## AD-S SERIES HYDRAULIC PRESS BRAKES



- Perfect Precision
- Deep And Fast Bending
- Efficient
- WinningElegant Design











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 m<sup>2</sup>, 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.





High technology, modern production lines



2 Top quality components



High quality machines designed in R&D Centre

#### Feel The Force and Performance

Our Machines are shaped with our superior experience and state of art technology, special designed as well as excellent combined component its the fastest, most reliable and prices press brakes on its category.

With its rigid body structure, robust back gauge and high standard components it ensures long lasting and precision applications.

Therefore with *DURMA* press brakes you can always achieve perfect result.



## Fast, Precise and Perfect Bending

Precise bending result at fast speed

Minimalized tool change and adjustment time

Maximized speed and safety



DURMA DURMA

## AD-S Series Hydraulic Press Brake



## Perfect and Fast Bending

#### Perfect components for precision

With Easy to use control unit, stabile body structure, perfect design, low operating cost, different tool usage options, maximum safety standards, DURMA press brake is the best in the world in its segment.

High Capacity

Robust Body Perfect Precision

Winning

**Ergonomic** 

#### Why DURMA Press Brakes

- Better and faster bending
- Stronger and rigid body structure
- High sensitivity and repeatability
- High tegnology excellent equipment
- Low service cost
- Reliability

## Fast, Efficient, Modern

AD-S Series hydraulic press brakes, designed with high technology to increase efficiency on precise part bending.

Quality approved components. Stress relieved for long life and precise bending.



#### General Specifications

- High sensitivity, Stress relieved steel construction body, long life Mono Block Frame
- Automatic calibration and first start up
- DURMA designed and copyrighted guiding system
- Ball Screw and linear guide integrated perfect back gauge system
- Durable, long life and sensitive bending capable 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
- Best quality world wide accepted hydraulic and electric components

DURMA DURMA

### Strong Back Gauge Systems

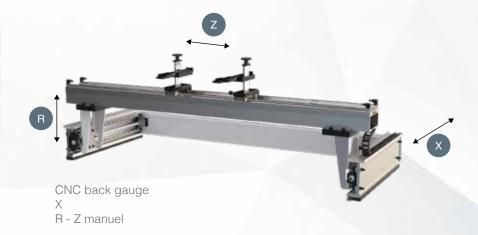


Precise

Reliable

Strong

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



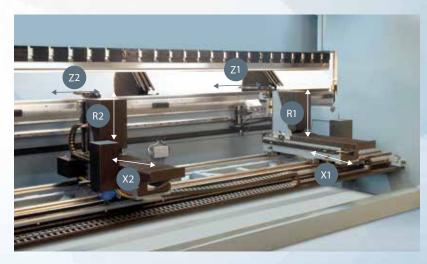
## Why *DURMA*Back Gauge?

The 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.





CNC optional back gauge X1 - X2, R1 - R2, Z1 - Z2

### Tool Holders and Tools

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

DURMA is your solution partner with various tool options.



European Clamping System



Quick Release Clamping



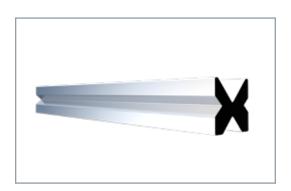
DURMA Top Tool Clamping System & Tool



European Type Bottom Tool (4V Die)



DURMA Hydraulic Clamping System



DURMA Bottom Tool Multi V

# 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.



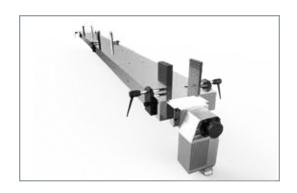
#### **CE Safety Systems**

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.

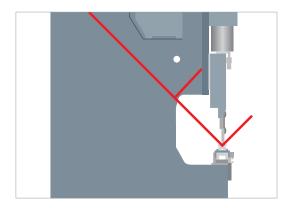




Linear Guide Front Sheet Supports



Ce Laser Safety System



90 Degree Endless Bend

### Now Bending is More Easier

DT 15



- Ergonomic panel design
- 19" color touchscreen
- Manual profiling on the touchscreen
- Diagnostic mode
- Easy programming mode
- Automatic bend sorting
- Multi-language option
- Tool programming and library
- D-Bend offline software
- Tandem compatible
- Internet service facility

SKY 22



- 21.5 "TFT color touch screen with USB port and backup
- Automatic bending order
- Perfect control of electrical servo systems
- Archiving user bendings
- 2D/3D color graphics display and multi-simulation
- Windows 10 operating system
- D-Bend offline software
- Tandem applications
- Network interface
- X1-X2-R1-R2-Z1-Z2 and AP3-AP4 part support system
- DURMA laser angle measurement system compatible
- 2D / 3D part & tool import

