AD-R SERIES
PRESS BRAKES

- Easy to Use
- Fast
- Productive
- Winning
- Ergonomic
As a total supplier for sheet metal manufacturing with almost 60 years of experience, Durma understands and recognizes the challenges, requirements and expectations of the industry. We strive to satisfy the ever higher demands of our customers by continuously improving our products and processes while researching and implementing the latest technologies.

In our three production plants with a total of 150,000 m², we dedicate 1,000 employees to delivering high quality manufacturing solutions at the best performance-to-price ratio in the market.

From the innovations developed at our Research & Development Center to the technical support given by our worldwide distributors, we all have one common mission: to be your preferred partner.

Present Durmazlar machines with DURMA name to the world.

1. High technology, modern production lines
2. Top quality components
3. High quality machines designed in R&D Centre
The Winning Force

With simple programmable features the high speed AD-R Series press brake adds value to your business with low energy consumption, precision bending and maintenance-free structure. This series can be used safely for many years and simplifies the operators work load.

With DURMA press brakes, you always get great results.

Fast, productive and perfect bending

- Always precision bending results
- Minimized tool exchange and setting time
- Maximized speed and security
AD-R Series Press Brakes

Advance Your Standards
World leader in its category

Perfectly equipped for sensitive bending, energy efficient solutions

With its easy to use control units, rigid body frame, perfect design, high efficiency, multiple tool usage solutions, top level CE safety standards and with its suitable price range, AD-R is the World leader in its category.

Why DURMA Press Brakes
- Better and faster bending
- Stronger and rigid body structure
- High sensitivity and repeatability
- Latest technology
- Low service cost
- Reliability
Gain More Power
With its Performance and Price ratio it is the best CNC Press Brake in the World

AD-R series press brakes give excellent results of various type business types. It provides a convenient workspace for bends in many different sizes with a longer daylight.

Strong Back Gauge System

- Fast and high accuracy
- Safe movement
- Adjustment availability at every point
- Resistance to crash
- Maintenance free

Why DURMA Back Gauge?

Most important feature to achieve perfect bending is the stability and the design of the back gauge, which allows an impeccable and correct product to be produced.

The high speed ballscrew back gauge system movement is also supported with linear guides, which helps the back gauge achieve long life, greater sensitivity and strengthens against any collisions.

Special designed finger blocks with steps to achieve maximum stability can also be supplied for every kind of bending solution.

General Specifications

- High sensitivity, Stress relieved steel construction body, long life Mono Block Frame
- DURMA designed and copyrighted guiding system
- Ball Screw and linear guide integrated perfect back gauge system
- Durable, long life and sensitive bending capability with special hardened top tools
- Suitable for segmented tools special and fast tool holding system
- Sensitive solutions on long and deep bending
- High accuracy linear scales
- CE safety standards
- Environmentally friendly, efficient and perfect bending combinations
**Tool Holders and Tools**

Bending performance increased using with high quality European clamping system and easy to use. Narrow table designed for European style tool holder and Z bending.

*DURMA* is your solution partner with various tool options.

---

**Safe and Accurate Bends with Top Quality Equipments**

**Crowning System**

Manual or CNC-controlled motorized crowning system simplifies bending, by adjusting each point of the bending parts to acquire straight bends. The need for shimming is eliminated.

---

**Linear Guide Front Sheet Supports**

Rugged support arms with tilting stops are mounted on a linear guide rail system. This allows “finger-tip” lateral adjustment as required by the bend length of the part. They are also equipped with side gauges for the fast, easy, and accurate feeding of parts small or large.

---

**CE Safety Systems**

Our machines are designed in accordance with Ce-Norms to ensure your safety with hydraulic, electric, appropriate height covers and laser light curtains. CE safety in tandem machines are also provided with light barriers.

---

**Stable Top Beam Movement**

By using long and planar guiding surfaces, all the disadvantages of point guiding are eliminated 100%. Free bending space; guiding system that eliminates bending between frame has been moved to the outside of the frame.

---

**European Clamping System**

**European Type Bottom Tool (4V Die)**

**Quick Release Clamping**

**DURMA Multi V Bottom Tool**

**DURMA Top Tool**

**CNC Crowning System**

**Linear Guide Front Sheet Supports**

**Ce Laser Safety System**

**90 Degree Endless Bend**
**DT10 Control Unit**

Create profile with touch screen

Online service via Internet connection

Diagnostic mode

Easy programming page

Automatic bend calculation and listing

Tool programming and library

**All the solutions are a click away with the DT10**

Alarm Help Screen

The alarm help screen helps find a solution for the operator step by step. This module makes the operator’s life easier with rapid solutions.

