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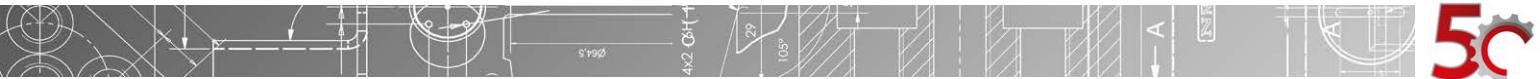
**150 Consumables**

Hydraulic Oil SIL POWER HV46

Hydraulic Oil SIL POWER HV68



According to evolution of regulations and material, the features indicated by the description and pictures in this document do not commit us until a further confirmation by our sales department. Prices may be subjected to variation and thus the material will be always invoiced according to the ruling conditions at delivery.



## Laser welding equipments

### Laser welding equipment MS20

The **MS20 Laser Welder** from Nargesa, with a power of 2000W, represents a significant advance in laser welding technology. It offers **surgical precision, high speed, and ease of use**.

**Laser welding** is a fusion process that **uses a laser beam to join different materials**, such as carbon steel, stainless steel, aluminum, brass, copper, etc., **with or without filler material**. Its **extreme precision, high speed, and ease of use** make it the most cost-effective welding process, not only manually but also in **robotic automation**. Entirely designed and manufactured at **our facilities in Spain**, making us the **only European manufacturer**.

Reference	100-19-01-001
Power	2000W / 2Kw.
Voltage	220 / 240v. Single-phase
Frequency	50 / 60Hz
Wavelength	1080nm
Fiber hose length	10 m / 393,7"
Fiber diamete	25 µm
Guide laser	630-650nm / 0,5-1Mw
Maximum laser beam opening	5mm/0,2" Single Wire Feed 8mm/0,31" Double Wire Feed
Power consumption	4Kw
Maximum amperage	16A
Dimensions	690x870x1780 mm
Weight	615 Kg



**NEW**



#### Ready to weld, cut, and clean

Three different operations with the same equipment. Weld with or without filler, clean welds, or cut sheet metal, working with cutting-edge technology. This equipment offers the greatest weld depth on the market, reaching up to 6 mm in carbon steel, stainless steel, and aluminum.



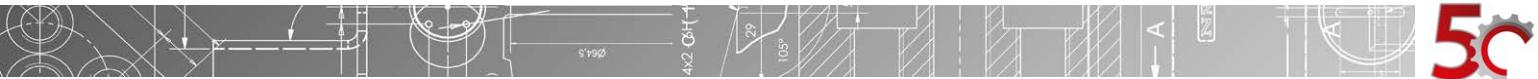
#### Intuitive interface and Plug & Play delivery

Its intuitive interface and low complexity mean that, with minimal training, the equipment can be operated quickly and safely by non-specialized personnel. Delivered with the basic parameters configured, ready to plug in and start working.



#### Expert technical support, free and unlimited

100% personalized technical support service, at no extra cost and with no limits. With 4.0 technology, we connect remotely to the MS20 to adjust parameters, perform updates, or evaluate any abnormal situations.



## Accessories for Laser welding equipment MS20

### Electronic Laser Protection Mask



**REF: 080-MSL-00023**

Auto-darkening electronic helmet with adjustable sensitivity and solar-powered photosensor for laser work. Wraparound polymer shell with adjustable harness and specific front laser filter. Side control for shade adjustment. Designed to protect the operator's eyes and face during laser welding and marking operations, according to filter configuration.

- **Full eye and face protection** against laser radiation (per installed filter), sparks, and light projections.
- **Adjustable auto-darkening:** automatic shade change upon emission detection (response time and darkness level configurable).
- **Comfort for long use:** lightweight, balanced helmet with adjustable headgear (diameter, height, and depth) for superior comfort.
- **High visibility in standby:** light mode for positioning and part preparation with precision.
- **Certified safety and marking:** compliant with the Standard technical rules and the essential requirements of Annex II of PPE Regulation (EU) 2016/425 (EN ISO 16321-1:2022, EN ISO 16321-2:2021, ISO 16321-1:2021/Amd.1:2024, EN 207:2017). Marking: eye protection 16321 LP W4 1-M, 950-100 D LB7 IR LB8 LP CE; face and head protection 16321 LP W4 1-M, 900-1100 D LB5 IR LB8 LP CE; automatic welding filter 11961-PZA-24.



### Laser Protection Mask



**REF: 080-MSL-00022**

Passive laser welding mask with specific green laser visor. Lightweight wraparound helmet with adjustable headgear and side adjustment. Designed to protect the operator's eyes and face during manual laser welding and auxiliary operations against UV exposure.

- **Eye and face protection** against laser radiation and light projections during welding.
- **Simplicity and reliability:** no electronics or batteries; minimal maintenance.
- **Comfort:** adjustable headgear for diameter, height, and depth.
- **Wide field of view** with large passive visor.
- **Certified safety and marking:** compliant with the essential requirements of Annex II of PPE Regulation (EU) 2016/425, in accordance with EN ISO 16321-2:2021 and EN 207:2017. Marking: eye protection 16321 LP W4 1-M, 950-100 D LB7 IR LB8 LP CE; face and head protection 16321 LP W4 1-M, 900-1100 D LB5 IR LB8 LP CE.



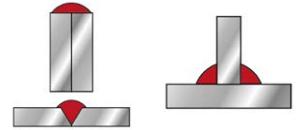
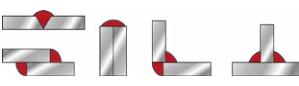
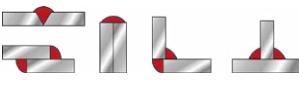
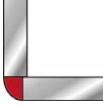
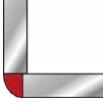
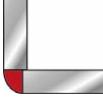
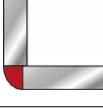


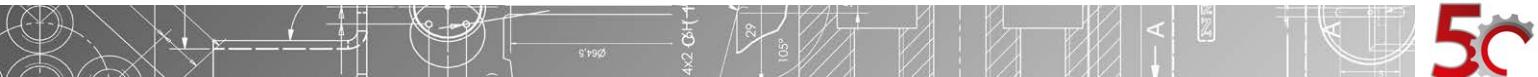
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## Accessories for Laser welding equipment MS20

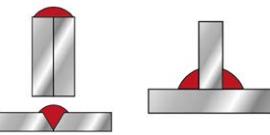
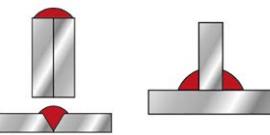
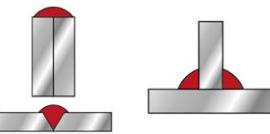
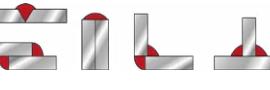
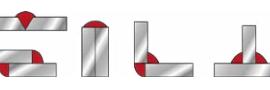
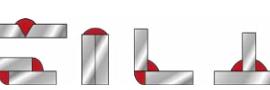
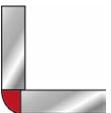
### Laser Welding Nozzles

Laser welding nozzles with and without filler wire feed, for different welding applications.

Descripción	Hilos	Tipo de soldadura	Ø Hilo	Modelo
 Ref: 080-MSL-00411 Nozzle for autogenous welding, for flat welds, inside corners and outside corners.	-		-	A
 Ref: 080-MSL-00412 Nozzle for autogenous welding, for flat welds or inside corners.	-		-	B
 Ref: 080-MSL-00413 Nozzle for autogenous welding, for outside corner welding.	-		-	C
 Ref: 080-MSL-00414 Nozzle for welding with filler wire up to 1.0 mm, for flat welding, inside corners and outside corners.	1		1.0 mm	AS-10
 Ref: 080-MSL-00415 Nozzle for welding with filler wire up to 1.2 mm, for flat welding, inside corners and outside corners.	1		1.2 mm	AS-12
 Ref: 080-MSL-00416 Nozzle for welding with filler wire up to 1.6 mm, for flat welding, inside corners and outside corners.	1		1.6 mm	BS-16
 Ref: 080-MSL-00417 Nozzle for welding with filler wire up to 2.0 mm, for flat welding, inside corners and outside corners.	1		2.0 mm	BS-20
 Ref: 080-MSL-00418 Nozzle for welding with filler wire up to 1.0 mm, for outside corner welding.	1		1.0 mm	CS-10
 Ref: 080-MSL-00419 Nozzle for welding with filler wire up to 1.2 mm, for outside corner welding.	1		1.2 mm	CS-12
 Ref: 080-MSL-00420 Nozzle for welding with filler wire up to 1.6 mm, for outside corner welding.	1		1.6 mm	CS-16
 Ref: 080-MSL-00421 Nozzle for welding with filler wire up to 1.2 mm, for outside corner welding.	1		1.2 mm	ES-12



## Accessories for Laser welding equipment MS20

Description	Wires	Type of welding	Wire Ø	Model
 Ref: 080-MSL-00422 Nozzle for welding with filler wire up to 1.0 mm, for flat welding and inside corners.	1		1.0 mm	DS-10
 Ref: 080-MSL-00423 Nozzle for welding with filler wire up to 1.2 mm, for flat welding and inside corners.	1		1.2 mm	DS-12
 Ref: 080-MSL-00424 Nozzle for welding with filler wire up to 1.6 mm, for flat welding and inside corners.	1		1.6 mm	DS-16
 Ref: 080-MSL-00425 Nozzle for welding with dual filler wire feed up to 1.2 mm, for flat welding, inside corners and outside corners.	2		1.2 mm	AS-12D
 Ref: 080-MSL-00426 Nozzle for welding with dual filler wire feed up to 1.6 mm, for flat welding, inside corners and outside corners.	2		1.6 mm	AS-16D
 Ref: 080-MSL-00427 Nozzle for welding with dual filler wire feed up to 2.0 mm, for flat welding, inside corners and outside corners.	2		2.0 mm	AS-20D
 Ref: 080-MSL-00431 Nozzle for welding with filler wire up to 1.6 mm, for outside corner welding.	1		1.6 mm	ES-16 FS-16

## Nozzle and tip for cutting

Nozzle and tip for laser cutting. One set is supplied, consisting of 1 nozzle and 1 tip.

Description	Model
 Ref: 080-MSL-00428 Nozzle and tip set for sheet metal cutting.	CT-15
 Ref: 080-MSL-00429 1.5 mm tip for the cutting nozzle.	CT-15



## Accessories for Laser welding equipment MS20

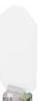
### Steel, Teflon and Graphite Liners

	Description
	Ref. 080-MSL-00301 Steel Liner Blue 0.6-0.8, 5m Welding liner for 0.6–0.8 mm steel wire, 5 m
	Ref. 080-MSL-00302 Steel Liner Red 1.0-1.2, 5m Welding liner for 1.0–1.2 mm steel wire, 5 m
	Ref. 080-MSL-00304 Teflon Liner Blue 0.6-0.8, 5m Welding liner for 0.6–0.8 mm aluminium wire, 5 m
	Ref. 080-MSL-00305 Teflon Liner Red 1.0-1.2, 5m Welding liner for 1.0–1.2 mm aluminium wire, 5 m
	Ref. 080-MSL-00306 Teflon Liner Yellow 1.4-1.6, 5m Welding liner for 1.4–1.6 mm aluminium wire, 5 m
	Ref. 080-MSL-00307 Graphite Liner 1.0-2.0, 5m Welding liner for 1.0–2.0 mm aluminium wire, 5 m
	Ref. 080-MSL-00308 Steel Liner 1.2-2.0, 5m Welding liner for 1.2–2.0 mm steel wire, 5 m



## Accessories for Laser welding equipment MS20

### Lenses

Description	
	Ref. 080-MSL-00323 Reflective Lens Reflective lens for welding, cutting and weld bead cleaning.
	Ref. 080-MSL-00321 Focusing Lens D20 x F150 x T3 Focusing lens D20 F150 for welding, cutting and weld bead cleaning.
	Ref. 080-MSL-00320 Collimating Lens D16 x F60 x T3 Collimating lens D16 for welding, cutting and weld bead cleaning.
	Ref. 080-MSL-00332 Protective Lens Protective lens for welding, cutting and weld bead cleaning.

### Feed rollers

Feed rollers with double "U" or "V" groove for different wire sizes and materials.

Ref.	Description	Wires Ø
	080-MSL-00326 Roller 0.8-1.0 U U-groove feed roller for aluminum wire.	0,8 y 1,0mm.
	080-MSL-00327 Roller 1.2-1.6 U U-groove feed roller for aluminum wire.	1,2 y 1,6mm.
	080-MSL-00328 Roller 1.6-2.0 U U-groove feed roller for aluminum wire.	1,6 y 2,0 mm.
	080-MSL-00329 Roller 0.8-1.0 V V-groove feed roller for steel wire.	0,8 y 1,0mm.
	080-MSL-00330 Roller 1.2-1.6 V V-groove feed roller for steel wire.	1,2 y 1,6 mm.
	080-MSL-00331 Roller 1.6-2.0 V V-groove feed roller for steel wire.	1,6 y 2,0 mm.



## Accessories for Laser welding equipment MS20

### Graded Tube



REF: 080-MSL-00334

Graduated focusing tube for nozzles.

### Feed nozzles

Wire feed guide nozzles.

Ref.	Description	Wires	Wire Ø
 080-MSL-00402	Double wire feed nozzle 1.0 mm Double wire feed guide nozzle, 1.0 mm.	2	1,0 mm.
 080-MSL-00403	Double wire feed nozzle 1.2 mm Double wire feed guide nozzle, 1.2 mm.	2	1,2 mm.
 080-MSL-00404	Double wire feed nozzle 1.6 mm Double wire feed guide nozzle, 1.6 mm.	2	1,6 mm.
 080-MSL-00405	Double wire feed nozzle 2.0 mm Double wire feed guide nozzle, 2.0 mm.	2	2,0 mm.
 080-MSL-00406	Single wire feed nozzle 0.8 mm Wire feed guide nozzle, 0.8 mm.	1	0,8 mm.
 080-MSL-00407	Single wire feed nozzle 1.0 mm Wire feed guide nozzle, 1.0 mm.	1	1,0 mm.
 080-MSL-00408	Single wire feed nozzle 1.2 mm Wire feed guide nozzle, 1.2 mm.	1	1,2 mm.
 080-MSL-00409	Single wire feed nozzle 1.6 mm Wire feed guide nozzle, 1.6 mm.	1	1,6 mm.
 080-MSL-00410	Single wire feed nozzle 2.0 mm Wire feed guide nozzle, 2.0 mm.	1	2,0 mm.



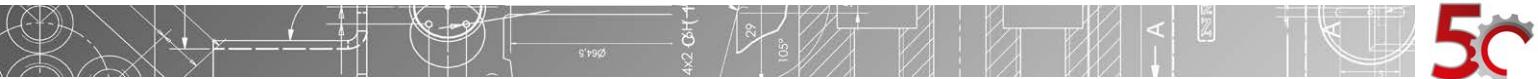
## Hydraulic iron worker

### Hydraulic iron worker MX340G

The Hydraulic Punching Machine MX340G Nargesa main feature is its versatility. It can make several functions as punching operations in metal sheet, flat bar, pipe, angle, U-T-UPN-IPN profiles, folding, cutting, tuve notching, inlaying, punching, bending sheets, stamping... It can be suitable for any other kind of tooling.

