

# HORIZONTAL HYDRAULIC PRESS BRAKE

# **PP200**









**"than 40 years** 

manufacturing industrial machinery

# HORIZONTAL **HYDRAULIC** PRESS BRAKE

The versatility of the 20 Tons, Horizontal Press Brake NARGESA PP200 allows us to bend, fold, bend, cut, form, enlarge and reduce flaring, swagging, assembling ... all kinds of metal materials such as iron, steel, stainless, copper, brass, aluminium, etc. Its simplicity when it comes to work and its easy handling so users can adapt their forming dies make this Horizontal Press machine to be indispensable in any kind of business from small workshops to large companies.

Our experience in this sector enables us to offer constantly renewed and competitive machines.

## **REQUEST QUOTATION**

Please fill up the following form. We will contact you in less than 24 hours.

Working days

VIDEO MACHINE OPERATION | Machine performance video

#### SAMPLES OF JOBS DONE WITH HORIZONTAL HYDRAULIC PRESS BRAKE PP200

Pipe bending at fixed radius up to 150° could be considered one of the good features of these presses

Cutting, piercing and punching flat bars or metal sheets turn this horizontal bending press into a punching shears machine

Stretching and reducing pipes on the ends in order to make parts that fit or weld later

It is also a solution to bend different profiles at different radius and keeping the ends straight, like when manufacturing handles and flanges

Cold forge uses horizontal presses to make and form different shapes of balusters

Tube notching to assemble at 90 degrees

Folding operations with wrought iron machines permit to completely bend the parts or pieces unlike conventional flat bar section bending machines



# **TECHNICAL FEATURES**









Its robustness, versatility and easy handling are just three of the best features our hydraulic horizontal bending machine has..

- > Folding operation with no risk of damaging the punches and dies with thick materials unlike conventional press brakes.
- > Folding flat bars and sheets into completely close shapes. Conception of this horizontal bending press brake allows to make folding operations impossible to be carried out on a conventional press brake.
- > Fast tool change, punches and dies: This change does not take more than 30 seconds most of the times.
- > A set of punch and folding die is supplied along with the machine.
- > Performance by a safety double activation hold pedal.
- > Low noise level, improving the quality of work of the operator.
- > The machine is shipped completely assembled and ready to work.
- > Palletized lower bench to easily transport the machine up to its working or storage site.
- > Dies support shelf included.
- > Lateral stop to place it right or left.

#### **Hydraulic System**

- > Monoblock hydraulic power unit with positioning and pressure regulation valves
- > The hydraulic system can be regulated by means of pressure adjustment valves that affect the piston force.
- > Pressure regulator with pressure gauge that allows to control the force carried out at any time.

#### **Control Panel**

- > Programming mode: Manual or Automatic.
- > Piece counter.
- > Digital display in different languages
- > Alarm diagnosis system

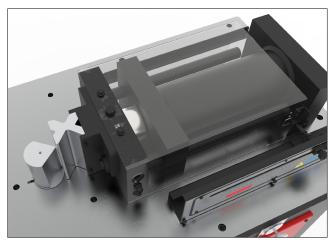
<sup>\*</sup> All our products are manufactured in our facilities in Spain. Hydraulic and electrical components are all standard from the best leading European trademarks with technical support all over the world: Rexroth, Bosch, Roquet, Schneider Electric, LG, Telemecanique, Pizzato...



## **Displacement control**

Continuous control of the work stroke by means of a hydraulic valve that guarantees maximum precision in folding or other operations.

Inductive sensor that guarantees a repeatability of 0.05mm.



## **Guided hydraulic cylinder**

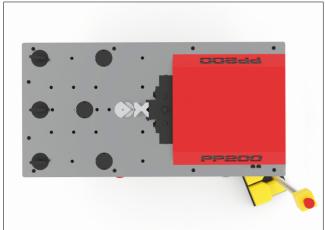
The hydraulic cylinder placed on the work bench allows us to transfer all the force directly on the tools. Fully guided hydraulic piston to prevent any bending during the folding operation.



# **Cylindrical fastening bolts**

Cylindrical fastening bolts easy to install, to guarantee maximum firmness to the tools during machining operations.

Plugs to prevent the residues of the folding from entering inside the machine.