DA-66T



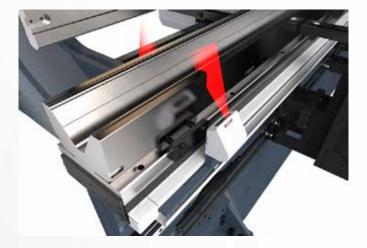
- 2D graphical touch screen programming mode
- 3D visualisation in simulation and production
- 17" high resolution colour TFT
- Full Windows application suite
- Delem modusys compatibility
- USB, peripheral interfacing
- User specific application support within the controllers multitasking environment
- Sensor bending & correction interface
- Profile TL software

DA-69S



- 24" TFT screen, 1920 x3080 pixels, 32 bit colour,
- Real-time Linux embedded OS
- Full touch screen control
- Storage capacity 2 GB
- Network connectivity
- Delem modusys compitable
- Tandem operation
- 2D/3D real-scale product programming and visualision
- Automatic bending calculation 2D/3D
- DXF part & tool import support

#### System of DURMA Angle Measurement



#### Automotic AP3 - AP4 Sheet Follower







#### Robotic System of Applications





## Standard & Optional Equipment

#### Standard Equipment

Y1, Y2, X - 3 Axis
Control Unit - DT 15
Manuel F. AKAS FPSC Security system
CE F.AKAS BVLT Light barrier and safety cages (For Tandem Press Brakes)
Servo motor back gauge & linear guided & ballscrew system (X)
Manual Crowning system
European style tool clamping system
Sliding front arms
World standards special design hydraulic block and valves
World standard electric equipment

#### **Optional Equipment**

Control Unit - SKY 22 Control Unit - Delem 66T

Control Unit - Delem 69S F.AKAS - LC 5 Security system

Motorlu F.AKAS-3P FPSC Security system

X Axis = 1000 mm - light barrier back protection

Motorised crowning system

Motorised X, R axis back gauge

Motorised X, R, Z1, Z2 axis back gauge

Motorised X1, X2, R1, R2, Z1, Z2 axis back gauge

Delta X Axis ± 125 stroke

AP3-AP4 Automatic system of sheet follower – Motorized elevation adjustment

(There is a motorized elevation adjusment of 220 tons or more.)

Durma Laser angle measurement (DAM)

Laser bending line

DBEND 3D bending simulation program

Quick release clamping system

Hydraulic and pneumatic tool clamping systems

Parking area

Robot Integration

Central lubrication system manuel/automatic

Oil cooler - oil heater

Additional back gauge finger and sliding front support arms

Special packing for overseas shipments

## 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.



Consultancy



Spare Parts



R&D Center



After Sales Service





Service Agreements



Software



Training



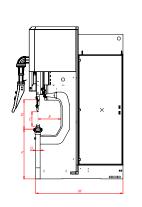
Flexible Solution

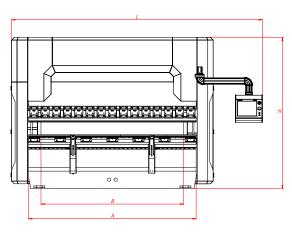
### **AD-S Series Technical Details**

			S)					(e)	Working	Speed
AD-S Series	Bending Force	Bending Length	Distance Between Columns	Stroke	Daylight	Throat Depth	Table Height	Table Width ( Narrow / Wide)	Y Rapid Speed	Y Working Speed
	Ton	mm	mm	mm	mm	mm	mm	mm	mm/sec.	mm/sec.
		Α	В	С	D	E	F	G		
AD-S 1260	60	1250	1050	160	400	350	900	104	200	10
AD-S 2060	60	2050	1700	265	530	450	900	104	200	10
AD-S 25100	100	2550	2200	265	530	450	900	104	180	10
AD-S 30100	100	3050	2600	265	530	450	900	104/180	180	10
AD-S 30135	135	3050	2600	265	530	450	900	104/180	160	10
AD-S 30175	175	3050	2600	265	530	450	900	104/240	160	10
AD-S 30220	220	3050	2600	265	530	450	900	104/240	140	10
AD-S 30320	320	3050	2600	365	630	450	900	154/300	160	10
AD-S 37175	175	3700	3100	265	530	450	900	104/240	140	10
AD-S 37220	220	3700	3100	265	530	450	900	104/240	160	10
AD-S 40175	175	4050	3600	265	530	450	900	104/240	160	10
AD-S 40220	220	4050	3600	265	530	450	900	104/240	160	10
AD-S 40320	320	4050	3600	365	630	450	900	154/300	160	10
AD-S 40400	400	4050	3400	365	630	510	1050	154/300	140	8
AD-S 60220	220	6050	5100	265	530	450	1050	154/300	140	10
AD-S 60400	400	6050	5100	365	630	510	1220	154/300	120	8

Y Axis Precision	X Axis Working Speec
mm	mm/sec.
0,01 0,01 0,01 0,01 0,01 0,01 0,01 0,01	500 500 500 500 500 500 500
0,01 0,01 0,01 0,01	500 500 500 500
0,01 0,01 0,01	500 350 350 350
	mm  0,01 0,01 0,01 0,01 0,01 0,01 0,01 0

Machines set according to optimum values.