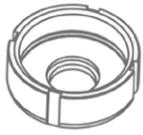
<b>Reference</b>	<b>100-02-01-002</b>
<b>Engine power</b>	<b>2,2 KW / 3 HP</b>
<b>Three-phased tension</b>	<b>230 / 400 V</b>
<b>Hydraulic power</b>	<b>40 Tn</b>
<b>Working speed</b>	<b>7,1 mm/s</b>
<b>Return speed</b>	<b>9,3 mm/s</b>
<b>Punch displacement</b>	<b>100 mm</b>
<b>Neck</b>	<b>180 mm</b>
<b>Tooling support table</b>	<b>245x265 mm</b>
<b>Dimensions</b>	<b>690x870x1780 mm</b>
<b>Weight</b>	<b>615 Kg</b>





## Accessories for Hydraulic iron worker MX340G

### Fitting nuts for punches MX340



TAP



ATAP

Reference	Type	Fitting nuts for punches
120-02-01-00011	TAP28	Fitting nuts for punches N28 Standard
140-02-01-00019	TAP40	Fitting nuts for punches N40
140-02-01-00020	TAP50	Fitting nuts for punches N50
140-02-01-00021	TAP60	Fitting nuts for punches N60
125-02-01-00002	ATAP	Fitting part for TAP60

### Fitting parts for dies MX340



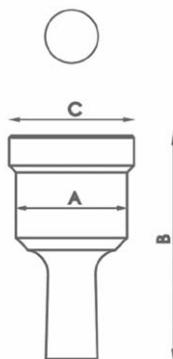
CAB



PORTABASES

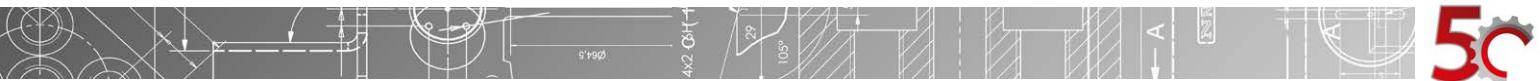
Reference	Type	Fitting for dies
120-02-01-00012	N46	Fitting for dies N46 Standard
140-02-01-00024	N60	Fitting for dies N60
140-02-01-00025	N78	Fitting for dies N78
140-02-01-00037	N100	Base holder for dies N100
140-02-01-00038	N125	Base holder for dies N125

### Standard round punches MX340



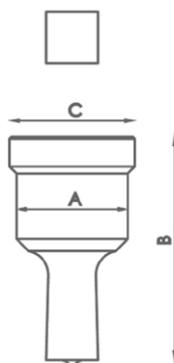
Type	Available sizes in mm Ø	A	B	C
N28	3/3'5/4/4'5/5/5'5/6/6'5/7/7'5/8 8'5 /9mm up to 28mm from 0'5 in 0'5mm	28 mm	58 mm	31,5 mm
N40	29/30/31/32/33/34/35 36/37/38/39/40mm	40 mm	64 mm	43,5 mm
N50	41/42/43/44/45/46/47/48/49/50mm	50 mm	58 mm	54 mm
N60	52/54/56/58/60mm	60 mm	58 mm	64 mm
N75	62/64/66/68/70/72/74mm	75 mm	58 mm	79 mm
N100	76/78/80/82/84/86/88 90/92/94/96/98/100mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer



## Accessories for Hydraulic iron worker MX340G

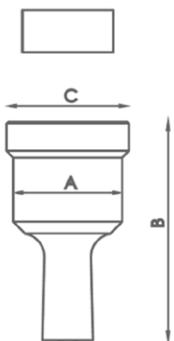
### Standard square punches MX340



Type	Available sizes in mm	A	B	C
N28	4/5/6/7/8/9/10/11/12/13/14/15 16/17/18/19/20mm	28 mm	58 mm	31,5 mm
N40	21/22/24/26/28mm	40 mm	64 mm	43,5 mm
N50	31/33/35mm	50 mm	58 mm	54 mm
N75	40/44/48/53mm	75 mm	58 mm	79 mm
N100	58/64/70mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer

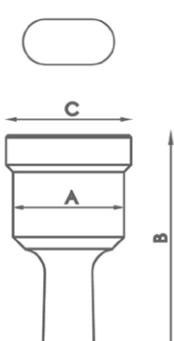
### Standard rectangular punches MX340



Type	Available sizes in mm	A	B	C
N28	7x10/7x15/9x13/9x19/11x17/11x23 13x19/15x21mm	28 mm	58 mm	31,5 mm
N40	13x25/15x27/17x25/19x30/20x34mm	40 mm	64 mm	43,5 mm
N50	25x43mm	50 mm	58 mm	54 mm
N75	25x70mm	75 mm	58 mm	79 mm
N100	25x96mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer

### Standard oval punches MX340



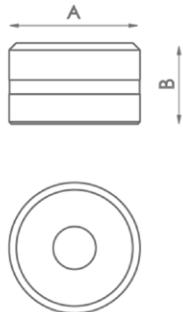
Type	Available sizes in mm	A	B	C
N28	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18/13x22/13x27/15x20/15x24 15x27/17x22/17x26/19x26/21x27mm	28 mm	58 mm	31,5 mm
N40	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	40 mm	64 mm	43,5 mm
N50	25x45/25x50mm	50 mm	58 mm	54 mm
N75	27x63/27x75mm	75 mm	58 mm	79 mm
N100	30x87/30x100mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer



## Accessories for Hydraulic iron worker MX340G

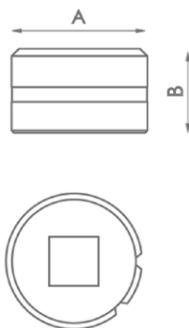
### Standard round dies MX340



Type	Available sizes in mm	A	B
N46	3/3,5/4/4,5/5/5,5/6/6,5/7/7,5/8/8,5 9mm up to 28mm from 0,5 in 0,5mm	46 mm	28,5 mm
N60	29/30/31/32/33/34/35/36/37/38/39/40mm	60 mm	32 mm
N78	41/42/43/44/45/46/47/48/49/50mm	78 mm	28,5 mm
N100	52/54/56/58/60/62/64/66/68/70/72/74mm	100 mm	28,5 mm
N125	76/78/80/82/84/86/88/90/92/94/96/98/100mm	125 mm	28,5 mm

*For different sizes, please ask the manufacturer*

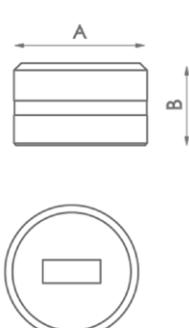
### Standard square dies MX340



Type	Available sizes in mm	A	B
N46	4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20mm	46 mm	28,5 mm
N60	21/22/24/26/28mm	60 mm	32 mm
N78	31/33/35mm	78 mm	28,5 mm
N100	40/44/48/53mm	100 mm	28,5 mm
N125	58/64/70mm	125 mm	28,5 mm

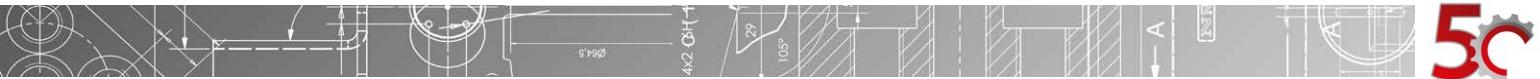
*For different sizes, please ask the manufacturer*

### Standard rectangular dies MX340



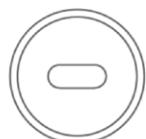
Type	Available sizes in mm	A	B
N46	7x10/7x15/9x13/9x19/11x17/11x23 13x19/13x25/15x21mm	46 mm	28,5 mm
N60	15x27/17x25/19x30/20x34mm	60 mm	32 mm
N78	25x43mm	78 mm	28,5 mm
N100	25x70mm	100 mm	28,5 mm
N125	25x96mm	125 mm	28,5 mm

*For different sizes, please ask the manufacturer*



## Accessories for Hydraulic iron worker MX340G

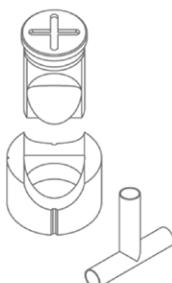
### Oval dies MX340



Type	Available sizes in mm	A	B
N46	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18/13x22/13x27/15x20/15x24/15x27 17x22/17x26/19x26/21x27mm	46 mm	28,5 mm
N60	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	60 mm	32 mm
N78	25x45/25x50mm	78 mm	28,5 mm
N100	27x63/27x75mm	100 mm	28,5 mm
N125	30x87/30x100mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer

### Tube notching tooling MX340



Reference	Available sizes in mm	Required fitting	
MAN28	Tube from 16 to 28mm	TAP 28	CAB 46
MAN40	Tube from 28,5 to 40mm	TAP 40	CAB 60
MAN50	Tube from 40,5 to 50mm	TAP 50	CAB 78
MAN60	Tube from 50,5 to 60mm	TAP 60	

For different sizes, please ask the manufacturer

### Corner rounding tooling MX340



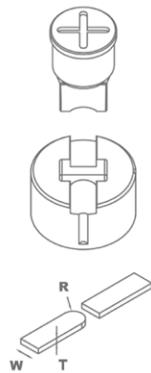
Reference	Available sizes in mm	Required fitting	
MRE28	Radius from 3 to 15mm	TAP 28	CAB 46
MRE40	Radius from 16 to 26mm	TAP 40	CAB 60
MRE50	Radius from 26,5 to 32mm	TAP 50	CAB 78

For different sizes, please ask the manufacturer



## Accessories for Hydraulic iron worker MX340G

### Flat bar round end tooling R1 MX340



Reference	Model	Width size	Required fitting
MOR1-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR1-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR1-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR1-35D	D	From 20 to 35mm	TAP28 / TAP40
MOR1-50A	A	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50B	B	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50C	C	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50D	D	From 40 to 50mm	TAP50 / TAP60 with ATAP

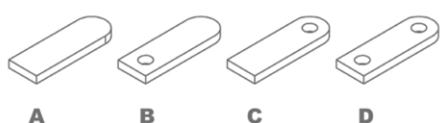
For different sizes, please ask the manufacturer.

When placing order it must be specified the REFERENCE, MODEL, R (radius), W (flat bar width), T (flat bar thickness)

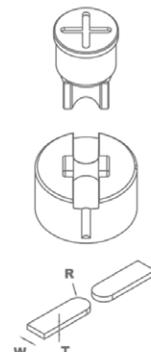
In models B, C and D specify diameter of the hole.

The ear shaped length is always adjustable.

Production capacity: 450 to 600 parts per hour.



### Flat bar round end tooling R2 MX340



Reference	Model	Width size	Required fitting
MOR2-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR2-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR2-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR2-50A	A	From 40 to 50mm	TAP50 / TAP60 con ATAP
MOR2-50B	B	From 40 to 50mm	TAP50 / TAP60 con ATAP
MOR2-50C	C	From 40 to 50mm	TAP50 / TAP60 con ATAP

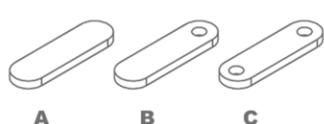
Para medidas distintas o superiores consultar con el fabricante.

Al realizar el pedido especificar REFERENCIA, MODELO, R (radio), W (ancho pletina), T (grueso pletina)

En los modelos B y C especificar diámetro del agujero.

La longitud de la orejeta siempre es ajustable.

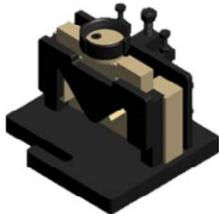
Capacidad de producción: 450 a 600 piezas la hora.





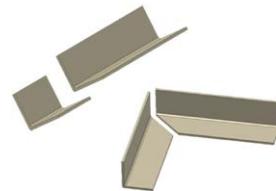
## Accessories for Hydraulic iron worker MX340G

### Angle cutting tooling. MX340



Reference: 140-02-01-00001

Angle cutting tooling, from 90° up to 45°.



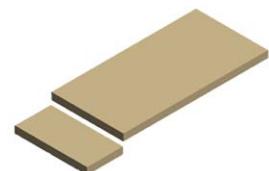
Units per machine	Max. Capacity for straight cut	Max. Cutting capacity for miter	Weight
1	60x60mm	50x50mm	32 Kg

### Flat bar cutting tooling. MX340



Reference: 140-02-01-00002

Tooling for cutting sheet or flat bars from 0.8mm up to 10mm thickness.



Units per machine	Max. Cutting capacity	Weight
1	100x10mm	28 Kg

### Folding tooling 170mm. MX340



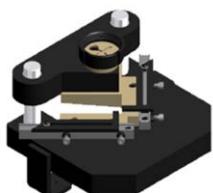
Reference: 140-02-01-00004

Tooling for folding sheet and flat bar up to 170mm. 88° punch. Dies with V for 56mm and V for 26m.



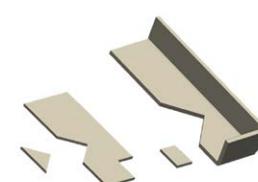
Units per machine	Max folding length	Max folding thickness	Weight
1	170mm	8 to 12mm	12 Kg

### Stripping tooling to 90° adjustable 100x100 MX340



Reference: 140-02-01-00005

Stripping tooling for angle etc. Adjustable up to 100x100mm to 90° fijos.



Units per machine	Max. Cutting capacity	Weight
1	100x100x4	21 Kg



## Accessories for Hydraulic iron worker MX340G

### Arrow tooling for metal sheet MX340



**Reference: 140-02-01-00006**

Tooling for punching metal sheet in arrow shapes for fences.



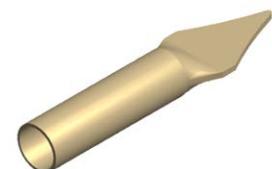
Units per machine	Max. Sheet Thickness	Weight
1	3mm	21 Kg

### Arrow tooling for pipes MX340



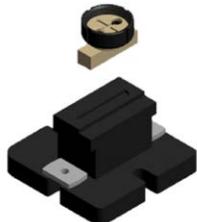
**Reference: 140-02-01-00007**

Tooling to flatten and cut arrow shaped pipes end. Suitable for different diameters.



Units per machine	Pipe max. Diameter	Min. Pipe diameter	Weight
1	30x2mm	10x2mm	19 Kg

### Ventilation grip tooling. MX340



**Reference: 140-02-01-00010**

Tooling to make ventilation grips in metal sheet. Adjustable amount of punchings. They are to be made one by one.



Units per machine	Punchings sizes	Max. thickness	Weight
1	100x20mm	2mm	20Kg

### Angle & U profile punching tooling MX340



**Reference: 140-02-01-00031**

Base holder for angle punching. Suitable for punches and dies of different diameters, exchangeables.



Units per machine	Max. Hole diameter	Min. Hole diameter	Weight
1	28mm	2mm	7 Kg



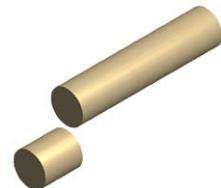
## Accessories for Hydraulic iron worker MX340G

### Round bar cutting tooling. MX340



Reference: 140-02-01-00035

Tooling for cutting round bar from 3mm up to 35mm.



Units per machine	Max. Cutting diameter	Min. Cutting diameter	Weight
1	35mm	3mm	15 Kg

### Locks punch and die MX340



Reference: 140-02-01-00036

Set for making the lock hole in metal sheet.

Necessary complements: CAB60 and TAP40



Parts per set	Max. Thickness	Weight
2	6mm	1 Kg

### Flattening tooling MX340



Reference: 140-02-01-00039

It's an extractor which acts as the flat bar holder at the punching time to prevent the flat bar from deformation while being punched.



Parts per tooling	Flat Bar Max Thickness	Weight
3	15mm	15 Kg

### Fence post end tooling MX340

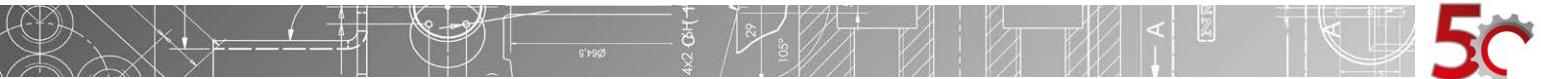


Reference: 140-02-01-00040

Tooling to flatten and punch the pipe for fences. It admits different pipe diameters. Exchangeable hole size.



Parts per tooling	Max. Pipe diameter	Min. Pipe diameter	Hole diameter	Weight
2	50mm	10mm	Exchangeable	23 Kg



## Hydraulic iron worker

### Hydraulic iron worker MX700

The Hydraulic Punching Machine MX700 Nargesa main feature is its versatility. It can make several functions as punching operations in metal sheet, flat bar, pipe, angle, U-T-UPN-IPN profiles, folding, cutting, tuve notching, inlaying, punching, bending sheets, stamping... It can be suitable for any other kind of tooling.

