configuration (Optional)

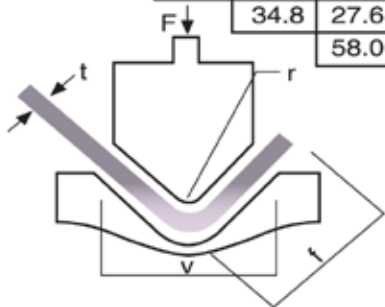
JMT AD-R press brakes are available in tandem configurations for longer jobs (such as creating light poles).

JMT AD-R Press Brake Air Bending Tonnage Guide

Force to Air-Bend Mild Steel (60,000 PSI)										F = U.S. tons/lineal ft. of workpiece										All Dimensions in inches									
t	v	1/4	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	v											
ga.	f	3/16	9/32	11/32	7/16	9/16	11/16	7/8	1 1/8	1 3/8	1 3/4	2 3/16	2 13/16	3 1/2	4 1/2	5 1/2	6 7/8	f											
r	in.	1/32	1/16	5/64	7/64	9/64	5/32	13/64	1/4	5/16	13/32	33/64	5/8	3/4	1 1/32	1 5/16	1 5/8	ga.											
20	0.036	3.1	1.75	1.2															20										
18	0.048	5.4	3.1	2.1	1.55	1.3	F Values												18										
16	0.060	9.6	5.5	3.8	2.8	2.2	1.45												16										
14	0.075	9.3		6.4	4.7	3.8	2.5	1.85											14										
12	0.105	20.5		14.0	10.4	8.1	5.6	4.1	3.2	2.2									12										
11	0.120	18.5			13.9	10.9	7.4	5.6	4.3	2.9	2.15								11										
10	0.135	25.2			17.2	14.5	9.9	7.3	5.7	3.8	2.85	2.23							10										
3/16	0.188	34.8				27.6	19.1	13.9	11.0	7.5	5.6	4.3							3/16										
1/4	0.250	58.0					39.5	29.0	22.8	15.5	11.4	8.9	6.1	4.5						1/4									
5/16	0.313	69.5						51.0	40.0	27.0	20.0	15.6	10.5	7.8	6.1					5/16									
3/8	0.375	75.0							59.0	40.0	29.5	23.4	15.8	11.7	9.2	6.2	4.6		3/8										
7/16	0.438	115.0								90.0	61.0	45.5	35.2	24.0	17.8	13.9	9.4	6.9	7/16										
1/2	0.500	85.0									62.0	44.3	33.0	24.5	19.1	13.0	9.8	1/2											
5/8	0.625	86.0										58.0	43.0	34.0	23.2	17.5	5/8												
3/4	0.750	91.0											67.0	53.0	36.4	26.7	3/4												
7/8	0.875	136.0												101.0	79.0	54.0	40.0	7/8											
1	1.000	146.0													115.0	68.0	58.0	1											

t = Workpiece thickness
r = Inside radius of formed part
v = Vee-die opening
f = Minimum flange

For steel of different tensile strength.
F value differs in proportion to strength ratio.
Inside radius r for mild steel, is about
5/32 of female die opening v. for any t.
Shaded F values are for v = 8t, common for
average 90° bending.
For t = 1/2 inch or more, use v = 10t.



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PLEASE VERIFY YOUR TOOLING IS CAPABLE OF HANDLING THE TONNAGE

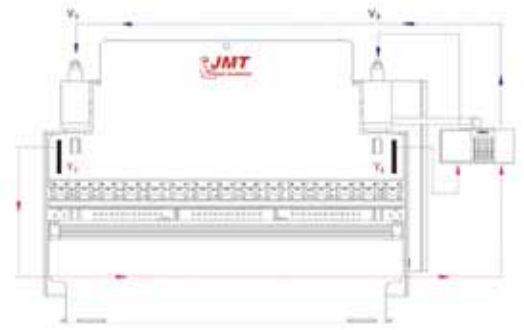
*Tonnage requirements for coining are 3 to 5 times Greater than when air bending. Bending pressures for other metals are:

• Soft brass = 50% of pressure shown. • Soft Aluminum = 50% of pressure shown. • Aluminum alloys heat treated = same as steel. • Stainless steel = 50% more than steel.

JMT AD-R PRESS BRAKE STANDARD EQUIPMENT

AD-R Series press brakes are manufactured with exceptionally large stroke/daylight combinations as well as high speed ram and back gauge positioning. The production of deep boxes and other parts requiring large clearances are produced with ease.