#### Work table without frame

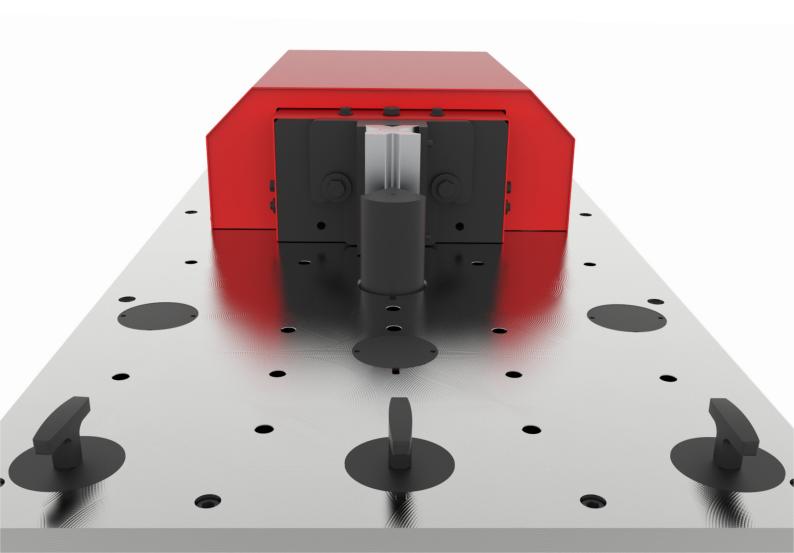
The work bench is frameless, this is great for the movement of the parts to be machined for there isn't any element that obstructs its movement. The table is manufactured in a 60mm monoblock of welded steel, stabilized and machined.

The operator's working position must be at the side of the machine for accomplishing a better vision and control, as well as greater safety for the user since he will be outside the radius of action of the tools.

The advantage of the Horizontal Bending Press PP200 is to have a really simple head drive so that all our customers can adapt any die manufactured by themselves

To add more options when fastening tools, the workbench has a series of clamping holes distributed throughout the area to ease up the fixing.

If you need a special die, Prada Nargesa offers a technical support to all our customers who wish to make their own tools. Moreover, we have an extra service for designing and manufacturing exclusive tooling on request, for each of the machines we manufacture.



# DETAILED FEATURES



Working strength

20 Ton. (200 KN).



**Working speed** 

9,8 mm/s.



**Return speed** 

35 mm/s.



**Maximum displacement** 

250 mm.



Repeatability

0,05 mm.



**Bench size** 

600x1170 mm.



**Working height** 

950 mm.



**Engine power** 

2.2 KW / 3 CV a 1400 r.p.m.



**Electric Tension** 

230 / 400 V three-phased

For Single-phased machines, please ask the manufacturer.



Intensity

9/5 A.



**Hydraulic pressure** 

50 a 215 Kg/cm2.



**Hydraulic pump** 

7,5 litres/minute



**Tank Capacity** 

27 litres



**Machine dimensions** 

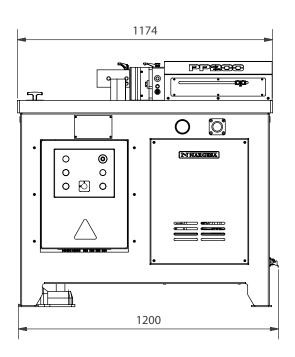
760x1174x1150 mm.

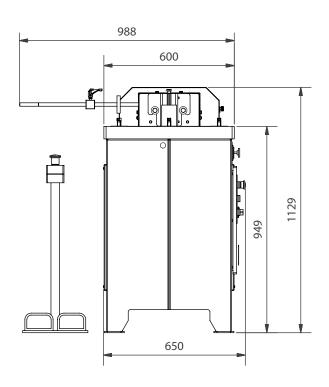


Weight

625 Kg.

# EXTERNAL DIMENSIONS





# CHARACTERISTICS OF THE PACKAGING

- Tariff Item Code: 84624990
- The machine is delivered completely mounted.
- Packaging with wooden pallet NIMF15 and
- 3-layered cardboard box suitable for sea freight.
- Optional: Complete wooden packaging NIMF15.