<b>Reference</b>	<b>100-02-02-003</b>
<b>Engine power</b>	<b>5,5 KW / 7,5 HP</b>
<b>Three-phased tension</b>	<b>400 V</b>
<b>Hydraulic power</b>	<b>70 Tn</b>
<b>Working speed</b>	<b>9 mm/s</b>
<b>Return speed</b>	<b>14 mm/s</b>
<b>Punch displacement</b>	<b>160 mm</b>
<b>Neck</b>	<b>350 mm</b>
<b>Tooling support table</b>	<b>600x350 mm</b>
<b>Dimensions</b>	<b>1130x1370x2060 mm</b>
<b>Weight</b>	<b>2000 Kg</b>





## Accessories for Hydraulic iron worker MX700

### Fitting nuts for punches MX700



TAP



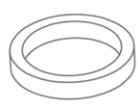
ATAP

Reference	Type	Fitting nuts for punches
120-02-02-00312	TAP28	Fitting nuts for punches N28 Standard
140-02-02-00011	TAP40	Fitting nuts for punches N40
140-02-02-00015	TAP50	Fitting nuts for punches N50
140-02-02-00014	TAP60	Fitting nuts for punches N60
140-02-02-00010	TAP75	Fitting nuts for punches N75
140-02-02-00012	TAP100	Fitting nuts for punches N100
125-02-02-00042	ATAP	Fitting part for TAP100

### Fitting parts for dies MX700



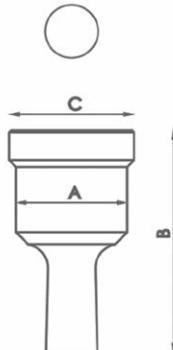
CAB



CAB N125

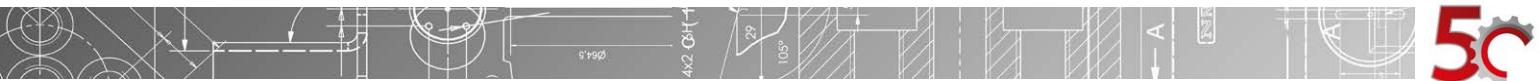
Reference	Type	Fitting for dies
120-02-02-00313	N46	Fitting for dies N46 Standard
140-02-02-00019	N60	Fitting for dies N60
140-02-02-00028	N78	Fitting for dies N78
140-02-02-00044	N85	Fitting for dies N85
140-02-02-00029	N100	Fitting for dies N100
140-02-02-00027	N125	Fitting for dies N125

### Standard round punches MX700



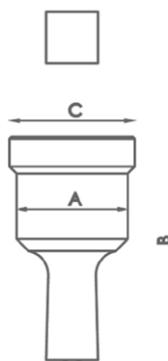
Type	Available sizes in mm Ø	A	B	C
N28	3/3'5/4/4'5/5/5'5/6/6'5/7/7'5/8 8'5 /9mm up to 28mm from 0'5 in 0'5mm	28 mm	58 mm	31,5 mm
N40	29/30/31/32/33/34/35 36/37/38/39/40mm	40 mm	64 mm	43,5 mm
N50	41/42/43/44/45/46/47/48/49/50mm	50 mm	58 mm	54 mm
N60	52/54/56/58/60mm	60 mm	58 mm	64 mm
N75	62/64/66/68/70/72/74mm	75 mm	58 mm	79 mm
N100	76/78/80/82/84/86/88 90/92/94/96/98/100mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer



## Accessories for Hydraulic iron worker MX700

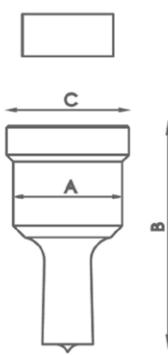
### Standard square punches MX700



Type	Available sizes in mm	A	B	C
N28	4/5/6/7/8/9/10/11/12/13/14/15 16/17/18/19/20mm	28 mm	58 mm	31,5 mm
N40	21/22/24/26/28mm	40 mm	64 mm	43,5 mm
N50	31/33/35mm	50 mm	58 mm	54 mm
N75	40/44/48/53mm	75 mm	58 mm	79 mm
N100	58/64/70mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer

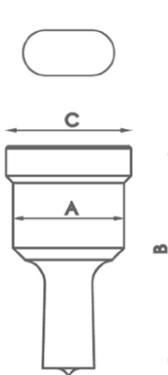
### Standard rectangular punches MX700



Type	Available sizes in mm	A	B	C
N28	7x10/7x15/9x13/9x19/11x17/11x23 13x19/15x21mm	28 mm	58 mm	31,5 mm
N40	13x25/15x27/17x25/19x30/20x34mm	40 mm	64 mm	43,5 mm
N50	25x43mm	50 mm	58 mm	54 mm
N75	25x70mm	75 mm	58 mm	79 mm
N100	25x96mm	100 mm	58 mm	104 mm

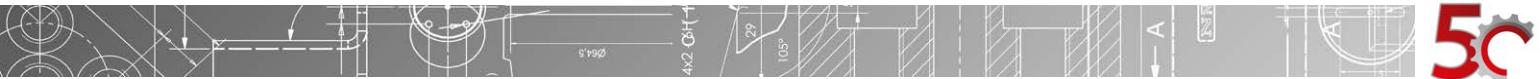
For different sizes, please ask the manufacturer

### Standard oval punches MX700



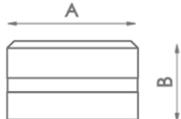
Type	Available sizes in mm	A	B	C
N28	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18/13x22/13x27/15x20/15x24 15x27/17x22/17x26/19x26/21x27mm	28 mm	58 mm	31,5 mm
N40	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	40 mm	64 mm	43,5 mm
N50	25x45/25x50mm	50 mm	58 mm	54 mm
N75	27x63/27x75mm	75 mm	58 mm	79 mm
N100	30x87/30x100mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer



## Accessories for Hydraulic iron worker MX700

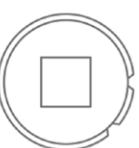
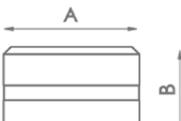
### Standard round dies MX700



Type	Available sizes in mm	A	B
N46	3/3,5/4/4,5/5/5,5/6/6,5/7/7,5/8/8,5 9mm up to 28mm from 0,5 in 0,5mm	46 mm	28,5 mm
N60	29/30/31/32/33/34/35/36/37/38/39/40mm	60 mm	32 mm
N78	41/42/43/44/45/46/47/48/49/50mm	78 mm	28,5 mm
N100	52/54/56/58/60/62/64/66/68/70/72/74mm	100 mm	28,5 mm
N125	76/78/80/82/84/86/88/90/92/94/96/98/100mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer

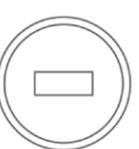
### Standard square dies MX700



Type	Available sizes in mm	A	B
N46	4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20mm	46 mm	28,5 mm
N60	21/22/24/26/28mm	60 mm	32 mm
N78	31/33/35mm	78 mm	28,5 mm
N100	40/44/48/53mm	100 mm	28,5 mm
N125	58/64/70mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer

### Standard rectangular dies MX700



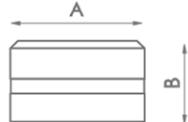
Type	Available sizes in mm	A	B
N46	7x10/7x15/9x13/9x19/11x17/11x23 13x19/13x25/15x21mm	46 mm	28,5 mm
N60	15x27/17x25/19x30/20x34mm	60 mm	32 mm
N78	25x43mm	78 mm	28,5 mm
N100	25x70mm	100 mm	28,5 mm
N125	25x96mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer



## Accessories for Hydraulic iron worker MX700

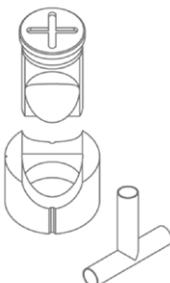
### Oval dies MX700



Type	Available sizes in mm	A	B
N46	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18/13x22/13x27/15x20/15x24/15x27 17x22/17x26/19x26/21x27mm	46 mm	28,5 mm
N60	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	60 mm	32 mm
N78	25x45/25x50mm	78 mm	28,5 mm
N100	27x63/27x75mm	100 mm	28,5 mm
N125	30x87/30x100mm	125 mm	28,5 mm

*For different sizes, please ask the manufacturer*

### Tube notching tooling MX700



Reference	Available sizes in mm	Required fitting
MAN28	Tube from 16 to 28mm	TAP 28 CAB 46
MAN40	Tube from 28,5 to 40mm	TAP 40 CAB 60
MAN50	Tube from 40,5 to 50mm	TAP 50 CAB 78
MAN60	Tube from 50,5 to 60mm	TAP 60

*For different sizes, please ask the manufacturer*

### Corner rounding tooling MX



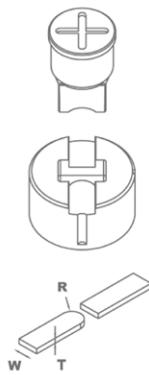
Reference	Available sizes in mm	Required fitting
MRE28	Radius from 3 to 15mm	TAP 28 CAB 46
MRE40	Radius from 16 to 26mm	TAP 40 CAB 60
MRE50	Radius from 26,5 to 32mm	TAP 50 CAB 78

*For different sizes, please ask the manufacturer*



## Accessories for Hydraulic iron worker MX700

### Flat bar round end tooling R1 MX700



Reference	Model	Width size	Required fitting
MOR1-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR1-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR1-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR1-35D	D	From 20 to 35mm	TAP28 / TAP40
MOR1-50A	A	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50B	B	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50C	C	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50D	D	From 40 to 50mm	TAP50 / TAP60 with ATAP

For different sizes, please ask the manufacturer.

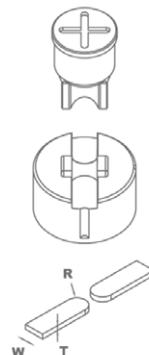
When placing order it must be specified the REFERENCE, MODEL, R (radius), W (flat bar width), T (flat bar thickness)

In models B, C and D specify diemeter of the hole.

The ear shaped legth is always adjustable.

Production capacity: 450 to 600 parts per hour.

### Flat bar round end tooling R2 MX700



Reference	Model	Width size	Required fitting
MOR2-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR2-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR2-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR2-50A	A	From 40 to 50mm	TAP50 / TAP60 con ATAP
MOR2-50B	B	From 40 to 50mm	TAP50 / TAP60 con ATAP
MOR2-50C	C	From 40 to 50mm	TAP50 / TAP60 con ATAP

For different sizes, please ask the manufacturer.

When placing order it must be specified the REFERENCE, MODEL, R (radius), W (flat bar width), T (flat bar thickness)

In models B and C specify hole diameter.

The ear shaped legth is always adjustable.

Production capacity: 450 to 600 parts per hour.



## Accessories for Hydraulic iron worker MX700

### Ventilation grip tooling MX700



Reference: 140-02-02-00031

Tooling to make ventilation grips in metal sheet. Adjustable amount of punchings which are to be made one by one.



Units per machine	Punchings sizes	Max. thickness	Weight
1	100x20mm	2mm	21Kg

### Locks punch and die MX700



Reference: 140-02-01-00036

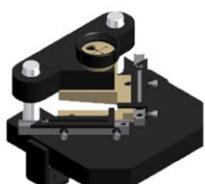
Set of punch and die to make the locks punching in metal sheet.

Necessary complements: CAB60 and TAP40



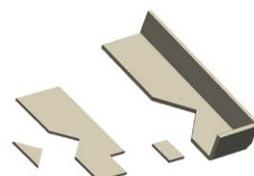
Pieces per set	Max. Thickness	Weight
2	6mm	1 Kg

### Stripping tooling 90° adjustable 150x150 MX700



Reference: 140-02-02-00001

Stripping tooling for metal sheet, angle... Adjustable up to 150x150mm to 90° fixed.



Units per machine	Max. Cutting capacity	Weight
1	150x150x8mm	38 Kg

### Flat bar cutting tooling 200 x 20. MX700



Reference: 140-02-02-00002

Tooling for cutting flat bar or metal sheet from 0.8mm up to 20mm Thickness.



Units per machine	Max. Cutting capacity	Weight
1	200x20mm	54 Kg



## Accessories for Hydraulic iron worker MX700

### Angle and U profile punching machine MX700



Reference: 140-02-01-00031

Base holder for punching angles. The punches and dies of different diameters are exchangeable.



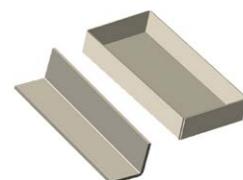
Units per machine	Max. Hole Diameter	Min. Hole Diameter	Weight
1	28mm	2mm	7 Kg

### Folding tooling 170mm. MX700



Reference: 140-02-02-00034

Tooling for folding sheet and flat bar up to 170mm. 88° punch. Dies with V for 56mm and V for 26m.



Units per machine	Max. Folding Length	Max. Folding Thickness	Weight
1	170mm	8 to 12mm	13 Kg

### Angle cutting tooling. MX700



Reference: 140-02-02-00036

Tooling for cutting angles from 90° up to 45°.



Units per machine	Max cutting capacity Straight cut	Max. Cutting capacity Miter cut	Weight
1	80x80mm	50x50mm	32 Kg

### Flat bar cutting tooling 100 x 12. MX700

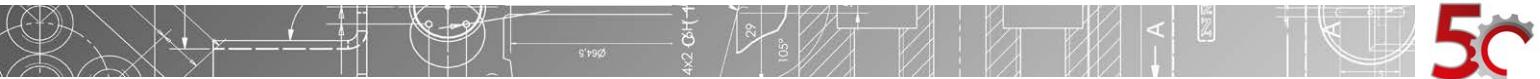


Reference: 140-02-02-00037

Tooling for cutting metal sheet or flat bar from 0.8mm up to 12mm thickness.



Units per machine	Max. Cutting capacity	Weight
1	100x12mm	29 Kg



## Accessories for Hydraulic iron worker MX700

### Round bar cutting tooling MX700



Reference: 140-02-02-00038

Tooling for cutting round bar from 3mm up to 35mm.



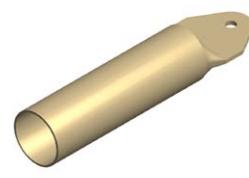
Units per machine	Max. Cutting diameter	Min. Cutting diameter	Weight
1	35mm	3mm	16 Kg

### Fence post end tooling MX700



Reference: 140-02-02-00039

Tooling to flatten and punch the pipe for fences. It admits different pipe diameters. Exchangeable hole size.



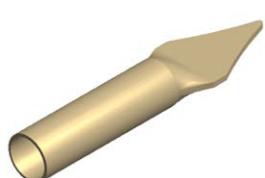
Pieces by tooling	Pipe Max. Diameter	Pipe Min. Diameter	Hole Diameter	Weight
2	50mm	10mm	Exchangeable	24 Kg

### Arrow tooling for pipes MX700



Reference: 140-02-02-00040

Tooling for flattening and cutting pipes in arrow shapes. Suitable for different diameters.



Units per machine	Pipe Max. Diameter	Pipe Min. Diameter	Weight
1	30x2mm	10x2mm	20 Kg

### Arrow tooling for metal sheet MX700



Reference: 140-02-02-00041

Tooling for punching metal sheet in arrow shapes for fences.



Units per machine	Sheet Max. Thickness	Weight
1	3mm	22 Kg



## Accessories for Hydraulic iron worker MX700

### Flattening tooling MX700



**Reference: 140-02-02-00042**

It's an extractor which acts as the flat bar holder at the punching time to prevent the flat bar from deformation while being punched.



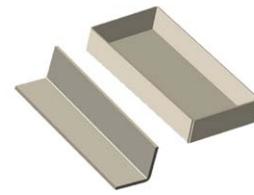
Pieces per tooling	Bar or flat bar max. thickness	Weight
1	15mm	15 Kg

### Folding tooling 350mm. MX700



**Reference: 140-02-02-00043**

Tooling to fold metal sheet and flat bar up to 350mm.  
Punch: 88°. Die with adjustable V of 120mm, 80mm, 40mm and 16mm.