- 3 axis CNC:
 - Y1, Y2 precision ram positioning*
 - X axis back gauge
- Large trio of value:
 - Large open height
 - Large stroke
 - Large throat depth
- Back gauge - motorized & linear guide & ball bearing system
- Back gauge fingers - height adjustable
- Delem DA-56 CNC control unit with 2D graphics
- Clamping:
 - American/European section-style box punch clamps
 - American-only style punch clamp available at no charge
- Quick-set sliding front sheet support arms with full-length linear guide, tilting stop and T-slot (front gauging squaring, etc.)
- Protection covers (side and rear safety doors)
- Rear work light
- World-class hydraulic and electronic components that are easily replaceable (parts stocked by us or available off-the-shelf from your local supplier):
 - Hydraulic blocks and valves (Rexroth)
 - Electronics system (Siemens, Schneider)
- High-yield plate construction
- Automatic bend sequence determination
- Automatic stretch length calculator for blank size determination



* Features Y1/Y2 ram positioning system where each cylinder operates independently in a closed loop system. Linear encoders are mounted on a separate sub-frame on each side of the machine. These encoders combined with precision servo-hydraulic valves and the CNC command center, provide accuracy of $\pm .0004$ " and the ability to program all ram positions, ram speeds and ram tilt. The decompression point is also programmable, which, along with programmable speeds is very useful when bending large sheets or high-yield material.

JMT AD-R PRESS BRAKE OPTIONAL EQUIPMENT

- CNC R axis
- Safety laser with manual F.AKAS II M -FPSC-B-C + safety covers with switch
- Safety laser with SICK C 4000 (only for tandem) + steel protection covers
- DFS1 laser finger protection (for bottom beam)
- Adaptive bending sensors
- Top tool American or European
- Bottom tool American or European
- Hydraulic tooling clamping systems
- Quick release clamping
- Universal die blocks
- Manual crowning
- CNC controlled motorized crowning
- 40" back gauge - back protection with light barrier
- Oil coolant
- Very reasonable tooling packages available (multi-V tooling)
- Hydraulic tooling clamping systems
- Universal die blocks
- Additional finger blocks
- Additional sliding front arms
- Profile-W offline software
- Tooling packages
- Tandem configuration

Many options and customizations are available — please contact us for details.

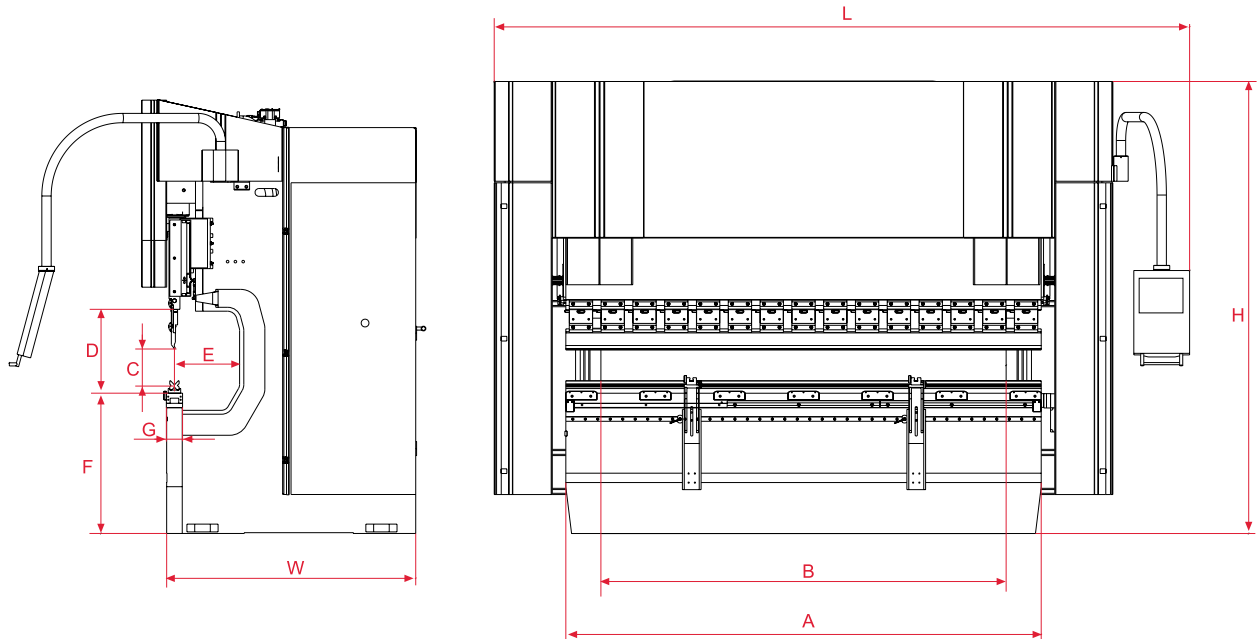
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JMT AD-R PRESS BRAKE TECHNICAL DIMENSIONS