**D-Bend offline software**

D-Bend Offline software allows you to simulate your bending at your desk in your office. You can create your tools and it provides the opportunity to make new programs without interrupting production. D-Bend verifies your bend sequence. Creates verified part drawings for Laser, punch, and plasma machines.

**Everything is Under Control with User-Friendly Interface**

- Automatic bend listing
- Storing your programs
- Easy bend functioning
- 2D color graphics display and multiple simulation
- Linux operating system
- D-Bend offline software
- Tandem compatible
- Multiple language options
- Ergonomic panel design
- USB port, back-up 10”TFT color touch screen

**Optional Control Units**

**ModEva 15T**

15” color Touch Screen
On-screen finger profile drawing
Automatic bend listing
Very simple and convenient data transfer
Higher productivity thanks to easy and rapid
Multi-simulation capability
Simulation criteria for better sheet management
Windows XPe for multitasking and file management
EC safety-cycle management
Ethernet for Easy communication
Bundled Offline Software

**DA-58T**

2D graphical touch screen programming
15” high resolution colour TFT
Bend sequence calculation
Crowning control
Servo and frequency inverter control
Advanced Y-axis control algorithms for closed-loop as well as open-loop valves
USB, peripheral interfacing
Standard & Optional Equipment

Standard Equipments

Y1, Y2, X=650mm (AL - double gayt)
Control Unit - DT 10 Touch screen 2D graphic (Remote Control)
Back gauge - motorised & linear guide & ball bearing system
Manually adjustable R axes
European Clamping system
Sliding sheet support Arms with T-Channel and Tilting stop
Special designed – world-class hydraulics blocks & valves
World-class electrical equipment
Manuel crowning

Optional Equipments

Control Unit - CNC ModEva 15T 3D Colour Graphic
Control Unit - CNC DA 58T
CE with FIESSLER AKAS-LC II F manual + AKFR control box
CE BLVT safety – only for tandem machines
Motorized R Axes
Z1 – Z2 axes CNC
DBEND 3D CAD/CAM Importing & Simulation Program
European style top tool
European style bottom tool
Bottom tool Durma
Quick Release Clamping
CNC controlled Motorized Crowning
Back gauge 1000 mm - Back protection with Light barrier
Oil Cooler
Additional Finger blocks & Sliding front arms
Overseas special packaging

Fast on Service and Spare Parts

DURMA provides the best level of service and spare parts with qualified personnel and spare parts in stock. Our experienced and professional service personnel are always ready at your service. Our professional training and application enriched courses will give you an advantage to use our machinery.
## AD-R Series Technical Details