Units per machine	Max. Folding Length	Max. Folding Thickness	Weight
1	350mm	20mm	45 Kg



## Profile Formers

### Profile former MC150B

Section bending, pipe curving machine MC150B Nargesa. Our pipe bender MC150B is designed to minimize the manufacturing cost and provide maximum performance when bending pipes and profiles. It has been manufactured for different profiles such as flat bar or bar section, T-profile, rolling U-profile, bending angle, bending solid rod, both square and round types, spiral tube or even to perform square, rectangular or round pipe.

Reference	100-08-07-001
Engine power	0,75 KW / 1 HP
Tension Single-phase	230 V
Speed	6 r.p.m.
Axes diameter	40 mm
Rollers diameter	127 mm
Useful axes length	74 mm
Dimensions	680x950x1240 mm
Weight	270 Kg



### Profile former MC200

Profile former MC200 Nargesa, is made of mechanized and weldes Steel sheet. Unlike others, this one's not made of melting. It has been conceived for work pipes and profiles. It is ideal for making spiral stairs, to bend pipes in spiral shapes, flanges for pipes, greenhouses, handrails, tables, chairs, doors, windows... making all kind of circular shapes in all kinds of profiles.

Reference	100-08-02-002
Engine power	1,1 KW / 1,5 HP
Tension 3-phased	230 / 400 V
Speed	8 r.p.m.
Axes diameter	40 mm
Rollers diameter	127 mm
Useful axes length	74 mm
Dimensions	790x810x1300 mm
Weight	320 Kg





## Profile Formers

### Profile former MC400

Profile former MC400 Nargesa, is made of mechanized and weldes Steel sheet. Unlike others, this one's not made of melting. It has been conceived for work pipes and profiles. It is ideal for making spiral stairs, to bend pipes in spiral shapes, flanges for pipes, greenhouses, handrails, tables, chairs, doors, windows... making all kind of circular shapes in all kinds of profiles.

Reference	100-08-01-001
Engine power	1,1 KW / 1,5 HP
Tension 3-phased	230 / 400 V
Speed	7 r.p.m.
Axes diameter	40 mm
Rollers diameter	130 mm
Useful axes length	80 mm
Dimensions	660x760x1250 mm
Weight	365 Kg

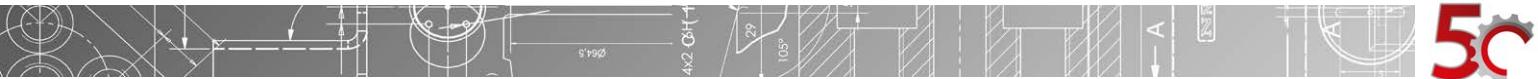


### Profile former MC200H

Profile Former MC200H Nargesa, made of welded and mechanized steel sheet. Unlike the others, this one is not made of cast iron. Ideal for making flanges, greenhouses, balausters, tables, chairs, doors, windows... making a great number of circular shape in all kinds of profiles. Its robustness, axis diameter, reducer capacity and other features, make it one of the best bending machines in the market, within the category of two traction rollers.

Reference	100-08-03-001
Engine power	1,85 KW / 2,5 HP
Tension 3-phased	230 / 400 V
Speed	8 r.p.m.
Axes diameter	40 mm
Rollers diameter	127 mm
Useful axes length	74 mm
Dimensions	790x810x1540 mm
Weight	360 Kg





## Accessories for Profile formers MC150B, MC200, MC200H and MC400

### Set of treated steel rollers · MC150B · MC200 · MC200H · MC400



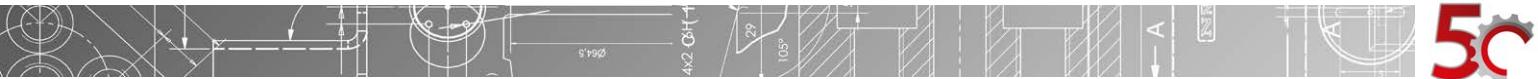
Set of 3 treated steel rollers for steel round pipe or stainless steel, thickness bigger than 2 mm.

When pipe sizes are smaller, two sizes are included in the same roller.

Eg. (25 + 30) o (1/2" + 1"1/4")

*Always clean up the rollers well before using stainless steel not to get the pipe contaminated.*

Tube size in mm		
Reference	Dimensions	Weight
140-08-01-RHT0007	(25 + 30)	17,00 Kg.
140-08-01-RHT0006	(20 + 35)	16,50 Kg.
140-08-01-RHT0001	40	16,60 Kg.
140-08-01-RHT0002	50	14,25 Kg.
140-08-01-RHT0003	60	11,10 Kg.
For Schedule pipe		
140-08-01-RHISOT0006	(3/4" + 1/2") = (26,9 + 21,3 mm)	17,70 Kg.
140-08-01-RHISOT0007	(1" + 3/8") = (33,7 + 17,2 mm)	17,00 Kg.
140-08-01-RHISOT0002	1" 1/4 = 42,4 mm	16,00 Kg.
140-08-01-RHISOT0003	1" 1/2 = 48,3 mm	14,40 Kg.
140-08-01-RHISOT0004	2" = 60,3 mm	11,15 Kg.
For inches pipe		
140-08-01-RHWT-00001	(1/2" + 1"1/4") = (12,700 + 31,751 mm)	18,00 Kg.
140-08-01-RHWT-00002	(1" + 3/4") = (25,401 + 19,051 mm)	18,50 Kg.
140-08-01-RHWT-00003	1" 1/2 = 38,101 mm	17,25 Kg.
140-08-01-RHWT-00004	2" = 50,802 mm	13,60 Kg.
140-08-01-RHWT-00005	2" 1/2 = 63,502 mm	9,75 Kg.



## Accessories for Profile formers MC150B, MC200, MC200H and MC400

### Set of Sustarín rollers · MC150B · MC200 · MC200H · MC400



Set of 3 Sustarin rollers for stainless steel pipes, aluminium and delicate materials for thickness smaller than 2.5 mm.

When pipe sizes are smaller, two sizes are included in the same roller. Eg. (25 + 30)

*Susterin rollers do not spoil or contaminate the pipe.*

*For any other size or profile please ask the manufacturer.*

Tube size in mm		
Reference	Dimensions	Weight
140-08-01-RI0007	(25 + 30)	1,40 Kg.
140-08-01-RI0001	(20 + 35)	1,40 Kg.
140-08-01-RI0010	33	1,50 Kg.
140-08-01-RI0004	40	1,40 Kg.
140-08-01-RI0003	43	1,30 Kg.
140-08-01-RI0006	50	1,20 Kg.
140-08-01-RI0008	60	0,90 Kg.
For Schedule inches		
140-08-01-RIISO0001	(3/4" + 1/2") = (26,9 + 21,3 mm)	1,70 Kg.
140-08-01-RIISO0002	(1" + 3/8") = (33,7 + 17,2 mm)	1,60 Kg.
140-08-01-RIISO0003	1" 1/4 = 42,4 mm	1,30 Kg.
140-08-01-RIISO0004	1" 1/2 = 48,3 mm	1,20 Kg.
140-08-01-RIISO0005	2" = 60,3 mm	0,90 Kg.
For inches pipe		
140-08-01-RIW-00001	(1/2"+1"1/4) = (12,700 + 31,751 mm)	1,80 Kg.
140-08-01-RIW-00002	(1"+3/4") = (25,401 + 19,051 mm)	1,50 Kg.
140-08-01-RIW-00003	1"1/2 = 38,101 mm	1,40 Kg.
140-08-01-RIW-00004	2" = 50,802 mm	1,20 Kg.
140-08-01-RIW-00005	2"1/2 = 63,502 mm	0,90 Kg.



## Profile formers

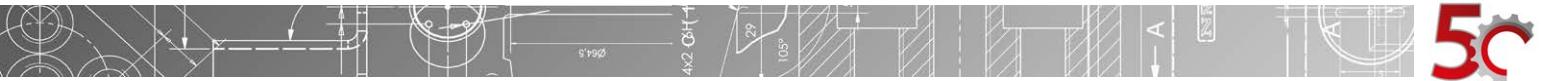
### Profile formers MC550

The NEW MC550 Nargesa Section and pipe bending machine is specially designed to carry out mass production through the control, which saves the position of the rollers in each curve to repeat the same operations later, without longitudinal positioning control. It is ideal for manufacturing flanges, greenhouses, railings, large structures for construction... **Maximum capacity for bending round pipe: 3" inches (76,2 mm) or 80 mm.** Its robustness, axis diameter, reduction capacity, Control Panel and 4.0 Technology make out of it one of the best bending machines on the market in the **three-driven roller category, an essential condition for working tubes and large profiles with a perfect finish.**

Reference	100-08-13-001
Engine power	1,5 Kw / 2 HP
Hydraulic motor power	0,75 Kw / 1 HP
Tension Single-phase	220 V
Adjustable roller speed	From 3 to 8 RPM.
Axes diameter	50 mm or 2"
Useful axes length	90 mm or 3,5"
Dimensions	965x1190x1341 mm
Weight	840 Kg



Nargesa MC550 pipe benders are controlled with a very intuitive and easy-to-use 7" color touchscreen with the latest 4.0 technology. **You only need to do the first piece and save each step so that the control will repeat the same operations on the other pieces in the same series automatically,** without longitudinal positioning control. You can add the type and dimensions of the pipe or profile, the material and position of the rollers to the program so all of this is saved for the following series.



## Accessories for Profile formers MC550

### CNC Bending Kit

Reference: 140-08-13-01000



#### Packaging

Dimensions: 840 x 720 x 260 mm

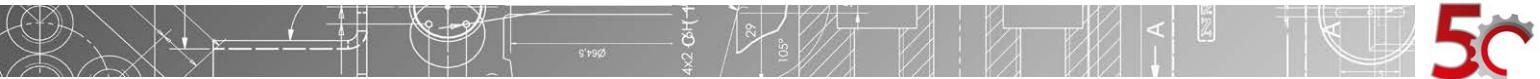
Weight: 28,5 Kg.

The ALL-NEW CNC bending kit is the ideal accessory designed and manufactured to get the most out of Nargesa MC550 pipe and profile benders. This kit can be installed whenever the customer wants; in other words, some time after having purchased the bending machine.

Its incredible smart predictive system, which is being offered for the first time ever in the world's tube and profile bending industry, guarantees any desired radius right away. Unbeatable ease of programming for operators, speed and reliability for unique pieces and large series. The CNC bending kit minimizes material waste, increases productivity and speeds up the creation of complex pieces. It offers exceptional repetitiveness, a simple, intuitive and powerful interface with CNC ESA S625 control, absolute connectivity for industry 4.0, safety, durability and maximum efficiency.

The interpolated axle control and independent speed management guarantee excellent results and soft transitions, which leads to greater and better productivity with perfect mass-produced pieces and exceptional repetitiveness.

- Absolute positioning control:** With a high-resolution 4096 impulse encoder, quadrature decoder, A+B channels, 5 Vdc, DB9 connector.
- Smart predictive system:** Developed exclusively by Nargesa and built into a CNC ESA S625 control, it helps obtain the desired radius right away which minimizes material waste and speeds up the process of creating complex pieces.
- Easy to program:** Anyone with minimal knowledge can bend highly complex pieces. > **Repetitiveness:** Guarantees the creation of identical pieces with minimal tolerances.
- Varied bending speed:** The speed can be adjusted irrespective of the bending operation or material to be bent.
- Perfect pieces with soft transitions:** Thanks to the interpolated axle control with independent speed adjustment during bending.
- CNC bending software:** Gets radii right away, axle interpolation, bend direction configuration, soft transitions, step-by-step, digital mode.
- Photocell:** 300 mm long-range direct reflection, PNP NO output, M12 connector.
- Gas spring:** 200 newton release speed, lock knob, guided by linear sliding bearings, rotating and bendable handle.
- Maximum speed:** Up to 70 mm/s
- Completely automatic bending:** Control button with an indicator light.
- Material savings:** Up to 90% less material waste.



## Profile formers

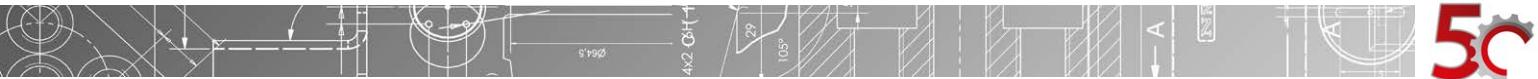
### Profile formers MC550CNC

The all-new Nargesa MC550CNC CNC pipe and profile bending machine was designed for single pieces as well as mass production. Its advanced CNC control panel makes it possible to easily create any desired geometry by directly programming the radii required to obtain mass-produced pieces with exceptional repetitiveness. Built with welded and machined steel sheet, the MC550CNC stands out due to its resistance and stability, perfectly adapting to applications such as the manufacture of clamps, greenhouses, railings, pergolas, windows, tables... It's also perfect for creating urban furniture, such as streetlamps, bike racks and public transport shelters.

Reference	100-08-14-001
Engine power	1,5 kW / 2 CV
Hydraulic motor power	0,75 kW / 1 CV
Tension Single-phase	220 V
Adjustable roller speed	From 3 to 8 RPM
Axes diameter	50 mm or 2"
Useful axes length	90 mm or 3,5"
Dimensions	965x1190x1341 mm
Weight	883 Kg



The CNC ESA S625 control panel which comes standard with the Nargesa MC550CNC CNC pipe bender features total connectivity to comply with the requirements of the industry 4.0 as well as a 7 inch color touchscreen, which combines processing power with an intuitive, easy-to-use graphic interface. With step-by-step digital programming modes, creating a unique piece or large series based on the initial concept is super fast and easy: define the type of tube or profile, the dimensions, the material and the axle roller configuration, and then ask the control for the desired radii. After that, you just have to press a button to get excellent results.



## Accessories for Profile formers MC550 and MC550CNC

### Set of treated steel rollers MC550



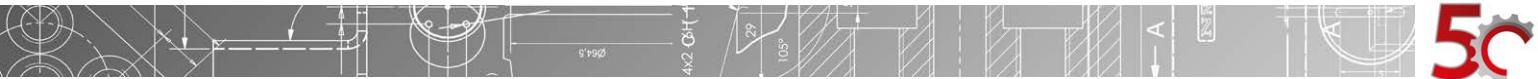
Set of 3 treated steel rollers for steel round pipe or stainless steel, thickness bigger than 2 mm.

When pipe sizes are smaller, two sizes are included in the same roller.

Eg. (25 + 30) o (1/2" + 1"1/4")

*Always clean up the rollers well before using stainless steel not to get the pipe contaminated.*

Tube size in mm		
Reference	Dimensions	Weight
140-08-13-RHT0001	(25 + 30)	40,04 Kg.
140-08-13-RHT0002	(20 + 35)	39,65 Kg.
140-08-13-RHT0003	40	39,93 Kg.
140-08-13-RHT0004	50	36,24 Kg.
140-08-13-RHT0005	60	31,92 Kg.
140-08-13-RHT0006	70	28,57 Kg.
140-08-13-RHT0007	80	23,22 Kg.
For Schedule pipe		
140-08-13-RHISOT0001	(3/8" + 1/2") = (17,2 + 21,3 mm)	43,53 Kg.
140-08-13-RHISOT0002	(1" + 3/4") = (33,7 + 26,9 mm)	38,57 Kg.
140-08-13-RHISOT0003	1" 1/4 = 42,4 mm	39,11 Kg.
140-08-13-RHISOT0004	1" 1/2 = 48,3 mm	36,91 Kg.
140-08-13-RHISOT0005	2" = 60,3 mm	31,77 Kg.
140-08-13-RHISOT0006	2" 1/2 = 73 mm	27,01 Kg.
For inches pipe		
140-08-13-RHWT0001	(1/2" + 1"1/4") = (12,70 + 31,75 mm)	41,67 Kg.
140-08-13-RHWT0002	(1" + 3/4") = (25,40 + 19,05 mm)	42,35 Kg.
140-08-13-RHWT0003	1" 1/2 = 38,1 mm	40,56 Kg.
140-08-13-RHWT0004	2" = 50,8 mm	35,92 Kg.
140-08-13-RHWT0005	2" 1/2 = 63,5 mm	30,28 Kg.
140-08-13-RHWT0006	3" = 76,2 mm	25,31 Kg.



