DURMA

*Head Quarter & Ataevler*

## *Durmazlar has aimed continous development since 1956*

*Owes one of the world's most contemporary production plants in the production technology business .3 different plants oriented to different product families, 1000 dedicated employees and 150.000 m2 footprint.*

*In order to offer solution according to clients' needs and enriching the quantity and quality of its own patent rights; long experienced Engineering Department transformed to Durma Research & Develepment Center has opened in the year 2010. Designed and engineered with modern technics; its products are equipped with proven quality components to precisely fulfill your requirements. We serve " accuracy, speed, flexibility, durability, reliability and advanced technology" with high performance/price ratio.Worldwide Durma distributors and technical support network assures perfect support to our clients.*

*With its 55 years of experience, its product quality, innovative solutions Durma gives importance and cares you with proactive approach. We thank all our clients to hold us at the top segment of the world brands.*

*Laser Factory*

*Başköy Factory*

## *IW Series*

***Iron Worker***
*Combined and convenient metal working solution for variety of processes*

## *P Series*

***Punch***
*Cost effective punching solution for every thicknesses*

## *MULTI - P Series*

***Multi Punch***
*Multiple punching head and CNC, machine offers productivity and ease of operation.*

## *MULTI - P Line*

***Multi Punch Line***
*Multiple punching head and CNC, machine offers productivity and ease of operation for huge sheet punching.*

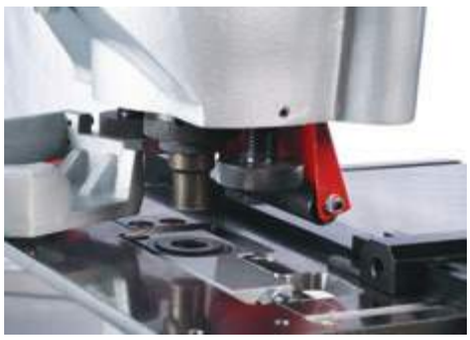
165/300
DURMA

# IW SERIES

*The DURMA Hydraulic Ironworkers are designed with multi-functions to save labor, time energy and cost. DURMA Ironworkers are well engineered, maximum efficiency and long life is guaranteed by latest manufacturing methods. These universal machines are supplied with Standard tooling including repetition support tables at punch, shear and notch stations and with easily adjusted hold downs at all five work stations. Each work station is equipped with specially designed hold downs to ensure safety while providing precision and easy use.*