AD-R SERIES Model	Bending Length [A]	Bending Force (Tons)	Between Frames [B]	Speeds (Inches per Minute)			Daylight [D]	Bed Cap Width [G]	Bed Height [F]	Stroke [C]	Throat Depth [E]
				Y-Axis Rapid Speed	Y-Axis Working Speed	Y-Axis Return Speed					
AD-R 2060	6' 8"	66	5' 7"	472	23	283	20.87"	4"	35.4"	10.4"	16"
AD-R 25100	8' 4"	110	7' 2"	425	23	283	20.87"	4"	35.4"	10.4"	16"
AD-R 30100	10'	110	8' 6"	425	23	283	20.87"	4"	35.4"	10.4"	16"
AD-R 30135	10'	150	8' 6"	378	23	283	20.87"	4"	35.4"	10.4"	16"
AD-R 30175	10'	192	8' 6"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 30220	10'	242	8' 6"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 30320	10'	352	8' 6"	283	23	236	24.8"	6"	35.4"	14.37"	16"
AD-R 37175	12' 1"	192	10' 2"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 37220	12' 1"	242	10' 2"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 40175	13' 3"	192	11' 9"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 40220	13' 3"	242	11' 9"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 40320	13' 3"	352	11' 9"	236	23	236	24.8"	6"	35.4"	14.37"	16"
AD-R 40400	13' 3"	440	11' 2"	236	19	189	24.8"	12"	40.9"	14.37"	20"
AD-R 43175	14'	192	12' 2"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 43220	14'	242	12' 2"	283	23	236	20.87"	4"	35.4"	10.4"	16"
AD-R 43320	14'	352	12' 2"	236	23	236	24.8"	6"	35.4"	14.4"	16"
AD-R 43400	14'	440	12' 2"	236	19	189	24.8"	12"	40.9"	14.37"	20"
AD-R 60220	20'	242	16' 8"	236	23	236	20.87"	6"	43.3"	10.4"	16"
AD-R 60320	20'	352	16' 8"	236	23	236	24.8"	6"	43.3"	14.37"	16"
AD-R 60400	20'	440	16' 8"	236	19	189	24.8"	12"	48"	14.37"	20"



JMT AD-R PRESS BRAKE TECHNICAL DIMENSIONS (Continued)

AD-R SERIES Model	Sliding Support Arms	B.G. Finger Blocks	X-Axis (Gauging)		Motor Power (HP)	Oil Tank Capacity (Gallons)	Overall Dimensions			Weight (Approx. Lbs.)
			X-Axis Speed (IPM)	X-Axis Travel			Length [L]	Width [W]	Height [H]	
AD-R 2060	2	2	590	17"	10	27	10' 10"	5' 5"	9'	13,450
AD-R 25100	2	2	590	25.6"	15	27	12' 6"	5' 6"	9'	19,070
AD-R 30100	2	2	590	25.6"	15	27	13' 10"	5' 6"	9'	20,935
AD-R 30135	2	2	590	25.6"	20	40	13' 10"	5' 6"	9'	22,600
AD-R 30175	2	2	590	25.6"	25	66	14' 3"	5' 7"	9'	24,800
AD-R 30220	2	2	590	25.6"	30	66	13' 11"	5' 10"	9' 6"	27,000
AD-R 30320	2	2	590	25.6"	50	66	14' 1"	6'	10' 7"	38,030
AD-R 37175	2	2	590	25.6"	25	66	16' 3"	5' 7"	9' 6"	27,830
AD-R 37220	2	2	590	25.6"	30	66	16' 3"	5' 10"	9' 6"	31,020
AD-R 40175	2	2	590	25.6"	25	66	17' 3"	5' 7"	9'	28,270
AD-R 40220	2	2	590	25.6"	30	66	17' 3"	5' 10"	9' 6"	32,450
AD-R 40320	2	2	590	25.6"	50	66	17' 5"	6' 3"	10' 7"	45,650
AD-R 40400	2	2	590	29.5"	50	120	18' 10"	6' 11"	11' 7"	58,550
AD-R 43175	2	2	590	25.6"	25	66	18' 3"	5' 7"	9' 6"	29,850
AD-R 43220	2	2	590	25.6"	30	66	19' 4"	5' 10"	9' 6"	32,525
AD-R 43320	2	2	590	25.6"	50	66	19' 11"	6' 4"	10' 8"	47,650
AD-R 43400	2	2	590	29.5"	50	120	20'	7' 10"	11' 7"	59,875
AD-R 60220	4	4	590	29.5"	30	66	24' 7"	5' 10"	10' 8"	45,298
AD-R 60320	4	4	590	29.5"	50	66	24' 7"	6' 3"	11' 4"	62,150
AD-R 60400	4	4	590	29.5"	50	132	24' 7"	6' 11"	12' 2"	78,815

The above are standard specifications.*

Please contact us for other sizes and options:

- Bed lengths to your specifications
- Custom distance between frames
- Extra throat depth
- Extra open height
- Extra stroke
- Longer back gauge travel
- Tandem machine configurations for increased bending length

All readily available.

*Due to ongoing product development, specifications are subject to change.



JMTUSA.com

Email: **JMT@JMTUSA.com**

Toll Free: **855-773-7727**
(855-PRESS-BRAKE)