## Accessories for Profile formers MC550 and MC550CNC

### Set of Sustarín rollers MC550



Set of 3 Sustarin rollers for stainless steel pipes, aluminium and delicate materials for thickness smaller than 2.5 mm.

When pipe sizes are smaller, two sizes are included in the same roller. Eg. (25 + 30)

*Susterin rollers do not spoil or contaminate the pipe.*

*For any other size or profile please ask the manufacturer.*

Tube size in mm		
Reference	Dimensions	Weight
140-08-13-RI0001	(25 + 30)	7,24 Kg.
140-08-13-RI0002	(20 + 35)	7,17 Kg.
140-08-13-RI0003	40	7,22 Kg.
140-08-13-RI0004	50	6,55 Kg.
140-08-13-RI0005	60	5,77 Kg.
140-08-13-RI0006	70	5,17 Kg.
140-08-13-RI0007	80	4,20 Kg.
For Schedule pipe		
140-08-13-RIISO0001	(3/8" + 1/2") = (17,2 + 21,3 mm)	7,87 Kg.
140-08-13-RIISO0002	(1" + 3/4") = (33,7 + 26,9 mm)	6,98 Kg.
140-08-13-RIISO0003	1" 1/4 = 42,4 mm	7,07 Kg.
140-08-13-RIISO0004	1" 1/2 = 48,3 mm	6,68 Kg.
140-08-13-RIISO0005	2" = 60,3 mm	5,75 Kg.
140-08-13-RIISO0006	2" 1/2 = 73 mm	4,89 Kg.
For inches pipe		
140-08-13-RIWT0001	(1/2" + 1" 1/4) = (12,70 + 31,75 mm)	7,54 Kg.
140-08-13-RIWT0002	(1" + 3/4") = (25,40 + 19,05 mm)	7,66 Kg.
140-08-13-RIWT0003	1" 1/2 = 38,1 mm	7,33 Kg.
140-08-13-RIWT0004	2" = 50,8 mm	6,50 Kg.
140-08-13-RIWT0005	2" 1/2 = 63,5 mm	5,47 Kg.
140-08-13-RIWT0006	3" = 76,2 mm	4,58 Kg.



## Profile formers

### Profile formers MC650

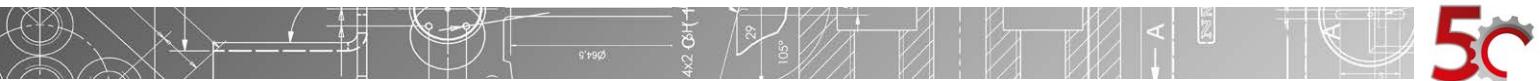
The NEW MC650 Nargesa Section and pipe bending machine is specially designed to carry out mass production through the control, which saves the position of the rollers in each curve to repeat the same operations later, without longitudinal positioning control. It is ideal for manufacturing flanges, greenhouses, railings, large structures for construction... **Maximum capacity for bending round pipe: 4" inches or 101,6 mm.**

Its robustness, axis diameter, reduction capacity, Control Panel and 4.0 Technology make out of it one of the best bending machines on the market in the **three-driven roller category, an essential condition for working tubes and large profiles with a perfect finish.**

Reference	100-08-08-001
Engine power	3 Kw / 4 HP
Hydraulic motor power	0,75 Kw / 1 CV
Tension 3-phased	230/400 V
Adjustable roller speed	From 3 to 8 RPM
Axes diameter	Lower 65 mm or 2,56" Higher 80 mm or 3,15"
Useful axes length	130 mm or 5,11"
Dimensions	990x1310x1300 mm
Weight	1290 Kg



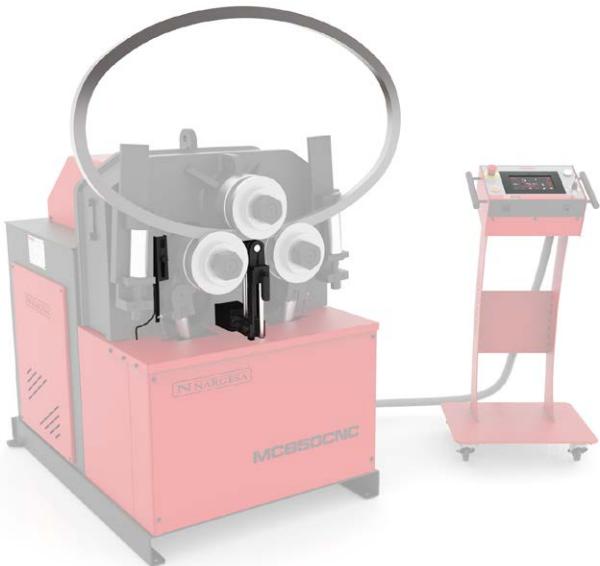
Nargesa MC650 pipe benders are controlled with a very intuitive and easy-to-use 7" color touchscreen with the latest 4.0 technology. You only need to do the first piece and save each step so that the control will repeat the same operations on the other pieces in the same series automatically, without longitudinal positioning control. You can add the type and dimensions of the pipe or profile, the material and position of the rollers to the program so all of this is saved for the following series.



## Accessories for Profile formers MC650

### CNC Bending Kit

Reference: 140-08-08-01000



#### Packaging

Dimensions: 920 x 620 x 340 mm

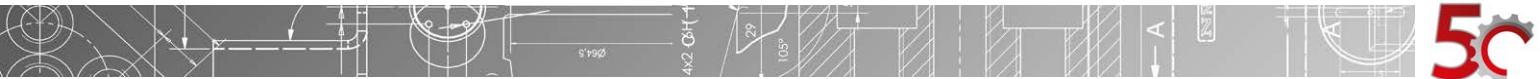
Weight: 37 Kg.

The ALL-NEW CNC bending kit is the ideal accessory designed and manufactured to get the most out of Nargesa MC650 pipe and profile benders. This kit can be installed whenever the customer wants; in other words, some time after having purchased the bending machine.

Its incredible smart predictive system, which is being offered for the first time ever in the world's tube and profile bending industry, guarantees any desired radius right away. Unbeatable ease of programming for operators, speed and reliability for unique pieces and large series. The CNC bending kit minimizes material waste, increases productivity and speeds up the creation of complex pieces. It offers exceptional repetitiveness, a simple, intuitive and powerful interface with CNC ESA S625 control, absolute connectivity for industry 4.0, safety, durability and maximum efficiency.

The interpolated axle control and independent speed management guarantee excellent results and soft transitions, which leads to greater and better productivity with perfect mass-produced pieces and exceptional repetitiveness.

- Absolute positioning control:** With a high-resolution 4096 impulse encoder, quadrature decoder, A+B channels, 5 Vdc, DB9 connector.
- Smart predictive system:** Developed exclusively by Nargesa and built into a CNC ESA S625 control, it helps obtain the desired radius right away which minimizes material waste and speeds up the process of creating complex pieces.
- Easy to program:** Anyone with minimal knowledge can bend highly complex pieces. > Repetitiveness: Guarantees the creation of identical pieces with minimal tolerances.
- Varied bending speed:** The speed can be adjusted irrespective of the bending operation or material to be bent.
- Perfect pieces with soft transitions:** Thanks to the interpolated axle control with independent speed adjustment during bending.
- CNC bending software:** Gets radii right away, axle interpolation, bend direction configuration, soft transitions, step-by-step, digital mode.
- Photocell:** 300 mm long-range direct reflection, PNP NO output, M12 connector.
- Gas spring:** 200 newton release speed, lock knob, guided by linear sliding bearings, rotating and bendable handle.
- Maximum speed:** Up to 90 mm/s
- Completely automatic bending:** Control button with an indicator light.
- Material savings:** Up to 90% less material waste.



## Profile formers

### Profile formers MC650CNC

The all-new Nargesa MC650CNC CNC pipe bender is the perfect solution for large mass production requiring maximum repetitiveness as well as the creation of unique pieces **thanks to the processing power offered by its advanced CNC control panel with a touch graphic interface**. Plus, its smart predictive system for bend adjustment makes it possible to obtain the radii requested right away to reduce material waste by up to 90%.

Its operating capacity and power make it the best choice for manufacturing a wide variety of industrial and structural applications.

Reference	100-08-15-001
Engine power	3 Kw / 4 CV
Hydraulic motor power	0,75 Kw / 1 CV
Tension 3-phased	230/400 V
Adjustable roller speed	From 3 to 8 r.p.m.
Axes diameter	Lower 65 mm or 2,56" Higher 80 mm or 3,15"
Useful axes length	130 mm or 5,11"
Dimensions	990x1310x1300 mm
Weight	1305 Kg



**NEW**



The CNC ESA S625 control panel which comes standard with the Nargesa MC650CNC CNC pipe bender features total connectivity to comply with the requirements of the industry 4.0 as well as a 7 inch color touchscreen, which combines processing power with an intuitive, easy-to-use graphic interface. **With step-by-step digital programming modes, creating a unique piece or large series based on the initial concept is super fast and easy: define the type of tube or profile, the dimensions, the material and the axle roller configuration, and then ask the control for the desired radii. After that, you just have to press a button to get excellent results.**



## Accessories for Profile formers MC650 and MC650CNC

### Set of treated steel rollers MC650



Set of 3 treated steel rollers for steel round pipe or stainless steel, thickness bigger than 2 mm.

When pipe sizes are smaller, two sizes are included in the same roller.

Eg. (25 + 30) o (1/2" + 1"1/4")

*Always clean up the rollers well before using stainless steel not to get the pipe contaminated.*

Tube size in mm		
Reference	Dimensions	Weight
140-08-08-RHT0001	(25 + 30)	45,30 Kg.
140-08-08-RHT0002	(20 + 35)	44,80 Kg.
140-08-08-RHT0003	40	45,30 Kg.
140-08-08-RHT0004	50	40,80 Kg.
140-08-08-RHT0005	60	35,70 Kg.
140-08-08-RHT0006	70	64,70 Kg.
140-08-08-RHT0007	80	57,40 Kg.
140-08-08-RHT0008	90	49,50 Kg.
140-08-08-RHT0009	100	41,00 Kg.
For Schedule pipe		
140-08-08-RHISOT0001	(3/8" + 1/2") = (17,2 + 21,3 mm)	49,50 Kg.
140-08-08-RHISOT0002	(1" + 3/4") = (33,7 + 26,9 mm)	43,75 Kg.
140-08-08-RHISOT0003	1" 1/4 = 42,4 mm	44,40 Kg.
140-08-08-RHISOT0004	1" 1/2 = 48,3 mm	41,60 Kg.
140-08-08-RHISOT0005	2" = 60,3 mm	35,50 Kg.
140-08-08-RHISOT0006	2" 1/2 = 73 mm	60,20 Kg.
140-08-08-RHWT0007	3" = 88,9 mm	50,35 Kg.
140-08-08-RHWT0008	3" 1/2 = 101,6 mm	39,50 Kg.
For inches pipe		
140-08-08-RHWT0001	(1/2" + 1"1/4") = (12,70 + 31,75 mm)	47,25 Kg.
140-08-08-RHWT0002	(1" + 3/4") = (25,40 + 19,05 mm)	48,00 Kg.
140-08-08-RHWT0003	1" 1/2 = 38,1 mm	45,90 Kg.
140-08-08-RHWT0004	2" = 50,8 mm	40,70 Kg.
140-08-08-RHWT0005	2" 1/2 = 63,5 mm	33,70 Kg.
140-08-08-RHWT0006	3" = 76,2 mm	60,20 Kg.
140-08-08-RHWT0007	3" 1/2 = 88,9 mm	50,35 Kg.
140-08-08-RHWT0008	4" = 101,6 mm	39,50 Kg.



### Set of Steel Treated Rollers UPN-100-120mm

Set of 3 steel treated rollers for UPN mild steel or stainless steel profiles.

*Always clean up the rollers well before using stainless steel not to get the pipe contaminated.*

Reference	Dimensions	Weight
140-08-08-RHT0010	Adjustable from 100 to 120 mm	52,72 Kg.



## Accessories for Profile formers MC650 and MC650CNC

### Set of Sustarín rollers MC650



Set of 3 Sustarín rollers for stainless steel pipes, aluminium and delicate materials for thickness smaller than 2.5 mm.

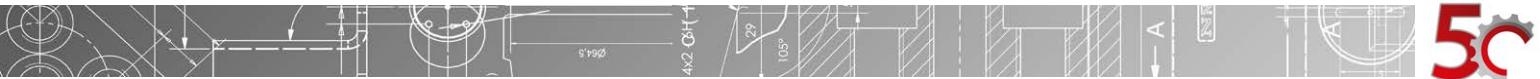
When pipe sizes are smaller, two sizes are included in the same roller.

Eg. (25 + 30)

*Susterin rollers do not spoil or contaminate the pipe.*

*For any other size or profile please ask the manufacturer.*

Tube size in mm		
Reference	Dimensions	Weight
140-08-08-RI0001	(25 + 30)	9,35 Kg.
140-08-08-RI0002	(20 + 35)	9,25 Kg.
140-08-08-RI0003	40	9,30 Kg.
140-08-08-RI0004	50	8,50 Kg.
140-08-08-RI0005	60	7,60 Kg.
140-08-08-RI0006	70	6,50 Kg.
140-08-08-RI0007	80	11,80 Kg.
140-08-08-RI0008	90	10,35 Kg.
140-08-08-RI0009	100	8,80 Kg.
For Schedule pipe		
140-08-08-RIISOT0001	(3/8" + 1/2") = (17,2 + 21,3 mm)	10,10 Kg.
140-08-08-RIISOT0002	(1" + 3/4") = (33,7 + 26,9 mm)	9,00 Kg.
140-08-08-RIISOT0003	1" 1/4 = 42,4 mm	9,15 Kg.
140-08-08-RIISOT0004	1" 1/2 = 48,3 mm	8,65 Kg.
140-08-08-RIISOT0005	2" = 60,3 mm	7,55 Kg.
140-08-08-RIISOT0006	2" 1/2 = 73 mm	12,30 Kg.
140-08-08-RIWT0007	3" = 88,9 mm	10,50 Kg.
140-08-08-RIWT0008	3" 1/2 = 101,6 mm	8,50 Kg.
For inches pipe		
140-08-08-RIWT0001	(1/2" + 1" 1/4") = (12,70 + 31,75 mm)	9,65 Kg.
140-08-08-RIWT0002	(1" + 3/4") = (25,40 + 19,05 mm)	9,80 Kg.
140-08-08-RIWT0003	1" 1/2 = 38,1 mm	9,40 Kg.
140-08-08-RIWT0004	2" = 50,8 mm	8,45 Kg.
140-08-08-RIWT0005	2" 1/2 = 63,5 mm	7,25 Kg.
140-08-08-RIWT0006	3" = 76,2 mm	12,30 Kg.
140-08-08-RIWT0007	3" 1/2 = 88,9 mm	10,50 Kg.
140-08-08-RIWT0008	4" = 101,6 mm	8,50 Kg.



## Digital radius gauge

### High precision digital radius gauge

#### Especially designed for measuring radii on profiles.

The High precision digital radius gauge allows the user to have a direct and immediate reading of inner and outer radius in a range from 55 to 11.250 millimeters or from 2" to 443" inches.

The High precision digital radius gauge measures radii in spherical objects such as tubes, profiles and pipes in a quick and accurate way.

It is really fast and easy to use! It indicates the inner or outer radius of the part we are bending without removing it from the machine and without needing to previously draw and cut a guide template.