*DURMA Ironworkers stand for reliability, productivity and accuracy.*

# IW Series Features



*Swing Away Stripper*

*Punching Flat Steel*

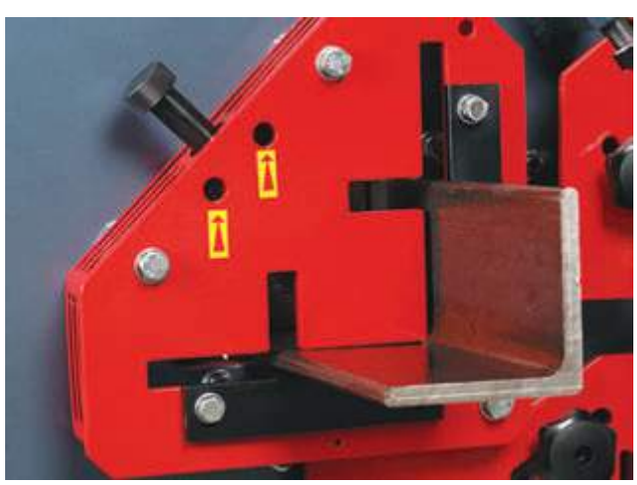
*Punching Channel Flangers And Angles*

*Different Dimension Punch & Dies*

*Press Brake Attachment*

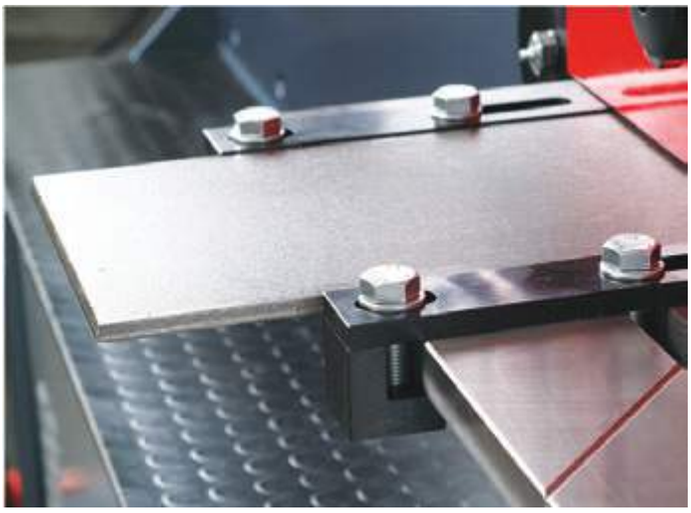
## Punching Station

*The punch station is designed with versatility in mind. The station of the bolster plate, makes it possible to perform a wide range of punching. This includes the punching of flat bar, flange, angle, and channel. The station comes standard with quick change punch and die holders, as well as a swing away stripper. Also included are x & y coordinate gauge stops. This feature is useful for repetitive work. At punch station different punching diameter, pipe notching and bending with pres brake attachment can be performed.*



## Angle Shearing Station

*Blades are four sided and and easily installed and rotated. An easy adjustable hold down provides for proper clamping of the material while it is being sheared.*



## *Flat Shearing Station*

*An easily adjustable hold down ensures proper clamping of the plate. An entry feed table has adjustable guides and stops to make sure the material is accurately placed under the cutting blades. The blades are manufactured in such a way that allows cutting of a wide range of material thickness at a low rake angle and without the need for adjustment.*

*Square bar Shearing*

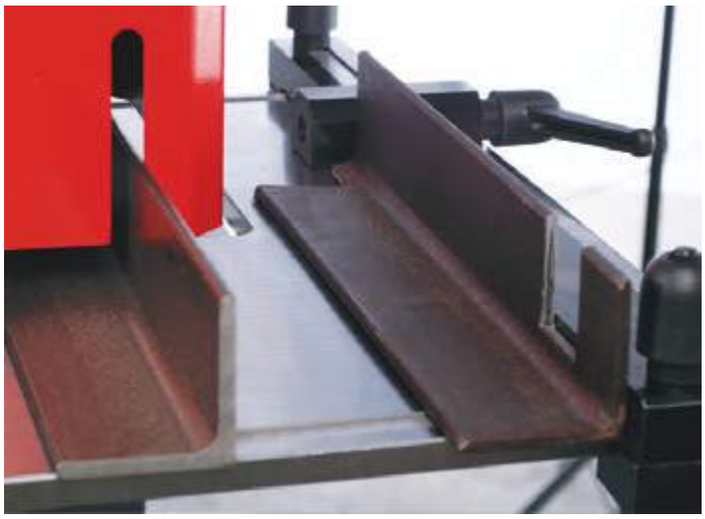
*Round bar Shearing*

*Optional U blade*

*Optional I & T blades*

*Touch and cut electrical back gauge*

## *Bar Shearing Stations*



*Rectangular Notcher*

*Triangular Notcher Option)*

## *Notching Stations*

*This station comes standard with rectangular notching blades which allow side notching, therefore allowing notching of unlimited widths. Vee notching blades can easily be installed, and are available as an option. Other optional devices include tube notching. It is also possible to convert this station to a punching or bending station. A large feed and worktable with gauging stops helps speed up repetitive type work and ease material handling.*

## *IW 45 & IW 45 M*

*Durma IW 45 Series Ironworkers are specially designed for high volumes and with its 5 stations enables to make efficient production. 45 tom machines have single cylinder and 5 stations can be operated by one foot pedal.*

*Punching station has max. Capacity of 27x13 & 18x18*

*Swing away stripper*

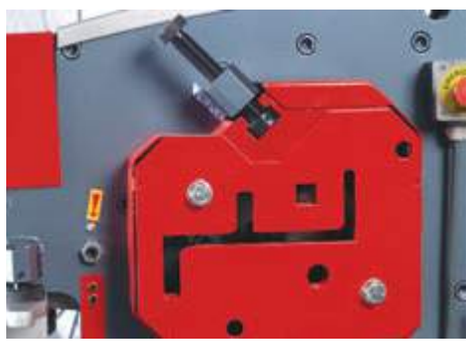
*Punching flat steel*

## Punching Station

*200x15 mm. & 300x12 mm. Flat steel cutting capacity*

## Flat Shearing Station

## Angle Shearing Station for IW45



*At angle shear station with Z shape apparatus, it is possible to make miter shear on angle bars*