# **PP200**

Width	700 mm
Length	1250 mm
Height	1400 mm
Volume	1,23 m3
Nett weight	625 Kg
Gross Weight	650 Kg

# STANDARD TOOLING PROVIDED ALONG WITH THE MACHINE

# Folding die at 100 mm · V 16, 22, 35, 50 mm



> Folding or bending die up to 100mm with 4 openings (16, 22, 35, 50mm) and a punch of 80°. This multi-V die allows 1mm up to 8mm sheet to be folded. The 70mm outer diameter punch allows to make completely closed shapes to a minimum of 75mm inner wing.



V 16: Sheet from 1 to 3mm V 22: Sheet from 2 to 4mm V 35: Sheet from 3 to 6mm V 50: Sheet from 4 to 8mm Max. Folding length: 100mm Max. Folding thickness: 8mm

Download folding chart

# **OPTIONAL TOOLING**

#### Baluster forming die 01



REF: 140-16-01-00001

> Die to form cold forging balusters for grills, gates, fences, handrails...

For other shapes or capacities, request the manufacturer.

Max. width	Thickness	Die length	Weight
20mm	4, 5, 6, 8mm	656mm	21Kg

# **Ring forming**



**REF:** 140-16-01-00003

> Die to form rings or English banister railing, used as ornamental piece in forging railings, gates, fences... For bars bonding.



For other shapes or capacities, request the manufacturer.

#### Optional tooling.

Max. width	Thickness	Outer sizes	Weight
50mm	6mm	90mm	9,3Kg

# Baluster forming die 04



**REF:** 140-16-01-00004

> Die to form cold forging balusters for grills, gates, fences, handrails...

For other shapes or capacities, request the manufacturer.



#### Optional tooling.

Square sizes	Die length	Weight
5, 6, 8, 10, 12, 14, 16, 18mm	600mm	20,5 Kg

## Bending tool for big radius



**REF:** 140-16-01-00006

> Die to form curves in flat bars, pipes, bars or profiles at big radius. It's perfect for bending small series or special parts without requiring a specific custom mould.



Max. bar capacity	Max. pipe capacity	Min. diameter	Max. diameter
40mm or 1 1/2"	80x80 mm or 3"	300mm	There is no maximum

# Baluster forming die 08



**REF:** 140-16-01-00008

> Die to form cold forging balusters for grills, gates, fences, handrails...

For other shapes or capacities, request the manufacturer.



## Optional tooling.

Max. width	Thickness	Die length	Weight
20mm	4, 5, 6, 8mm	650mm	19,5Kg

# **Baluster forming die 09**



REF: 140-16-01-00009

> Die to form cold forging balusters for grills, gates, fences, handrails...

For other shapes or capacities, request the manufacturer.



## Optional tooling.

Flat bar size	Die length	Weight
5, 6, 8, 10, 12mm	522mm	22Kg

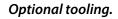
# **Baluster forming die 10**



**REF:** 140-16-01-00010

> Die to form cold forging balusters shaped parts for grills, so called "belly top railing".

For other shapes or capacities, request the manufacturer.





Flat bar size	Die length	Weight
12mm	1165mm	50Kg

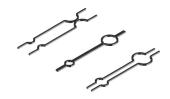
# **Baluster forming die 11**



#### REF: 140-16-01-00011

> Die to form cold forging balusters for grills, gates, fences, handrails...

For other shapes or capacities, request the manufacturer.



#### Optional tooling.

Flat bar size	Die length	Weight
6, 8, 10, 12mm	760mm	32,5Kg

# Twisted bars forming die



#### **REF:** 140-16-01-00013

- > Die to bend metal plate, flat bar or square bar to obtain a nice braid twisted effect. It's very used to make fences and grills
- > For flat bar from to 6, 12 and 14mm.



For different sizes, please ask the manufacturer

#### Optional tooling.

Max. capacity	Min. capacity	Weight
Square 14 mm	2x40 mm metal sheet	18Kg

## Flat bar cutting tooling 100x10mm



#### **REF:** 140-16-01-00014

> Flat bar and metal sheet cutting die up to 100mm through a maximum thickness of 10mm in mild steel.



