

# PBF SERIES PRESS BRAKES



- Easy to Use
- Faster
- Productive
- Winning
- Ergonomic





# **DURMA** The Winning Force







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

# PBF Series Press Brakes

#### Customer-oriented leader

We designed an excellent machine for our clients who do not need high stroke and work in three shifts. We support you with low investment costs, efficient, precise, minimum maintenance costs.

PBF series serves your company and advances your production standards.



# The Winning Force

#### The "Magic Touch" for your company

Fast, productive and perfect bendings

High efficiency

Low energy consumption

#### Perfectly equipped for precise bendings and economic solutions

Developed by the expertise of R&D Center engineers of DURMAZLAR PBF Hydraulic Press Brake will strenghten your business with innovative solutions.

Easy to Use

Economic

Efficient

Fast

Reliable Brand

#### Why DURMA Press Brakes

- Better and faster bendings
- Rigid body structure
- High sensitivity and repeatability
- Low service cost
- Hi-tech equipment
- Increases the value of your company
- Reliable brand

## Gain More Power

### Easy solutions for your investments

PBF Hydraulic Press Breaks, featuring low investment cost, high productivity and perfect peformance / price ratio, ensures and obtains all solutions for your bending needs.



#### **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 capabale special hardened top tools
- · Suitable for segmented tools special and fast tool holding system
- · Sensitive solutions at long and deep bending
- · High accuracy linear scales
- · CE safety standards
- · Environment friendly, efficient and perfect bending combinations

### Strong Back Gauge System

- Precise
- Reliable
- Robust
- Fast and high precision
- Reliable process
- Adjustable from each point
- Crash-proof
- Maintanance 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.



Standard back gauge X CNC R manuel

### Tool Holders and Tools

Bending performance is increased with high European clamping system and easiness to use. Narrow table for Z bending and table designed for European style tool holder. *DURMA* is your solution partner with various tool options.



European Clamping System



European Type Bottom Tool - 4 V Die



Quick Release Clamping



DURMA Multi V Bottom Tool



# 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.



Manual Crowning System

#### **Easy Changeable 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.



Front Support Arms with T-Slot

#### **CE Safety Systems**

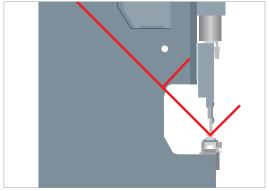
Our machines are designed in accordance with Ce-Norms to ensure your safety with hydraulic, electric, appropriate height covers and laser light curtains. CE safety in tandem machines are also provided with light barriers.



CE Laser Safety System

#### **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.



90 Degree Endless Bend

# **DT10** Control Unit



# Everything is Under Control With User-Friedly Interface...

3

Create profile with touch screen

<u>©</u>

Online service via Internet connection

Diagnostic mode

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Easy programming page

**↑**2]<sub>3</sub>

Automatic bend calculation and listing

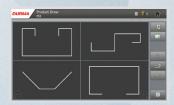


Tool programming and library





- Automatic bend listing
- Archiving your bendings
- 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





# All the solutions are a click away with the DT10

Alarm Help Screen

Alarm help screen is finding 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 bendings at your desk in your office. You can create your tools. It provides the opportunity to make new programs without interrupting production. In addition to the errors that occur when you start your process yet you will find the opportunity to pre-intervention. D-Bend verifies your unfoldment. Creates verified part drawings for Laser, punch, and plasma machines.

## 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



Solution Center



Service Agreements



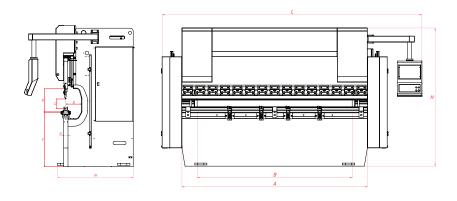
Software



Training



Flexible Solution



## PBF Series Technical Details

			PBF 1030	PBF 2560	PBF 30120	PBF 30200	PBF 40160	
Bending Force	Ton		30	60	120	200	160	
Bending Lenght	mm	А	1050	2550	3050	3050	4050	
Distance Between Columns	mm	В	850	2150	2550	2550	3600	
Stroke	mm	С	160	160	180	210	200	
Daylight	mm	D	390	350	375	445	430	
Throat Depth	mm	Е	250	250	250	250	300	
Y Axes Rapid Speed	mm/sec		200	120	100	100	160	
Y Axes Working Speed	mm/sec		10	9	9	7	10	
Y Axes Return Speed	mm/sec		130	70	77	73	140	
Table Height	mm	F	835	813	878	858	858	
Table Width	mm	G	104	104	104	104	104	
X Axes Working Speed	mm/sec		250	250	250	250	250	
X Axes Travel	mm		400	620	620	620	620	
Motor Power	kW		5.5	5,5	11	15	15	
Lenght	mm	L	2470	3250	3750	3750	4850	
Width	mm	W	1250	1200	1230	1390	1900	
Height	mm	Н	2245	2350	2400	2500	2610	
Weight Approx.	kg		3250	4250	5900	8160	10500	

## Standard & Optional Equipment

Y1, Y2, X - 3 Axis
CE with Manuel F. AKAS II M FPSC-B-C (SAFETY PLC)
Manuel crowning (Include PBF 30120, PBF 30200, PBF 40160)
Control Unit - DT 10 Touch screen 2D graphic (Remote Control)
Back gauge: motorized & linear guide & ballscrew
European clamping system
European clamping system top tool
European style bottom tool holder
Support arms with T-Slot
Safety side covers (Non CE)
World known electrical equipments

D-Bend offline software (3D importer)
Bottom tool *DURMA* Multi V
European style bottom tool
Quick release clamping
Additional finger blocks
Additional support arms with T-Slot
Oil coolant
Overseas special packing



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** 

## **DURMA**

			s(mm)																					
V	V b r <sub>i</sub>	0.5	8.0	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															7		
12	9	2		3	5	7	11	16													F			
15	12	2,7			4	6	9	13	16												1			
20	15	3,3				4	7	10	12	19									5,1	<b>&lt;</b> [	,	J		
26	18	4,2					4	7,5	9	14	21										=//			
30	22	5						6,5	8	12	19	24										9		
32	23	5,4							7,5	11,6	17	23	30											
37	25	5,8								10	14,5	20	26	33						L	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		$F = \frac{1,42 \times L \times Rm \times s^2}{(Ton)}$											21	31	42	55	69					
80	57	13,5														27	37	48	60	75				
90	64	15		F	= -	.,		,,,,,,,		(	(Ton	)					32	42	54	66	95			
100	71	17				1000 x V												38	48	60	86	134		
130	93	22																	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

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

PBF SERIES
PRESS BRAKES

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Durmazlar Makina San. Tic. A.Ş. has right to change catalogue values and machine technical details without notice.