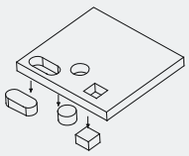
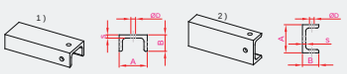
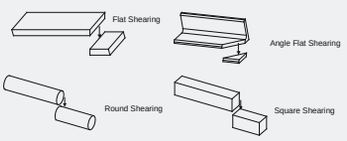
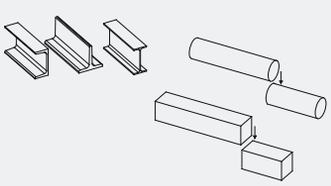
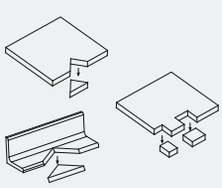
## Angle Shearing Station for IW45 M

*This station allows to cut special bars with special blades such as round, square, channels and many other special profiles*

## Bar Shearing Station

*In this station standard rectangular notching and with special blade triangular notching can be performed*

## Notching Station

| | IW | | IW 36 | IW 45 | IW 45 - M |
|---|---|---|---|---|---|
| **PUNCHING** | Punching Pressure | ton | 36 | 45 | 45 |
|  | Punch Capacity(Diameter x Thickness) | mm | Ø27x10<br>Ø16x16 | Ø27x13<br>Ø18x18 | Ø27x13<br>Ø18x18 |
| | Throat Depth | mm | 160 | 160 | 160 |
| | Stroke lenght | mm | 28 | 21 | 21 |
| | Cycles /Min. (15 mm stroke) | quat. | 24 | 20 | 20 |
| | Cycles /Min. (20 mm stroke) | quat. | - | - | - |
| | Table Size (W x D) | mm | 450x220 | 450x160 | 450x160 |
| | Largest Hole | mm | - | Ø100x3 | Ø100x3 |
| | Single Vee Press Brake (W x T) | mm | - | - | - |
| | Multi-Vee Press Brake (W x T) | mm | - | - | - |
| | Pipe Notching | inch | - | - | - |
|  | 1 ) A min-max for NPU | mm | - | - | - |
| | Maximum S - Maximum ØD ( Accor DIN 997) | mm | - | - | - |
| | 2 ) A min-max for NPU | mm | - | - | - |
| | Maximum S - Maximum ØD ( Accor DIN 997) | mm | - | - | - |
| **FLAT SHEARING** | Flat Bar (max. thickness) | mm | 200x13 | 200x13 | 200x13 |
|  | Flat Bar (max. width) | mm | 350x6 | 300x10 | 300x10 |
| | Blade Length | mm | 356 | 305 | 305 |
| | Angle Flange Trim | mm | 80x80x10 | 80x80x10 | 80x80x10 |
| | Round Bar Shear | mm | 30 | - | - |
| | Square Bar Shear | mm | 25 | - | - |
| **ANGLE SHEARING** | At 90° Shearing | mm | 80x80x10 | 80x80x8 | 80x80x8 |
| | At 90° Shearing width slight deformation | mm | - | 100x100x10 | - |
| | At 45° Miter Shearing | mm | 50x50x6 | - | 60x60x6 |
| **BAR SHEARING** | Round Bar Shear | mm | - | 30 | 25 |
|  | Square Bar Shear | mm | - | 30 | 22 |
| | Round Bar Shear | mm | 35 | - | - |
| | Square Bar Shear | mm | 30 | - | - |
| | U - Profil Shear | mm | - | 100 | 100 |
| | T - Profil Shear | mm | - | 40 | 40 |
| | I - Profil Shear | mm | - | 100 | 100 |
| **NOTCHING** | Material thickness | mm | - | 7 | 7 |
|  | Rectangular Notcher (width) | mm | - | 40 | 40 |
| | Rectangular Notcher (depth) | mm | - | 50 | 50 |
| | Vee-Notcher (Side x Side x T) | mm | - | 40x40x7 | 40x40x7 |
| | Triangular notching material tickness | mm | - | 4 | 4 |
| | Triangular notching width V90 | mm | - | 75 | 75 |
| | Triangular notching depth | mm | - | 75 | 75 |
| **GENERAL INFORMATION** | Motorpower | kw | 3 | 3 | 3 |
| | Oil Capacity | lt | 33 | 33 | 33 |
| | Weight | kg | 630 | 890 | 970 |
| | Machine dimensions (L x W x H) | mm | 1200x1470x1390 | 1460x1400x1620 | 1460x1580x1450 |
| | Working Height | mm | 990 | 1010 | 1010 |