Max. cutting length	Max. cutting thickness	Weight
100mm	10mm	23Kg

# Die to bend square or rectangular pipe



**REF:** 140-16-01-00015

> Tool to bend square pipe or bar at given or specific degrees. Technical drawing or sample pieces are required.





Maximum capacity	Maximum bending
30mm or 1'1/4 x 3mm thickness	120° - 150°

# Tool to shape pipe ends



**REF:** 140-16-01-00016

> Basic die to modify the ends of the tubes for their assembly. You can make all kinds of shapes and flaps according to the customer needs.

Weight: 110 Kg approx.

For special forms consult the manufacturer.

Optional tooling.



#### **Diameter reduction tools**



- > Composed by the clamp holder to reduce tube and the reduction clamp.
- > This accessory is adapted to the Tooling to shape pipe ends, to perform the operation of reducing the ends of the tubes, for its coupling.

#### Optional tooling.

We can find the different sizes in the following PDF file:



#### **Diameter expansion tools**



- > Composed by the Clamp Holder to Expand, Expansion Mandrel and the Expander Clamp.
- > This accessory is adapted to the Tooling to shape pipe ends, to perform the operation of expanding the ends of the tubes, for its coupling

# Optional tooling.

We can find the different sizes in the following PDF file:



# Die to straighten out profiles



REF: 140-16-01-00017

> Tool used to bend straight profiles or parts. It is adjustable to different capacities according to the profiles.

Maximum capacity: H 120mm.

Weight: 72Kg.

Optional tooling.



## Die to bend special profiles



**REF:** 140-16-01-00018

> Die to bend or fold different profiles such as U, T angle, with other specific radius and degrees. Technical drawing or sample pieces are required.





# Hinges making tool



**REF:** 140-16-01-00019

> Die to manufacture hinges depending on the customer's requirements. Technical drawing or sample pieces are needed for the manufacturing.





# Baluster forming die 20



**REF:** 140-16-01-00011

> Die to form cold forging balusters for grills, gates, fences, handrails...

For other shapes or capacities, request the manufacturer.

Optional tooling.

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55,5
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
7375
3

Square sizes	Circumference size	Weight
12mm	760mm	32,5Kg

# **Punching die**



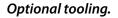
**REF:** 140-16-01-00022

> Punch-holder die, compatible with our Nargesa

brand punches. **Gooseneck:** 54 mm.

Free distance of tooling: 95 mm.

Weight: 52 Kg.



	Round	Square	Rectangular	Oval
Capacidad máx. Punzonado	43mm	35mm	20x34mm	21x40mm



### Promecam punch holder



REF: 140-16-01-00023

- > Punch holder for all kind of punches for Promecam bending or folding press.
- > Compatible with any Promecam punch.



#### **Optional tooling**

Max. Folding length	Weight
150mm	14kg

# Clamp forming die



**REF:** 140-16-01-00024

> Die to form all kinds of clamps. This tooling is manufactured according to the user's needs thus it is required to have a technical drawing or a sample piece.



Maximum capacity: 100x4mm.

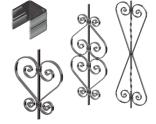
Optional tooling.

# Bar clamps forming die



**REF:** 140-16-01-00028

> Clamp forming die, used to manufacture the clamps used to join different forging bars with no need to get them welded.



Max. capacity	Weight
25x5mm	9Kg

### **Special punches**

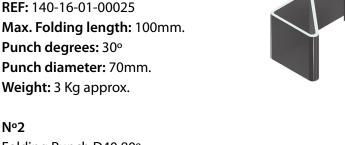
Folding punches to bend special pieces of small sizes or folded up to 30°.



#### Nº1

Folding Punch D70 30° **REF:** 140-16-01-00025

Punch degrees: 30° Punch diameter: 70mm. Weight: 3 Kg approx.





#### N°2

Folding Punch D40 80° **REF:** 140-16-01-00026

Max. Folding length: 60mm.

Punch degrees: 80° Punch diameter: 40mm. Weight: 3 Kg approx.



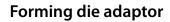
#### N°3

Folding Punch D22 80° **REF:** 140-16-01-00027

Max. Folding length: 60mm.

Punch degrees: 80° Punch diameter: 22mm. Weight: 3 Kg approx.