<table>
<thead>
<tr>
<th>AD-R Series</th>
<th>Bending Force (Ton)</th>
<th>Bending Length (mm)</th>
<th>Distance Between Columns (mm)</th>
<th>Style (mm)</th>
<th>Daylight (mm)</th>
<th>Throat Depth (mm)</th>
<th>Optional Throat Depth</th>
<th>Total Height (mm)</th>
<th>Y Rapid Speed (mm/sec)</th>
<th>Y Working Speed (mm/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD-R 1260</td>
<td>60</td>
<td>1250</td>
<td>1050</td>
<td>160</td>
<td>400</td>
<td>350</td>
<td>900</td>
<td>104</td>
<td>200</td>
<td>10</td>
</tr>
<tr>
<td>AD-R 2060</td>
<td>60</td>
<td>2050</td>
<td>1700</td>
<td>160</td>
<td>400</td>
<td>350</td>
<td>900</td>
<td>104</td>
<td>200</td>
<td>10</td>
</tr>
<tr>
<td>AD-R 25100</td>
<td>100</td>
<td>2550</td>
<td>2200</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>900</td>
<td>104</td>
<td>180</td>
<td>10</td>
</tr>
<tr>
<td>AD-R 30100</td>
<td>100</td>
<td>3050</td>
<td>2600</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>180</td>
</tr>
<tr>
<td>AD-R 30135</td>
<td>135</td>
<td>3050</td>
<td>2600</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>180</td>
</tr>
<tr>
<td>AD-R 30175</td>
<td>175</td>
<td>3050</td>
<td>2600</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>180</td>
</tr>
<tr>
<td>AD-R 30220</td>
<td>220</td>
<td>3050</td>
<td>2600</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>180</td>
</tr>
<tr>
<td>AD-R 30320</td>
<td>320</td>
<td>3050</td>
<td>2600</td>
<td>365</td>
<td>630</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>154</td>
<td>160</td>
</tr>
<tr>
<td>AD-R 37175</td>
<td>175</td>
<td>3700</td>
<td>3100</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>140</td>
</tr>
<tr>
<td>AD-R 37220</td>
<td>220</td>
<td>3700</td>
<td>3100</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>140</td>
</tr>
<tr>
<td>AD-R 40175</td>
<td>175</td>
<td>4050</td>
<td>3600</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>160</td>
</tr>
<tr>
<td>AD-R 40220</td>
<td>220</td>
<td>4050</td>
<td>3600</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>104</td>
<td>160</td>
</tr>
<tr>
<td>AD-R 40320</td>
<td>320</td>
<td>4050</td>
<td>3600</td>
<td>365</td>
<td>630</td>
<td>410</td>
<td>*</td>
<td>900</td>
<td>154</td>
<td>160</td>
</tr>
<tr>
<td>AD-R 40400</td>
<td>400</td>
<td>4050</td>
<td>3400</td>
<td>365</td>
<td>630</td>
<td>510</td>
<td>**</td>
<td>1050</td>
<td>154</td>
<td>140</td>
</tr>
<tr>
<td>AD-R 60220</td>
<td>220</td>
<td>6050</td>
<td>5100</td>
<td>265</td>
<td>530</td>
<td>410</td>
<td>*</td>
<td>1100</td>
<td>154</td>
<td>140</td>
</tr>
<tr>
<td>AD-R 60320</td>
<td>320</td>
<td>6050</td>
<td>5100</td>
<td>365</td>
<td>630</td>
<td>410</td>
<td>*</td>
<td>1100</td>
<td>154</td>
<td>140</td>
</tr>
<tr>
<td>AD-R 60400</td>
<td>400</td>
<td>6050</td>
<td>5100</td>
<td>365</td>
<td>630</td>
<td>510</td>
<td>**</td>
<td>1220</td>
<td>154</td>
<td>120</td>
</tr>
</tbody>
</table>