| IW 55/110 | IW 55/110 BTD | IW 80/150 | IW 80/150 BTD | IW 110/180 BTD | IW 165/300 BTD |
|---|---|---|---|---|---|
| 55 | 55 | 80 | 80 | 110 | 165 |
| Ø40x10 | Ø40x10 | Ø40x14 | Ø40x14 | Ø40x20 | Ø40x30 |
| Ø20x20 | Ø20x20 | Ø24x24 | Ø24x24 | Ø28x28 | Ø34x34 |
| 250 | 510 | 300 | 510 | 610 | 610 |
| 60 | 60 | 70 | 70 | 80 | 90 |
| - | - | - | - | - | - |
| 37 | 37 | 38 | 38 | 28 | 31 |
| 550x250 | 550x510 | 550x300 | 550x510 | 550x610 | 750x510 |
| Ø160x2 | Ø160x2 | Ø160x3 | Ø160x3 | Ø160x5 | Ø160x7 |
| 250x10 | 250x10 | 300x10 | 300x10 | 300x10 | 415x12 |
| 500x5 | 500x5 | 600x6 | 600x6 | 600x8 | 835x8 |
| ”1/2”” - 2”” | ”1/2”” - 2”” | ”1/2”” - 2”” | ”1/2”” - 2”” | ”1/2”” - 2”” | ”1/2”” - 2”” |
| 120 - 260 | 120 - 260 | 120 - 400 | 120 - 400 | 140 - 400 | 120-400 |
| 10 - Ø25 | 10 - Ø25 | 14 -Ø28 | 14 - Ø28 | 14 - Ø28 | 14 - Ø28 |
| 100 - 240 | 100 - 240 | 100 - 320 | 100 - 320 | 120 - 320 | 120 - 320 |
| 10 - Ø25 | 10 - Ø25 | 14 -Ø28 | 14 - Ø28 | 14 - Ø28 | 14 - Ø28 |
| | | | | | |
| 200x20 | 200x20 | 300x20 | 300x20 | 400x20 | 400x30 |
| 300x15 | 300x15 | 450x15 | 450x15 | 600x15 | 750x20 |
| 305 | 305 | 475 | 475 | 605 | 765 |
| 60x60x8 | 60x60x8 | 80x80x10 | 80x80x10 | 100x100x12 | 120x120x12 |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| | | | | | |
| 120x120x10 | 120x120x10 | 130x130x13 | 130x130x13 | 152x152x13 | 205x205x18 |
| - | - | - | - | - | - |
| 70x70x7 | 70x70x7 | 70x70x7 | 70x70x7 | 70x70x7 | 70x70x7 |
| | | | | | |
| 20-40 | 20-40 | 45 | 45 | 50 | 60 |
| 20-40 | 20-40 | 45 | 45 | 50 | 60 |
| <20 | <20 | - | - | - | - |
| <20 | <20 | - | - | - | - |
| 120 | 120 | 140 | 140 | 160 | 200 |
| 50 | 50 | 60 | 60 | 60 | 80 |
| 120 | 120 | 140 | 140 | 160 | 200 |
| | | | | | |
| 10 | 10 | 12 | 12 | 13 | 16 |
| 42 | 42 | 52 | 52 | 52 | 58 |
| 90 | 90 | 90 | 90 | 90 | 110 |
| 42x42x10 | 42x42x10 | 52x52x12 | 52x52x12 | 52x52x13 | 58x58x16 |
| 6 | 6 | 6 | 6 | 6 | 10 |
| 95 | 95 | 125 | 125 | 125 | 125 |
| 95 | 95 | 125 | 125 | 125 | 125 |
| | | | | | |
| 5,5 | 5.5 | 11 | 11 | 11 | 15 |
| 76 | 76 | 76 | 76 | 76 | 150 |
| 1270 | 1680 | 2260 | 2530 | 3580 | 8070 |
| 1480x1800x1730 | 1980x1800x1730 | 2025x1780x2700 | 2120x2025x1780 | 2560x2550x1790 | 3230x1100x2280 |
| 1080 | 1088 | 1195 | 1195 | 1260 | 1110 |

