# 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 diejameter 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 PDF



## 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 mold.



Maximum bar capacity	Maximum pipe capacity	Minimum diameter	Maximum 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

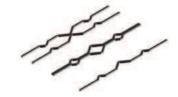
#### **Baluster forming die 09**



**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

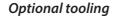
#### **Baluster forming die 10**



**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**

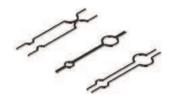


**REF:** 140-16-01-00011

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 accoprding to the customer needs.

For special forms consult the manufacturer.



#### **Optional tooling**

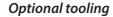
Weight: 110 Kg aprox.

#### **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.



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.



Weight: 72Kg.



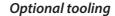


#### Die to bend special profiles



REF: 140-16-01-00018

Die to bend or fold different profiles such as U, T angle etc... 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 depnding on the customer's requirements. Technical drawing or sample pieces are needed for the manufacturing.





#### Baluster forming die 20



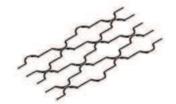
REF: 140-16-01-00011

Die to form cold forging balusters for grills, gates,

fences, handrails...

For other shapes or capacities, request the manufacturer.

**Optional tooling** 



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

#### **Punching die**



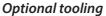
**REF:** 140-16-01-00022

Punch-holder die, compatible with our Nargesa

brand punches. **Gooseneck:** 54 mm

Free distance of tooling: 95 mm

Weight: 52Kg







#### 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** 



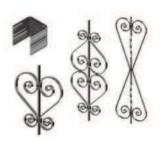
#### Bar clamps forming die



**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°.

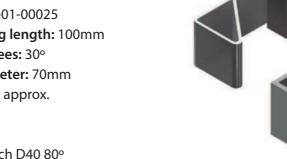


#### Nº1

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

Max. Folding length: 100mm

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







#### N°2

Folding Punch D40 80° **REF:** 140-16-01-00026 Max. Folding length: 60mm

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



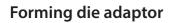
#### N°3

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

Max. Folding length: 60mm

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

**Optional tooling** 





**REF:** 140-16-01-00029

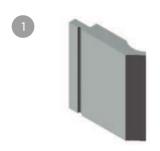
It is an exchangeable fitting device for the forming dies, suitable for each of the different baluster forming tools. It is advisable to get one in order to work with the specified dies.

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.







Nº2 Punch Promecam P.95.35.R5 PP200

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

Weight: 2,3Kg.







Nº3 Punch Promecam PS.134.30.R08 PP200

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

Weight: 2,7Kg.



#### Dies to fold thick metal sheet

Promecam dies of diferent 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: 4Kg.





#### N°2

Folding die M75-85-63 PP200

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

Weight: 5Kg.



#### N°3

Folding die M80-85-80 PP200

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

Weight: 6Kg.



#### Nº4

Folding die M95-80-100 PP200

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

Weight: 9Kg

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



At Nargesa we own a wide catalog for punches and dies of all kinds. If the size the cuetomer 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 PDF 1



#### Matriz de abocardar tubo



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 PDF



#### Matriz redondear esquinas



Die to get metal sheet corners rounded at different radius.

#### **Optional tooling**



Technical features PDF ]



#### Matrices de orejetas



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 PDF