<b>Reference</b>	<b>140-MED08-00001</b>
<b>Measurement scope</b>	De 55 a 11.250 m o de 2" a 443"
<b>Error tolerance over the radius</b>	$\Delta R = (0.01*R)mm$
<b>Error toler. over the touch sensor</b>	$\Delta L = 0.02mm$
<b>Power supply</b>	Pila de litio 3V CR2032
<b>Radius gauge dimensions</b>	250x60x40 mm
<b>100 arc meter measuring range</b>	R 65 to 625mm / R 2" to 24"
<b>200 arc meter measuring range</b>	R 450 to 2.500mm / R 18" to 98"
<b>300 arc meter measuring range</b>	R 650 to 11.250mm / R 25" to 443"
<b>Weight</b>	1,3 Kg



- Includes 3V CR2032 lithium battery
- Includes 3 measurement arcs (100, 200 and 300 mm).
- Supplied with a shock-resistant stainless Steel briefcase.

## Accessories for Digital radius gauge

### 400mm High precision arc meter for 20000mm radius

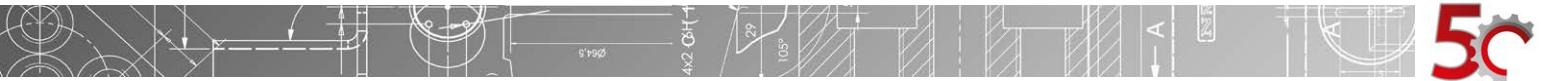


**Reference: 140-MED08-00002**

Additional arc to measure up to 20,000mm / 787"

**Measuring range:** From R 1,150 to 20,000mm / From R 45" to 787"

**Weight:** 0,300Kg.



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## Non-Mandrel Pipe Benders

### Non-mandrel pipe bender CC60

The new generation of CC60 non-mandrel pipe benders makes up to 180° curves on hollow pipes with the best finish, the greatest speed and thinner than other machines in the same category. Pipes may be round, oval, square, rectangular... made of different materials, iron, aluminum, stainless steel, copper...

**Maximum working stroke:** 60.3 mm or 2" Schedule-40 or 2" 1/4 x 4 mm.

<b>Reference</b>	100-17-01-001
<b>Engine power</b>	1,1 KW / 1,5 HP
<b>Tension</b>	230 V Single-phase 50/60 Hz
<b>Automatic rotation speed</b>	From 1,1 to 3,5 r.p.m.
<b>Intensity</b>	5 A
<b>Minimum radius of curvature</b>	3 times the pipe diameter
<b>Maximum radius of curvature</b>	320 mm
<b>Maximum working stroke on round steel pipe</b>	60,3mm or 2" Schedule-40 or 2" 1/4 x 4mm.
<b>Maximum angle of curvature</b>	180°
<b>Dimensions</b>	630x1000x1150 mm
<b>Weight</b>	365 Kg



Nargesa tube and pipes benders are controlled with a very intuitive and easy-to-use 7" color touchscreen with the latest 4.0 technology. Just enter the pipe dimensions, thickness, angle of the curve or curves and choose a die from the library and the control programs the rest of the parameters automatically; elastic recovery correction (springback), recommended rotation speed, whether a tool post support is necessary or not, and if the intended curve is possible... All of this may be modified by the end user based on their own needs. These are some of the most relevant features of this control system.



## Accessories for Non-Mandrel Pipe Bender CC60

### Accessories for round pipes in millimeters • 12 to 60 mm

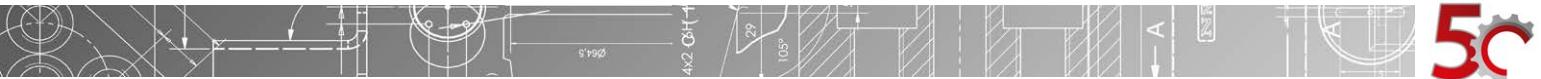


Rollers made of treated Steel. Units suitable for bending all types of round pipes 12 to 60 millimeters.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 12mm Radius 60</b>				<b>REF: 140-17-01-10012</b>
12 mm	60 mm	1 mm	5 mm	3,26 Kg
<b>Set diameter 15mm Radius 60</b>				<b>REF: 140-17-01-10001</b>
15 mm	4D=60 mm	1 mm	5 mm	3,18 Kg
<b>Set diameter 18mm Radius 60</b>				<b>REF: 140-17-01-10010</b>
18 mm	60 mm	1 mm	5 mm	3,11 Kg
<b>Set diameter 20mm Radius 60</b>				<b>REF: 140-17-01-10002</b>
20 mm	3D=60 mm	1 mm	5 mm	3,22 Kg
<b>Set diameter 22mm Radius 66</b>				<b>REF: 140-17-01-10014</b>
22 mm	3D=66 mm	1 mm	5 mm	4,10 Kg
<b>Set diameter 25mm Radius 75</b>				<b>REF: 140-17-01-10003</b>
25 mm	3D=75 mm	1,2 mm	5 mm	5,55 Kg
<b>Set diameter 28mm Radius 84</b>				<b>REF: 140-17-01-10011</b>
28 mm	3D=84 mm	1,2 mm	5 mm	7,28 Kg
<b>Set diameter 30mm Radius 90</b>				<b>REF: 140-17-01-10004</b>
30 mm	3D=90 mm	1,2 mm	5 mm	8,29 Kg
<b>Set diameter 32mm Radius 98</b>				<b>REF: 140-17-01-10013</b>
32 mm	3D=98 mm	1,5 mm	5 mm	10,16 Kg
<b>Set diameter 35mm Radius 105</b>				<b>REF: 140-17-01-10005</b>
35 mm	3D=105 mm	1,5 mm	5 mm	12,14 Kg
<b>Set diameter 40mm Radius 120</b>				<b>REF: 140-17-01-10006</b>
40 mm	3D=120 mm	1,5 mm	5 mm	17,11 Kg
<b>Set diameter 50mm Radius 150</b>				<b>REF: 140-17-01-10007</b>
50 mm	3D=150 mm	2 mm	5 mm	31,41 Kg
<b>Set diameter 60mm Radius 180</b>				<b>REF: 140-17-01-10008</b>
60 mm	3D=180 mm	2 mm	2,5 mm	40,88 Kg



## Accessories for Non-Mandrel Pipe Bender CC60

### Accessories for 60mm round pipes



Rollers made of treated steel. Suitable kit to bend 60mm tube of 3mm wall thickness or thicker.

The following is supplied with the unit: A main roller, a clamp with a fastener, a support holder

*Check with the manufacturer for other dimensions*

*Supporting Roller Kit REF: 140-17-01-00002 is required*

Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 60mm Radius 180 with support holder</b>				<b>REF: 140-17-01-10009</b>
60 mm	3D=180 mm	3mm	4 mm	40,58 Kg

*\* The walls with more thickness to the established one and the materials with more resistance, reduce the capacities of the machine.*



## Accessories for Non-Mandrel Pipe Bender CC60

### Accessories for round pipes 3/8" to 1" 1/2 Schedule



Rollers made of treated Steel. Units suitable for bending all types of round pipes 3/8" to 1" 1/2 Schedule.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Ø Ext.	Ø Ext.	Radius	SCH10	SCH40	SCH80	SCH160	Weight
<b>Set diameter 17,10mm Radius 60mm Diameter 3/8" Schedule</b>							<b>REF: 140-17-01-20001</b>
3/8"	17,1 mm	60 mm	1,65 mm	2,31 mm	3,20 mm	--	4,22 Kg
<b>Set diameter 21,30mm Radius 63,9mm Diameter 1/2" Schedule</b>							<b>REF: 140-17-01-20002</b>
1/2"	21,3 mm	3D=63,9 mm	2,11 mm	2,77 mm	3,73 mm	4,78 mm	3,56 Kg
<b>Set diameter 26,90mm Radius 80,1mm Diameter 3/4" Schedule</b>							<b>REF: 140-17-01-20003</b>
3/4"	26,9 mm	3D=80,1 mm	2,11 mm	2,87 mm	3,91 mm	5,56 mm	6,74 Kg
<b>Set diameter 33,70mm Radius 101,1mm Diameter 1" Schedule</b>							<b>REF: 140-17-01-20004</b>
1"	33,7 mm	3D=101,1 mm	2,77 mm	3,38 mm	4,55 mm	6,35 mm	11,18 Kg
<b>Set diameter 42,40mm Radius 127,2mm Diameter 1" 1/4 Schedule</b>							<b>REF: 140-17-01-20005</b>
1" 1/4	42,4 mm	3D=127,2 mm	2,77 mm	3,56 mm	4,85 mm	6,35 mm	18,86 Kg
<b>Set diameter 48,30mm Radius 144,9mm Diameter 1" 1/2 Schedule</b>							<b>REF: 140-17-01-20006</b>
1" 1/2	48,3 mm	3D=144,9 mm	2,77 mm	3,68 mm	5,08 mm	--	27,05 Kg

### Accessories for 2" Schedule round pipes



Rollers made of treated steel. Suitable kit to bend 2" tube of 2,77mm wall thickness or thicker.

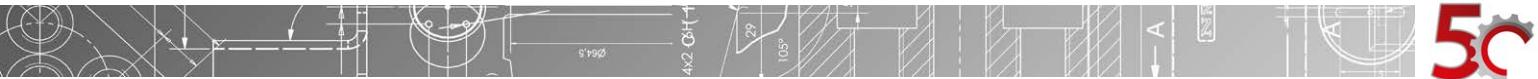
The following is supplied with the unit: A main roller, a clamp with a fastener, a support holder

*Check with the manufacturer for other dimensions*

*Supporting Roller Kit REF: 140-17-01-00002 is required*

Ø Ext.	Ø Ext.	Radius	SCH10	SCH40	SCH80	SCH160	Weight
<b>Set diameter 60,3mm Radius 180,9mm Diameter 2" Schedule</b>							<b>REF: 140-17-01-20007</b>
2"	60,3 mm	3D=180,9 mm	2,77 mm	3,91 mm	--	--	45,75 Kg

*\* All capacities are based on the norm of carbon steel tubes according to ASTM, Standard A-53 grade A with a maximum resistance strength of 330MPa. The walls with more thickness to the established one and the materials with more resistance, reduce the capacities of the machine. Check with your material supplier for the specifications of this one.*



## Accessories for Non-Mandrel Pipe Bender CC60

### Accessories for round pipes in inches · 1/2" to 2" 1/4 inches

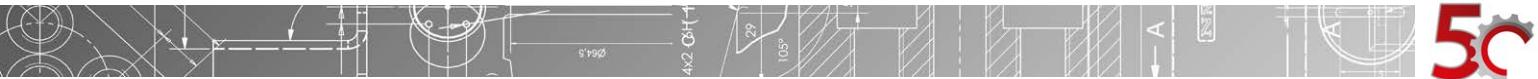


Rollers made of treated Steel. Units suitable for bending all types of round pipes 1/2" to 2" 1/4 inches.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 9,52mm Radius 60mm Diameter 3/8" inches</b>					<b>REF: 140-17-01-30012</b>
3/8"	9,52 mm	60 mm	1 mm	4 mm	3,40 Kg
<b>Set diameter 12,7mm Radius 60mm Diameter 1/2" inches</b>					<b>REF: 140-17-01-30011</b>
1/2"	12,7 mm	60 mm	1 mm	4 mm	3,37 Kg
<b>Set diameter 15,88mm Radius 60mm Diameter 5/8" inches</b>					<b>REF: 140-17-01-30001</b>
5/8"	15,88 mm	60 mm	1 mm	4 mm	3,61 Kg
<b>Set diameter 19,05mm Radius 60mm Diameter 3/4" inches</b>					<b>REF: 140-17-01-30002</b>
3/4"	19,05 mm	60 mm	1 mm	4 mm	2,79 Kg
<b>Set diameter 22,22mm Radius 66mm Diameter 7/8" inches</b>					<b>REF: 140-17-01-10014</b>
7/8"	22,22 mm	66 mm	1 mm	5 mm	4,10 Kg
<b>Set diameter 25,40mm Radius 76,20mm Diameter 1" inches</b>					<b>REF: 140-17-01-30003</b>
1"	25,40 mm	3D=76,2 mm	1,2 mm	5 mm	5,72 Kg
<b>Set diameter 28,57mm Radius 85,7mm Diameter 1" 1/8 inches</b>					<b>REF: 140-17-01-30009</b>
1" 1/8	28,57 mm	3D=85,7 mm	1,5 mm	5 mm	7,70 Kg
<b>Set diameter 31,75mm Radius 95,25mm Diameter 1" 1/4 inches</b>					<b>REF: 140-17-01-30004</b>
1" 1/4	31,75 mm	3D=95,25 mm	1,5 mm	6 mm	10,21 Kg
<b>Set diameter 38,10mm Radius 114,30mm Diameter 1" 1/2 inches</b>					<b>REF: 140-17-01-30005</b>
1" 1/2	38,10 mm	3D=114,3 mm	1,5 mm	7 mm	15,69 Kg
<b>Set diameter 44,45mm Radius 133,35mm Diameter 1" 3/4 inches</b>					<b>REF: 140-17-01-30010</b>
1" 3/4	44,45 mm	3D=133,35 mm	2 mm	5 mm	21,86 Kg
<b>Set diameter 50,8mm Radius 152,4mm Diameter 2" inches</b>					<b>REF: 140-17-01-30006</b>
2"	50,80 mm	3D=152,4 mm	2 mm	5 mm	32,24 Kg
<b>Set diameter 57,15mm Radius 171,45mm Diameter 2" 1/4 inches</b>					<b>REF: 140-17-01-30007</b>
2" 1/4	57,15 mm	3D=171,45 mm	2 mm	2,5 mm	36,13 Kg



## Accessories for Non-Mandrel Pipe Bender CC60

### Accessories for 2" 1/4 round pipes



Rollers made of treated Steel. Suitable kit to bend 2" 1/4 tube of 3mm wall thickness or thicker.

The following is supplied with the unit: A main roller, a clamp with a fastener, a support holder

*Check with the manufacturer for other dimensions*

*Supporting Roller Kit REF: 140-17-01-00002 is required*

Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 57,15mm Radius 171,45mm Diameter 2" 1/4 with support holder</b>					<b>REF: 140-17-01-30008</b>
2" 1/4	57,15 mm	3D=171,45 mm	3 mm	4 mm	35,91 Kg

*\* The walls with more thickness to the established one and the materials with more resistance, reduce the capacities of the machine.*

### Supporting Roller Kit CC60

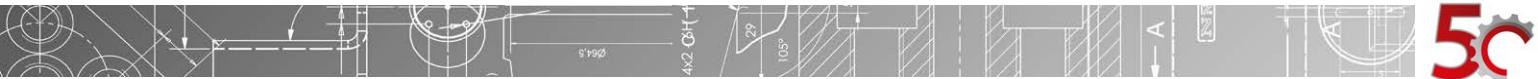


**Reference: 140-17-01-00002**

The CC60 Supporting Roller Kit is used to bend:

- 60mm tube of 3mm wall thickness or thicker
- 2" Schedule tube of 2,77mm wall thickness or thicker
- 2" 1/4 tube of 3mm wall thickness or thicker

**Weight: 9,85Kg**



## Accessories for Non-Mandrel Pipe Bender CC60

### Accessories for square pipes in millimeters · 20 to 40 mm



Rollers made of treated Steel. Units suitable for bending all types of square pipes 20 to 40mm.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Section	Radius	Min. thickness	Max. thickness	Weight
<b>Square Tube Die Set 20mm Radius 100mm</b>				<b>REF: 140-17-01-10101</b>
20x20 mm	5D=100 mm	1,5 mm	4 mm	11,1 Kg
<b>Square Tube Die Set 25mm Radius 115mm</b>				<b>REF: 140-17-01-10102</b>
25x25 mm	115 mm	2 mm	4 mm	14,75 Kg
<b>Square Tube Die Set 30mm Radius 135mm</b>				<b>REF: 140-17-01-10103</b>
30x30 mm	135 mm	2 mm	4 mm	22 Kg
<b>Square Tube Die Set 40mm Radius 165mm</b>				<b>REF: 140-17-01-10104</b>
40x40 mm	165 mm	2 mm	5 mm	34,15 Kg

### Accessories for square pipes in inches · 3/4" to 1" 1/2 inches



Rollers made of treated Steel. Units suitable for bending all types of square pipes 3/4" to 1" 1/2 inches.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Section	Section	Radius	Radius	Min. Thick.	Max. Thick.	Weight
<b>Square Tube Die Set 3/4" (19,05mm) Radius 4" (101,6mm)</b>					<b>REF: 140-17-01-30101</b>	
3/4"x3/4"	19,05x19,05mm	4"	101,6mm	1,5 mm	4 mm	11,5 Kg
<b>Square Tube Die Set 1" (25,4mm) Radius 4,5" (114,3mm)</b>					<b>REF: 140-17-01-30102</b>	
1"x1"	25,4x25,4mm	4" 1/2	114,3mm	2 mm	4 mm	14,6 Kg
<b>Square Tube Die Set 1" 1/4 (31,75mm) Radius 5,5" (139,7mm)</b>					<b>REF: 140-17-01-30103</b>	
1" 1/4x1" 1/4	31,75x31,75mm	5" 1/2	139,7mm	2 mm	4 mm	23,3 Kg
<b>Square Tube Die Set 1" 1/2 (38,1mm) Radius 6,5" (165,1mm)</b>					<b>REF: 140-17-01-30104</b>	
1" 1/2x1" 1/2	38,1x38,1mm	6" 1/2	165,1mm	2 mm	5 mm	34,6 Kg



## Accessories for Non-Mandrel Pipe Bender CC60

### Nargesa BEND8 aerosol lubricant



This is a high-additive and low-viscosity aerosol oil. Contains PTFE. Does not contain silicone.