* 750 mm throat depth

** 750 - 1000 - 1250 mm throat depth

*** 500mm/sec. backgauge speed on AL.

Machines set according to optimum values.
DURMA

FIBER LASER

PUNCH

PRESS BRAKE

VARIABLE RAKE SHEAR

PLASMA

L ANGLE PROCESSING CENTER

ROLL BENDING

PROFILE BENDING

IRON WORKER

POWER OPERATED SHEAR

BANDSAW

CORNER NOTCHER
| V | b | r_I | 0.5 | 0.6 | 0.8 | 1 | 1.2 | 1.5 | 1.8 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 15 | 18 | 20 |
|---|---|-----|-----|-----|-----|---|-----|-----|-----|---|-----|---|-----|---|-----|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 5 | 1   | 2.5 | 6.5 | 10 | 2 | 5   | 8   | 11  | 3 | 4   | 6   | 9   | 13  | 4 | 6   | 9   | 13  | 16  | 18  | 20  | 22  | 24  | 26  | 28  |
| 8 | 6 | 1.3 | 2   | 5   | 8   | 11 | 3   | 5   | 7   | 11  | 13  | 16  | 19  | 22  | 25  | 28  | 31  | 34  | 37  | 40  | 43  | 46  | 49  |
| 10| 7 | 1.7 | 1.5 | 4   | 6   | 9   | 13  | 2   | 4   | 6   | 9   | 13  | 16  | 19  | 22  | 25  | 28  | 31  | 34  | 37  | 40  | 43  | 46  |
| 12| 9 | 2   | 3   | 5   | 7   | 11  | 16  | 4   | 6   | 9   | 13  | 16  | 19  | 22  | 25  | 28  | 31  | 34  | 37  | 40  | 43  | 46  | 49  |
| 15| 12 | 2.7 | 4   | 6   | 9   | 13  | 16  | 5   | 7   | 10  | 13  | 16  | 19  | 22  | 25  | 28  | 31  | 34  | 37  | 40  | 43  | 46  | 49  |
| 20| 15 | 3.3 | 4   | 7   | 10  | 13  | 16  | 6   | 8   | 12  | 16  | 19  | 22  | 25  | 28  | 31  | 34  | 37  | 40  | 43  | 46  | 49  | 52  |
| 26| 18 | 4.2 | 4   | 7.5 | 9   | 14  | 21  | 7.5 | 9   | 14  | 19  | 24  | 29  | 33  | 38  | 43  | 48  | 53  | 58  | 63  | 68  | 73  | 78  |
| 30| 22 | 5   | 6.5 | 8   | 12  | 19  | 24  | 7.5 | 9   | 14  | 19  | 24  | 29  | 33  | 38  | 43  | 48  | 53  | 58  | 63  | 68  | 73  | 78  |
| 32| 23 | 5.4 | 6.5 | 8   | 12  | 19  | 24  | 7.5 | 9   | 14  | 19  | 24  | 29  | 33  | 38  | 43  | 48  | 53  | 58  | 63  | 68  | 73  | 78  |
| 37| 25 | 5.8 | 10  | 14.5| 20  | 26  | 33  | 10  | 14.5| 20  | 26  | 33  | 10  | 14.5| 20  | 26  | 33  | 10  | 14.5| 20  | 26  | 33  | 10  | 14.5|
| 42| 29 | 6.7 | 10  | 14.5| 20  | 26  | 33  | 13  | 17  | 23  | 29  | 33  | 13  | 17  | 23  | 29  | 33  | 13  | 17  | 23  | 29  | 33  | 13  | 17  |
| 45| 32 | 7.5 | 12  | 16  | 22  | 28  | 16  | 21  | 27  | 33  | 38  | 12  | 16  | 22  | 28  | 16  | 21  | 27  | 33  | 38  | 12  | 16  |
| 50| 36 | 8.3 | 14  | 18  | 24  | 30  | 19  | 24  | 30  | 36  | 42  | 14  | 18  | 24  | 30  | 19  | 24  | 30  | 36  | 42  | 14  | 18  |
| 60| 43 | 10  | 18  | 22  | 28  | 34  | 20  | 25  | 31  | 37  | 43  | 20  | 25  | 31  | 37  | 20  | 25  | 31  | 37  | 20  | 25  |
| 70| 50 | 11.5| 21  | 26  | 31  | 36  | 21  | 26  | 31  | 36  | 41  | 21  | 26  | 31  | 36  | 21  | 26  | 31  | 36  | 21  | 26  |
| 80| 57 | 13.5| 24  | 29  | 34  | 39  | 24  | 29  | 34  | 39  | 44  | 24  | 29  | 34  | 39  | 24  | 29  | 34  | 39  | 24  | 29  |
| 90| 64 | 15  | 27  | 32  | 37  | 42  | 27  | 32  | 37  | 42  | 47  | 27  | 32  | 37  | 42  | 27  | 32  | 37  | 42  | 27  | 32  |
| 100| 71 | 17 | 30  | 35  | 40  | 45  | 30  | 35  | 40  | 45  | 50  | 30  | 35  | 40  | 45  | 30  | 35  | 40  | 45  | 30  | 35  |
| 150| 100| 22 | 35  | 40  | 45  | 50  | 35  | 40  | 45  | 50  | 55  | 35  | 40  | 45  | 50  | 35  | 40  | 45  | 50  | 35  | 40  |
| 180| 130| 30 | 40  | 45  | 50  | 55  | 40  | 45  | 50  | 55  | 60  | 40  | 45  | 50  | 55  | 40  | 45  | 50  | 55  | 40  | 45  |
| 200| 145| 33 | 45  | 50  | 55  | 60  | 45  | 50  | 55  | 60  | 65  | 45  | 50  | 55  | 60  | 45  | 50  | 55  | 60  | 45  | 50  |
| 250| 180| 42 | 50  | 55  | 60  | 65  | 50  | 55  | 60  | 65  | 70  | 50  | 55  | 60  | 65  | 50  | 55  | 60  | 65  | 50  | 55  |

\[
F = \frac{1.42 \times L \times Rm \times s^2}{1000 \times V} \quad \text{(Ton)}
\]

F: Bending Force (Ton)  L: Length (mm)  R_I: Inside Radius (mm)  Rm: Material Tensile Strength (daN/mm²)  V: Channel Width (mm)  B: Minimum Sheet Bending Side (mm)  S: Thickness (mm)