# IW

## STANDARD EQUIPMENTS

PUNCHING

Table for punching station

Durma punch&die holder

1 starting set ( Punch & Die )

Punch holder up to 28 mm (IW 45-45M)

Punch holder up to 40 mm (IW 55/110-55/110 BTD- 80/150-80/150

BTD-110/180 BTD)

1m. Electrical back gauge (over 55 tons)

1m. Manual backgauge for 36 &45 to

Blades for flat steel station

Blades for angle cutting station

Blades for round and square bar cutting station

Rectangular notcher complete with down holder

Table for notching station

## OPTIONAL EQUIPMENTS

Illmunations (24V-220V)

1 m. Manual Back gauge ( additional)

Electrical Back gauge( over 1 m.)

Gress pump

Special Colour

Overseas special packaging

**PUNCHING**

Pedinghaus, Mubea,Kingsland punch&die holder

Bending equipment ( top tool +single Vee+toolholder)

40-80 NPU punching equipment

"Pipe Notching Equipment (between 1/2"" and 2"" any diameter) witouth

punch&die"

For pipe notching punch and dies (each set)

NC control with table x=1000mm Y=350mm

**FLAT SHEARING**

Spare blades for flat shearing

**ANGLE SHEARING**

Spare blades for angle shearing

**BAR SHEARING**

Spare blades for bar shearing

U,I,T profile blades

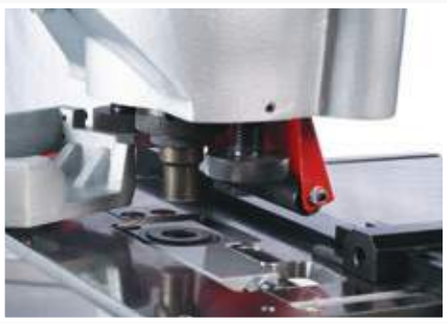
**NOTCHING**

Triangular notching system with blades

Spare blades for triangular notching

Spare blades for rectangular notching

# P SERIES



*The punching station comes standard with quick change punch and die holders, as well as a swing away stripper*

*Punching channel flanges and angles*

*Punching flat steel*

*Different dimension Punch & Dies*

## STANDARD EQUIPMENTS

| |
|---|
| Table for punching station |
| Durma punch&die holder |
| 1 starting set ( Punch & Die ) |
| Punch holder up to 28 mm (IW 45-45M) |
| Punch holder up to 40 mm (IW 55/110-55/110 BTD- 80/150-80/150 BTD-110/180 BTD) |

## OPTIONAL EQUIPMENTS

| |
|---|
| Illmunations (24V-220V) |
| Special Colour |
| Overseas special packaging |
| |
| PUNCHING |
| Pedinghaus, Mubea,Kingsland punch&die holder |
| Bending equipment ( top tool +single Vee+toolholder) |
| 40-80 NPU punching equipment |
| "Pipe Notching Equipment (between 1/2"" and 2"" any diameter) witouth |
| punch&die" |
| For pipe notching punch and dies (each set) |
| NC control with table x=1000mm Y=350mm |

# MULTI P

| Multi P | | Unit | 80 |
|---|---|---|---|
| Max Lenght of sheet, X Axis | | mm | 1500 |
| Max Widht of sheet, Y Axis | | mm | 750 |
| Thickness of metal plate | | mm | 2 - 20 |
| Positioning tolerance | | mm/m | 0,1 |
| Punching Tonnage | | ton | 80 |
| Max. Traverse speed Of X Axis | | m/min | 25 |
| Max. Traverse speed Of Y Axis | | m/min | 25 |
| Cycles / Min (20 mm Stroke) | | quat. | 38 |
| Stroke Lenght | | mm | 70 |
| Lenght | A | mm | 3755 |
| Table Widht | B | mm | 1310 |
| Width | C | mm | 2930 |
| Working Height | D | mm | 1220 |
| Height | E | mm | 2240 |
| Weight | | kg | 11150 |

## STANDARD EQUIPMENTS

- Triable Punching Unit
- Hydraulic Holddown
- Siemens Control Unit

# MULTI P LINE

*Automatic Light Pole Punching line with loading and unloading.*