	X Axis Distances													
X Axis Precision	650	750	1000	R Axis Working Speed	R Axis Working Distance	R Axis Precision	Z Axis Working Speed	Z Axis Working Distance	Motor Power	Oil Tank Capacity	Length	Width	Height	Weight Approx.
mm	mm	mm	mm	mm/sec.	mm	mm	mm/sec.	mm	kW	lt	mm	mm	mm	kg
											L	W	Н	
0,05	S	-	0	350	250	0,1	1000	490	7,5	100	2300	1550	2350	4700
0,05	S	-	0	350	250	0,1	1000	1100	7,5	100	3200	1550	2850	5600
0,05	S	-	0	350	250	0,1	1000	1580	11	100	3800	1670	2850	7800
0,05	S	-	0	350	250	0,1	1000	1990	11	100	4200	1670	2850	8500
0,05	S	-	0	350	250	0,1	1000	1990	15	150	4200	1680	2850	9580
0,05	S	-	0	350	250	0,1	1000	1990	18,5	250	4250	1700	2850	10900
0,05	S	-	0	350	250	0,1	1000	1990	22	250	4250	1770	3000	12600
0,05	S	-	0	350	250	0,1	1000	1990	37	250	4300	1820	3330	17100
0,05	S	-	0	350	250	0,1	1000	2375	18,5	250	4950	1700	3000	11750
0,05	S	-	0	350	250	0,1	1000	2375	22	250	4950	1770	3000	14440
0,05	S	-	0	350	250	0,1	1000	2910	18,5	250	5250	1700	2850	12780
0,05	S	-	0	350	250	0,1	1000	2910	22	250	5250	1770	3000	14750
0,05	S	-	0	350	250	0,1	1000	2910	37	250	5300	1910	3330	20000
0,05	-	S	0	300	250	0,1	1000	2670	37	500	5750	2110	3640	27760
0,05	-	S	0	300	250	0,1	1000	4400	22	250	7500	1770	3350	20800
0,05	-	S	0	300	250	0,1	1000	4400	37	250	7500	2110	3810	34600

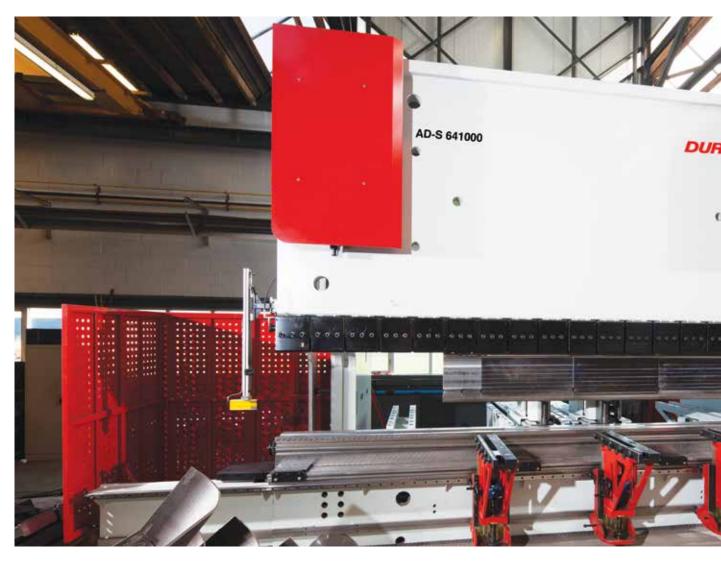
S : Standard

O : Optional

## Special projects























PANEL BENDER



**PUNCH** 



PLASMA



L ANGLE PROCESSING CENTER



**IRON WORKER** 



POWER OPERATED SHEAR



PRESS BRAKE



VARIABLE RAKE SHEAR



TUBE LASER CUTTING



FIBER LASER



**ROLL BENDING** 



PROFILE BENDING



CORNER NOTCHER

\/ I-			s(mm)																					
V	V b	ri	0.5	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																			
8	6	1,3	2	5	8	11																		
10	7	1,7	1,5	4	6	9	13													_		_		
12	9	2		3	5	7	11	16													F			
15	12	2,7			4	6	9	13	16															
20	15	3,3				4	7	10	12	19										<u> </u>	'	J		
26	18	4,2					4	7,5	9	14	21								,	_	9/			
30	22	5						6,5	8	12	19	24									V	<b>*</b>		
32	23	5,4							7,5	11,6	17	23	30											
37	25	5,8								10	14,5	20	26	33						-	v	-		
42	29	6,7									13	17	23	29	33,5									
45	32	7,5										16	21	27	33	48								
50	36	8,3											19	24	30	43	58							
60	43	10												20	25	36	49	64						
70	50	11,5													21	31	42	55	69					
80	57	13,5														27	37	48	60	75				
90	64	15			1.4	n	n		2								32	42	54	66	95			
100	71	17		F =	1,4	2×L 100	X KN	$n \times s$	- (To	n)								38	48	60	86	134		
130	93	22				100	00×1	7	,	,									37	46	66	103	149	
180	130	30																		33	48	75	107	15
200	145	33																			43	67	83	11
250	180	42																				54	77	92

AD-S SERIES PRESS BRAKES

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