- Enables the finish on the outer bend
- Inhibits roughness and inner marks
- Reduces wear of the tooling
- Especially designed for tubes of small thickness
- Lubricates to reduce friction
- Avoids and dissolves corrosion
- Gives shine and protects
- Cleans up and removes dirt

Reference	Description	Quantity	Weight
060-SPR-00003	Aerosol lubricant bottle	400ml	0,39Kg
060-SPR-00004	Box of 12 bottles	12x400ml	4,83Kg

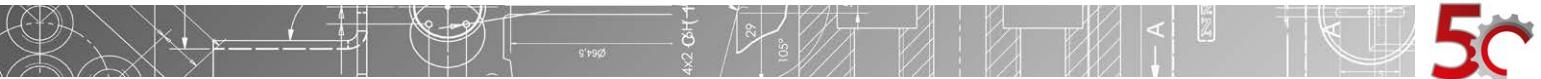
### CC60 2-axis positioning gauge



The gauge of the CC60 allows to make mass produced parts, much faster, more accurate and repetitively.

- Adjustable longitudinal positioning with 6 positions
- Angular head rotation every 5 degrees
- Four-clamp plate adjustable to round and square tube
- Longitudinal movement with high precision linear guides
- Automatic anti-collision control
- Easy handling and preparation for difficult parts

Reference	Gauge length	Maximum capacity	Weight
140-17-01-50000	3000mm	60,3mm, 2" Schedule	125Kg



## Non-Mandrel Pipe Benders

### Non-mandrel pipe bender CC90

The new generation of CC90 non-mandrel pipe benders makes up to 180° curves on hollow pipes with the best finish, the greatest speed and thinner than other machines in the same category. Pipes may be round, oval, square, rectangular...made of different materials, iron, aluminum, stainless steel, copper...

**Maximum working stroke:** 88.9 mm or 3" Schedule 40 or 3" 1/2 Whitworth or 3" ISO x 6 mm.

<b>Reference</b>	100-17-02-001
<b>Engine power</b>	2,2 Kw / 3 HP
<b>Tension</b>	230/400 V 50/60 Hz
<b>Automatic rotation speed</b>	From 0,75 to 2,2 r.p.m.
<b>Intensity</b>	9/5 A
<b>Minimum radius of curvature</b>	3 times the pipe diameter
<b>Maximum radius of curvature</b>	390 mm
<b>Maximum working stroke on round steel pipe</b>	90mm or 3" Schedule-40 or 3" 1/2 x 6mm.
<b>Maximum angle of curvature</b>	180°
<b>Dimensions</b>	700x1300x1360 mm
<b>Weight</b>	860 Kg



Nargesa tube and pipes benders are controlled with a very intuitive and easy-to-use 7" color touchscreen with the latest 4.0 technology. Just enter the pipe dimensions, thickness, angle of the curve or curves and choose a die from the library and the control programs the rest of the parameters automatically; elastic recovery correction (springback), recommended rotation speed, whether a tool post support is necessary or not, and if the intended curve is possible... All of this may be modified by the end user based on their own needs. These are some of the most relevant features of this control system.



## Accessories for Non-Mandrel Pipe Bender CC90

### Accessories for round pipes in millimeters • 12 to 80 mm

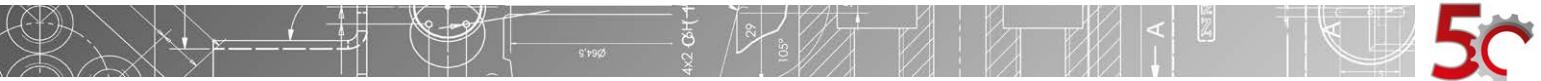


Rollers made of treated Steel. Units suitable for bending all types of round pipes 12 to 80 millimeters.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 12mm Radius 60</b>				REF: 140-17-01-10012
12 mm	60 mm	1 mm	5 mm	3,26 Kg
<b>Set diameter 15mm Radius 60</b>				REF: 140-17-01-10001
15 mm	4D=60 mm	1 mm	5 mm	3,18 Kg
<b>Set diameter 18mm Radius 60</b>				REF: 140-17-01-10010
18 mm	60 mm	1 mm	5 mm	3,11 Kg
<b>Set diameter 20mm Radius 60</b>				REF: 140-17-01-10002
20 mm	3D=60 mm	1 mm	5 mm	3,22 Kg
<b>Set diameter 22mm Radius 66</b>				REF: 140-17-01-10014
22 mm	3D=66 mm	1 mm	5 mm	4,10 Kg
<b>Set diameter 25mm Radius 75</b>				REF: 140-17-01-10003
25 mm	3D=75 mm	1,2 mm	5 mm	5,55 Kg
<b>Set diameter 28mm Radius 84</b>				REF: 140-17-01-10011
28 mm	3D=84 mm	1,2 mm	5 mm	7,28 Kg
<b>Set diameter 30mm Radius 90</b>				REF: 140-17-01-10004
30 mm	3D=90 mm	1,2 mm	5 mm	8,29 Kg
<b>Set diameter 32mm Radius 98</b>				REF: 140-17-01-10013
32 mm	3D=98 mm	1,5 mm	5 mm	10,16 Kg
<b>Set diameter 35mm Radius 105</b>				REF: 140-17-01-10005
35 mm	3D=105 mm	1,5 mm	5 mm	12,14 Kg
<b>Set diameter 40mm Radius 120</b>				REF: 140-17-01-10006
40 mm	3D=120 mm	1,5 mm	5 mm	17,11 Kg
<b>Set diameter 50mm Radius 150</b>				REF: 140-17-01-10007
50 mm	3D=150 mm	2 mm	5 mm	31,41 Kg
<b>Set diameter 60mm Radius 180</b>				REF: 140-17-01-10008
60 mm	3D=180 mm	2 mm	5 mm	40,88 Kg
<b>Set diameter 70mm Radius 210</b>				REF: 140-17-02-10001
70 mm	3D=210 mm	3,6 mm	6 mm	72,40 Kg
<b>Set diameter 80mm Radius 240</b>				REF: 140-17-02-10002
80 mm	3D=240 mm	4 mm	5 mm	88,17 Kg



## Accessories for Non-Mandrel Pipe Bender CC90

### Accessories for 90mm round pipes



Rollers made of treated steel. Suitable kit to bend 90mm tube of 4mm wall thickness or thicker.

The following is supplied with the unit: A main roller, a clamp with a fastener, a support holder

*Check with the manufacturer for other dimensions*

*Supporting Roller Kit REF: 140-17-02-00002 is required*

Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 90mm Radio 270</b>				<b>REF: 140-17-02-10003</b>
90 mm	3D=270 mm	4 mm	5 mm	114,36 Kg

*\* The walls with more thickness to the established one and the materials with more resistance, reduce the capacities of the machine.*



## Accessories for Non-Mandrel Pipe Bender CC90

### Accessories for round pipes 3/8" to 2" 1/2 Schedule



Rollers made of treated Steel. Units suitable for bending all types of round pipes 3/8" to 2" 1/2 Schedule.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Ø Ext.	Ø Ext.	Radius	SCH10	SCH40	SCH80	SCH160	Weight
<b>Set diameter 17,10mm Radius 60mm Diameter 3/8" Schedule</b>							<b>REF: 140-17-01-20001</b>
3/8"	17,1 mm	60 mm	1,65 mm	2,31 mm	3,20 mm	--	4,22 Kg
<b>Set diameter 21,30mm Radius 63,9mm Diameter 1/2" Schedule</b>							<b>REF: 140-17-01-20002</b>
1/2"	21,3 mm	3D=63,9 mm	2,11 mm	2,77 mm	3,73 mm	4,78 mm	3,56 Kg
<b>Set diameter 26,90mm Radius 80,1mm Diameter 3/4" Schedule</b>							<b>REF: 140-17-01-20003</b>
3/4"	26,9 mm	3D=80,1 mm	2,11 mm	2,87 mm	3,91 mm	5,56 mm	6,74 Kg
<b>Set diameter 33,70mm Radius 101,1mm Diameter 1" Schedule</b>							<b>REF: 140-17-01-20004</b>
1"	33,7 mm	3D=101,1 mm	2,77 mm	3,38 mm	4,55 mm	6,35 mm	11,18 Kg
<b>Set diameter 42,40mm Radius 127,2mm Diameter 1" 1/4 Schedule</b>							<b>REF: 140-17-01-20005</b>
1" 1/4	42,4 mm	3D=127,2 mm	2,77 mm	3,56 mm	4,85 mm	6,35 mm	18,86 Kg
<b>Set diameter 48,30mm Radius 144,9mm Diameter 1" 1/2 Schedule</b>							<b>REF: 140-17-01-20006</b>
1" 1/2	48,3 mm	3D=144,9 mm	2,77 mm	3,68 mm	5,08 mm	--	27,05 Kg
<b>Set diameter 60,30mm Radius 180,9mm Diameter 2" Schedule</b>							<b>REF: 140-17-02-20001</b>
2"	60,30 mm	3D=180,9 mm	2,77 mm	3,91 mm	5,54 mm	--	45,75 Kg
<b>Set diameter 73mm Radius 219mm Diameter 2" 1/2 Schedule</b>							<b>REF: 140-17-02-20002</b>
2" 1/2	73,0 mm	3D=219 mm	3,05 mm	5,16 mm	7,01 mm	--	72,00 Kg

### Accessories for 3" Schedule round pipes



Rollers made of treated steel. Suitable kit to bend 3" Schedule tube of 3,05mm wall thickness or thicker.

The following is supplied with the unit: A main roller, a clamp with a fastener, a support holder

*Check with the manufacturer for other dimensions*

*Supporting Roller Kit REF: 140-17-02-00002 is required*

Ø Ext.	Ø Ext.	Radius	SCH10	SCH40	SCH80	SCH160	Weight
<b>Set diameter 88,9mm Radius 266,7mm Diameter 3" Schedule</b>							<b>REF: 140-17-02-30003</b>
3"	88,9 mm	3D=266,7 mm	3,05 mm	5,49 mm	--	--	110,80 Kg

*\* All capacities are based on the norm of carbon steel tubes according to ASTM, Standard A-53 grade A with a maximum resistance strength of 330MPa. The walls with more thickness to the established one and the materials with more resistance, reduce the capacities of the machine. Check with your material supplier for the specifications of this one.*



## Accessories for Non-Mandrel Pipe Bender CC90

### Accessories for round pipes in inches · 1/2" to 3" inches

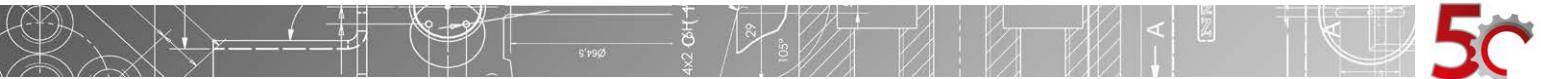


Rollers made of treated Steel. Units suitable for bending all types of round pipes 1/2" to 3" inches.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 9,52mm Radius 60mm Diameter 3/8" inches</b>					<b>REF: 140-17-01-30012</b>
3/8"	9,52 mm	60 mm	1 mm	4 mm	3,40 Kg
<b>Set diameter 12,7mm Radius 60mm Diameter 1/2" inches</b>					<b>REF: 140-17-01-30011</b>
1/2"	12,7 mm	60 mm	1 mm	4 mm	3,37 Kg
<b>Set diameter 15,88mm Radius 60mm Diameter 5/8" inches</b>					<b>REF: 140-17-01-30001</b>
5/8"	15,88 mm	60 mm	1 mm	4 mm	3,61 Kg
<b>Set diameter 19,05mm Radius 60mm Diameter 3/4" inches</b>					<b>REF: 140-17-01-30002</b>
3/4"	19,05 mm	60 mm	1 mm	4 mm	2,79 Kg
<b>Set diameter 22,22mm Radius 66mm Diameter 7/8" inches</b>					<b>REF: 140-17-01-10014</b>
7/8"	22,22 mm	66 mm	1 mm	5 mm	4,10 Kg
<b>Set diameter 25,40mm Radius 76,20mm Diameter 1" inches</b>					<b>REF: 140-17-01-30003</b>
1"	25,40 mm	3D=76,2 mm	1,2 mm	5 mm	5,72 Kg
<b>Set diameter 28,57mm Radius 85,7mm Diameter 1" 1/8 inches</b>					<b>REF: 140-17-01-30009</b>
1" 1/8	28,57 mm	3D=85,7 mm	1,5 mm	5 mm	7,70 Kg
<b>Set diameter 31,75mm Radius 95,25mm Diameter 1" 1/4 inches</b>					<b>REF: 140-17-01-30004</b>
1" 1/4	31,75 mm	3D=95,25 mm	1,5 mm	6 mm	10,21 Kg
<b>Set diameter 38,10mm Radius 114,30mm Diameter 1" 1/2 inches</b>					<b>REF: 140-17-01-30005</b>
1" 1/2	38,10 mm	3D=114,3 mm	1,5 mm	7 mm	15,69 Kg
<b>Set diameter 44,45mm Radius 133,35mm Diameter 1" 3/4 inches</b>					<b>REF: 140-17-01-30010</b>
1" 3/4	44,45 mm	3D=133,35 mm	2 mm	5 mm	21,86 Kg
<b>Set diameter 50,8mm Radius 152,4mm Diameter 2" inches</b>					<b>REF: 140-17-01-30006</b>
2"	50,80 mm	3D=152,4 mm	2 mm	5 mm	32,24 Kg
<b>Set diameter 57,15mm Radius 171,45mm Diameter 2" 1/4 inches</b>					<b>REF: 140-17-01-30007</b>
2" 1/4	57,15 mm	3D=171,45 mm	2 mm	5 mm	36,13 Kg
<b>Set diameter 63,5mm Radius 190,5mm Diameter 2" 1/2 inches</b>					<b>REF: 140-17-02-30001</b>
2" 1/2	63,50 mm	3D=190,5 mm	3 mm	8,64 mm	40,50 Kg
<b>Set diameter 76,2mm Radius 228,6mm Diameter 3" inches</b>					<b>REF: 140-17-02-30002</b>
3"	76,20 mm	3D=228,6 mm	3 mm	7,21 mm	80,68 Kg



## Accessories for Non-Mandrel Pipe Bender CC90

### Accessories for 3" 1/2 round pipes



Rollers made of treated Steel. Suitable kit to bend 3" 1/2 tube of 4mm wall thickness or thicker.