Optional tooling.





REF: 140-16-01-00029

> It is an exchangeable fitting device for the forming dies, suitable for each of the different baluster forming tools. It is advisable to get one in order to work with the specified dies.

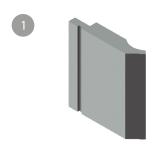
Weight: 3,1 Kg.

Optional tooling suitable for all forming dies.



#### **Promecam Punches**

Promecam punches of different shapes to bend and manufacture complex part. There are a lot more shapes, please consult the manufacturer.



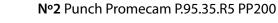
Nº1 Punch Promecam PS.135.85.R08 PP200

**REF:** 140-16-01-00030 **Folding length:** 150mm.

Weight: 3,2 Kg.







**REF:** 140-16-01-00031 **Folding length:** 150mm.

Weight: 2,3 Kg.







Nº3 Punch Promecam PS.134.30.R08 PP200

**REF:** 140-16-01-00032 **Folding length:** 150mm.

Weight: 2,7 Kg.



#### Dies to fold thick metal sheet

Promecam dies of different openings to fold sheets, flat bars or thicker plate sections up to 15mm. in order to fold even thicker sizes, ask the manufacture.

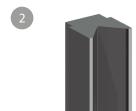


#### Nº1

Folding die T80.25.35 PP200 REF: 140-16-01-00036 Folding length: 150mm. Thickness: From 1,5 to 5mm.

Weight: 4 Kg.





#### N°2

Folding die M75-85-63 PP200

REF: 140-16-01-00033 Folding length: 150mm. Thickness: From 5 to 10mm.

Weight: 5 Kg.



#### N°3

Folding die M80-85-80 PP200

REF: 140-16-01-00034 Folding length: 150mm. Thickness: From 6 to 12mm.

Weight: 6 Kg.



#### Nº4

Folding die M95-80-100 PP200

REF: 140-16-01-00035 Folding length: 150mm. Thickness: From 8 to 15mm.

Weight: 9 Kg.

### Round, square, oval and rectangular punches and dies



- > At Nargesa we own a wide catalogue for punches and dies of all kinds. If the size the customer needs is not in the list, we manufacture it.
- > In the PDF file you will be able to see all kinds and sizes we have.



#### Optional tooling.

Technical features

# Pipe notching tool



> Dies for notching pipes from Ø16 to a Ø50mm. It crops the pipe end so it could be joined perpendicularly to another pipe.



#### Optional tooling.

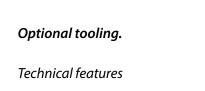
Technical features



#### Rounding corner tool



> Die to get metal sheet corners rounded at different radius.





# Metal tabs forming tool



> Tool to fabricate all kinds of tabs, with or without perforation, straight or rounded... They are very used as clamps, handles etc. Starting from a metal strip, there will be obtained one piece of the desired length at every stroke.



Optional tooling.

Technical features



# OUR RANGE OF MACHINERY



**IRON WORKERS** 



SECTION BENDING MACHINES



NON-MANDREL PIPE BENDER



HORIZONTAL PRESS BRAKES



TWISTING/SCROLL
BENDING MACHINES



HYDRAULIC PRESS BRAKES



HYDRAULIC SHEAR MACHINES



**GAS FORGES** 



IRON EMBOSSING MACHINES



END WROUGHT IRON MACHINES



**BROACHING MACHINES** 



**POWER HAMMERS** 



PRESSES FOR LOCKS

# WARRANTY

Nargesa machines have 3 years warranty provided that the customer registers it in our website. Otherwise it would be only one year warranty. This one encloses any manufacturing default all along these 3 years for components. Any misuse is excluded from this condition. Labor, back and forth shipping and any eventual repair, are not included in this warranty.

Partner companies













# **SHIPMENT EVERYWHERE**

Nargesa will arrange transport up to final destination, whenever the customers asks for so. There is also the possibility for the customer to arrange the shipment himself with his own agency.

# **TECHNICAL ASSISTANCE**

All our customers have access to technical support quickly and efficiently.

90% of incidences are solved out on the phone, mail, Skype or videoconferencing in less than 24hours. In case of needing presencial technical assistance, we may as well send a technician to the customer's facilities.

Follow us on

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