The following is supplied with the unit: A main roller, a clamp with a fastener, a support holder

*Check with the manufacturer for other dimensions*

*Supporting Roller Kit REF: 140-17-02-00002 is required*

Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight
<b>Set diameter 88,9mm Radius 266,7mm Diameter 3" 1/2 inches</b>					<b>REF: 140-17-02-30003</b>
3" 1/2	88,9 mm	3D=266,7 mm	4 mm	6,05 mm	110,80 Kg

*\* The walls with more thickness to the established one and the materials with more resistance, reduce the capacities of the machine.*

### Supporting Roller Kit CC90



**Reference: 140-17-02-00002**

The CC90 Supporting Roller Kit is used to bend:

- 90mm tube of 4mm wall thickness or thicker
- 3" Schedule tube of 3,05mm wall thickness or thicker
- 3" 1/2 tube of 4mm wall thickness or thicker.

**Weight: 24,57 Kg.**



## Accessories for Non-Mandrel Pipe Bender CC90

### Accessories for square pipes in millimeters · 20 to 50 mm



Rollers made of treated Steel. Units suitable for bending all types of square pipes 20 to 50mm.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Section	Radius	Min. thickness	Max. thickness	Weight
<b>Square Tube Die Set 20mm Radius 100mm</b>				REF: 140-17-01-10101
20x20 mm	5D=100 mm	1,5 mm	4 mm	11,1 Kg
<b>Square Tube Die Set 25mm Radius 115mm</b>				REF: 140-17-01-10102
25x25 mm	115 mm	2 mm	4 mm	14,75 Kg
<b>Square Tube Die Set 30mm Radius 135mm</b>				REF: 140-17-01-10103
30x30 mm	135 mm	2 mm	4 mm	22 Kg
<b>Square Tube Die Set 40mm Radius 165mm</b>				REF: 140-17-01-10104
40x40 mm	165 mm	2 mm	5 mm	34,15 Kg
<b>Square Tube Die Set 50mm Radius 180mm</b>				REF: 140-17-02-10101
50x50 mm	180 mm	2,5 mm	5 mm	45,7 Kg

### Accessories for square pipes in inches · 3/4" to 2" inches

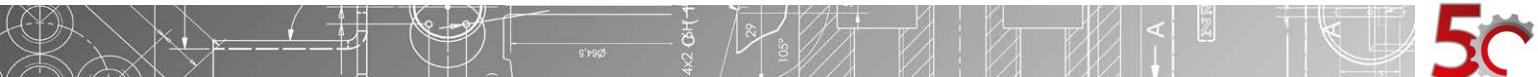


Rollers made of treated Steel. Units suitable for bending all types of square pipes 3/4" to 2" inches.

The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener

*Check with the manufacturer for other dimensions*

Section	Section	Radius	Radius	Min. Thick.	Max. Thick.	Weight
<b>Square Tube Die Set 3/4" (19,05mm) Radius 4" (101,6mm)</b>					REF: 140-17-01-30101	
3/4"x3/4"	19,05x19,05mm	4"	101,6mm	1,5 mm	4 mm	11,5 Kg
<b>Square Tube Die Set 1" (25,4mm) Radius 4,5" (114,3mm)</b>					REF: 140-17-01-30102	
1"x1"	25,4x25,4mm	4" 1/2	114,3mm	2 mm	4 mm	14,6 Kg
<b>Square Tube Die Set 1" 1/4 (31,75mm) Radius 5,5" (139,7mm)</b>					REF: 140-17-01-30103	
1" 1/4x1" 1/4	31,75x31,75mm	5" 1/2	139,7mm	2 mm	4 mm	23,3 Kg
<b>Square Tube Die Set 1" 1/2 (38,1mm) Radius 6,5" (165,1mm)</b>					REF: 140-17-01-30104	
1" 1/2x1" 1/2	38,1x38,1mm	6" 1/2	165,1mm	2 mm	5 mm	34,6 Kg
<b>Square Tube Die Set 1" 3/4 (44,45mm) Radius 6,75" (171,45mm)</b>					REF: 140-17-02-30101	
1" 3/4x1" 3/4	44,45x44,45mm	6" 3/4	171,45mm	2,5 mm	5 mm	39 Kg
<b>Square Tube Die Set 2" (50,8mm) Radius 7" (177,8mm)</b>					REF: 140-17-02-30102	
2"x2"	50,8x50,8mm	7"	177,8mm	2,5 mm	5 mm	44 Kg



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## Accessories for Non-Mandrel Pipe Bender CC90

### Nargesa BEND8 aerosol lubricant



This is a high-additive and low-viscosity aerosol oil. Contains PTFE. Does not contain silicone.

- Enables the finish on the outer bend
- Inhibits roughness and inner marks
- Reduces wear of the tooling
- Especially designed for tubes of small thickness
- Lubricates to reduce friction
- Avoids and dissolves corrosion
- Gives shine and protects
- Cleans up and removes dirt

Reference	Description	Quantity	Weight
060-SPR-00003	Aerosol lubricant bottle	400ml	0,39Kg
060-SPR-00004	Box of 12 bottles	12x400ml	4,83Kg

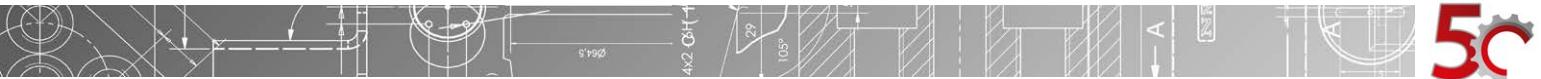
### CC90 2-axis positioning gauge



The gauge of the CC90 allows to make mass produced parts, much faster, more accurate and repetitively.

- Adjustable longitudinal positioning with 6 positions
- Angular head rotation every 5 degrees
- Four-clamp plate adjustable to round and square tube
- Longitudinal movement with high precision linear guides
- Automatic anti-collision control
- Easy handling and preparation for difficult parts

Referencia	Gauge length	Maximum capacity	Weight
140-17-02-50000	3000mm	90mm, 3" Schedule	135Kg



## Forging twisting machines

### Forging twisting machine MT150A

The twisting machine MT150A Nargesa was patented by Prada Nargesa many years ago. It makes us lead the manufacturing of this kind of machinery. It is made in a welded and mechanized Steel monoblock. It has been thought to transform cols iron. It is ideal for working all kind of ornamental pieces, handrails, scrolls...

<b>Reference</b>	<b>100-01-02-001</b>
<b>Engine Power</b>	<b>0,37 KW / 0,5 HP</b>
<b>2 phased tension</b>	<b>230 V Single phased</b>
<b>Rotary speed</b>	<b>Adjustable 0 to 9 r.p.m.</b>
<b>Twisting maximum capacity</b>	<b>20 mm or 3/4"</b>
<b>Bending maximum capacity</b>	<b>16 mm or 5/8"</b>
<b>Max. Scrolling and bending in flat bar</b>	<b>35x10 mm or 1 1/4"x3/8"</b>
<b>Máx. continued scrolling length</b>	<b>960 mm</b>
<b>Dimensions</b>	<b>2270x635x1115 mm</b>
<b>Weight</b>	<b>260 Kg</b>





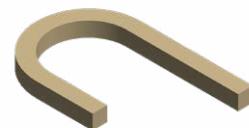
## Accessories for Forging twisting machine MT150A

### Flat bent rings 96,100,110mm MT150A



Reference: 140-01-01-00001

Steel Die to make round or square bent, the so called English railing.



Inner diameter	Max. Capacity	Weight
96,100,110mm	Round or square 16 mm	10 Kg.

### Belly top railing die MT150A



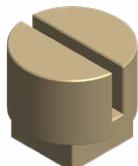
Reference: 140-01-01-00002

Steel Die to make the Belly Top Railing , used in balconies and windows.



Inner diameter	Max. Capacity	Weight
225mm	Round or square 16 mm	12 Kg.

### Flat bar bent die MT150A



Reference: 140-01-01-00003

Treated Steel die for making flat bar folding operations, handrails or cloths in all kinds. Folding with minimum external radius.



Max. Capacity	Weight
40x10 mm flat bar	3,1 Kg.

### Edge scrolls MT150A

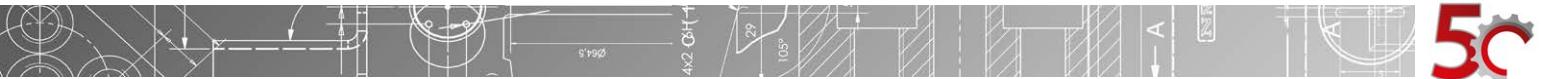


Reference: 140-01-01-00004

Treated steel Die to make scrolls or edge spirals in order to give it a different styling touch, it's commonly used in some specific countries.



Max. capacity	Weight
Round or square 16 mm	0,75 Kg.



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## Accessories for Forging twisting machine MT150A

### Baskets tooling MT150A



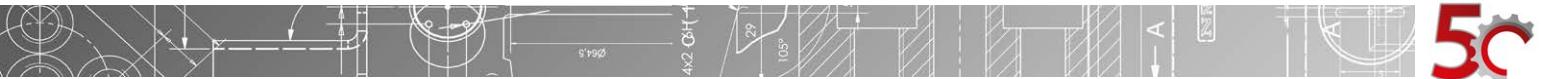
**Reference: 140-01-01-00005**

Tooling to make all kinds of baskets, in different sizes for square or round bars.

Available tooling for millimeter and inch square sizes



Max. Capacity	Weight
4 square or round 10 mm	45 Kg.



## Forging twisting machines

### Forging twisting machine MT500A

The twisting machine MT500A Nargesa was patented by Prada Nargesa many years ago. It makes us lead the manufacturing of this kind of machinery. It is made in a welded and mechanized Steel monoblock. It has been thought to transform cols iron. It is ideal for working all kind of ornamental pieces, handrails, scrolls...

<b>Reference</b>	<b>100-01-03-001</b>
<b>Engine Power</b>	<b>4 KW / 5,5 HP</b>
<b>Three-phased tension</b>	<b>230 / 400 V</b>
<b>Rotary speed</b>	<b>Adjustable 0 to 10 r.p.m.</b>
<b>Twisting maximum capacity</b>	<b>40 mm or 1 3/8"</b>
<b>Bending maximum capacity</b>	<b>25 mm or 1"</b>
<b>Max. Scrolling and bending in flat bar</b>	<b>50x10 mm or 2"x3/8"</b>
<b>Máx. continued scrolling length</b>	<b>1.620 mm</b>
<b>Dimensions</b>	<b>2200x800x1270 mm</b>
<b>Weight</b>	<b>1350 Kg</b>





## Accessories for Forging twisting machine MT500A

### Double eyed tooling



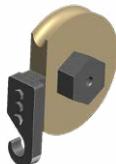
Reference: 140-01-03-00001

Tooling to make the folding commonly called "pig's tail" it's very used in balconies, handrails and many ornamental utilities.



Max. Capacity	Weight
16 mm round	35 Kg.

### Bent pipe die up to 180°



Reference: 140-01-03-00002

Steel die to make curves in pipes with fixed and adjustable radius to different degrees.



Pipe max. diameter	Pipe min. thickness	Piece radius	Degrees	Weight
40mm	3mm	3 x pipe diameter	Max.180 degrees	15/35 Kg.

### Belly top railing



Reference: 140-01-03-00003

Steel die to make Belly top railing commonly used in balconies and windows.



Inner diameter	Max. Capacity	Weight
225mm	Round or square 16 mm	12 Kg.

### Oval scrolls die

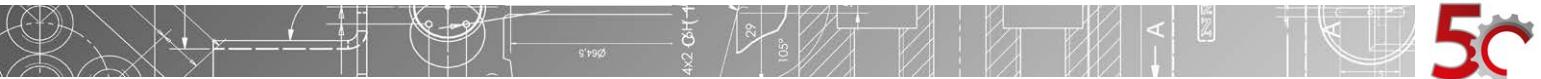


Reference: 140-01-03-00004

Steel die to make oval scrolls for all kind of railings.



Outer diameter	Max. Capacity	Weight
240x190mm	Round or square de 16 mm	11 Kg.



## Accessories for Forging twisting machine MT500A

### Flat bent rings 96,100,110mm



Reference: 140-01-03-00005

Steel die to make folding operations in round or square bars such as the so called English railings.



Inner diameter	Max. Capacity	Weight
96,100,110mm	Round or square 16 mm	10 Kg.

### Edge scrolls die



Reference: 140-01-03-00006

Treated Steel bar to make scrolls or edge spirals in order to give it a different styling touch, it is very used in specific countries.



Max. Capacity	Weight
Round or square 25 mm	0,400 Kg.

### Baskets tooling



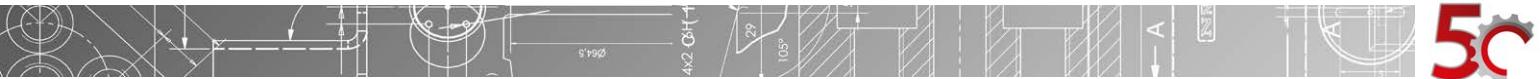
Reference: 140-01-03-00012

Tooling to make all kinds of baskets, different sizes in square or round bars.

Available tooling for millimeter and inch square sizes.



Max. Capacity	Weight
4 square or round de 12 mm.	55 Kg.



## Horizontal Press Brake

### Horizontal Press Brake PP200CNC

The versatility of the 20 Tons Horizontal Press Brake Nargesa PP200CNC allows us to bend, fold, cut and shape in cold, stretch and reduce, inlay, notch and assemble...

• **The new ECO mode** of our latest products saves energy and contributes to the conservation of the environment. Nowadays, we know the remarkable importance of saving energy. This is the main reason why our new machinery incorporates an "ECO mode" that automatically disconnects the electrical parts that generate greater energy consumption if a period of inactivity is detected. Thus, when it is necessary to restart the operation, all you have to do is press the pedal to continue working.

We strongly believe that this feature is a core point both for the savings of our clients and for the sustainability of our planet, since we are a company very committed to the environment.

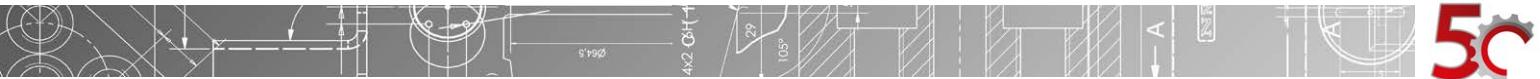
- **Quick start-up:** The machine is shipped fully assembled, it is only required to connect it to the electrical supply and run it.
- **Versatility:** Nargesa PP200 has a catalog with a great deal of optional tooling.
- **Easy fabrication of tooling:** The customer himself or any toolmaker can manufacture dies and punches.

Reference	100-16-01-001
Engine power	2,2 KW / 3 HP to 1400r.p.m
Three-phased tension	230 / 400 V
Working strength	20.000 Kg / 200 KN
Working speed	10 mm/s
Return speed	35 mm/s
Maximum displacement	250 mm
Repetitiveness	0,05 mm
Tooling support table	600x1170 mm
Dimensions	660x1180x1130 mm
Weight	665 Kg



Nargesa horizontal press brakes have a 7" color touch screen control, **very intuitive and easy to handle, with the latest 4.0 technology and a more comfortable and accurate regulation.**

We only have to introduce the material, the thickness, the bending angle, choose the punch and the die from the library and the control will program the rest of the parameters automatically.



## Accessories for Horizontal Press Brake

### PP200CNC Automated Gauge

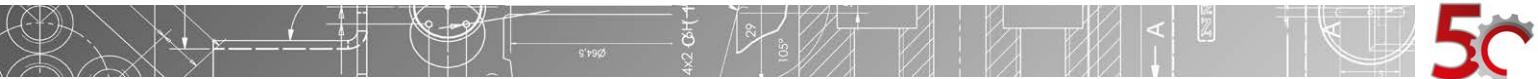
The automated gauge is an accessory specifically designed to get the most out of the PP200CNC Horizontal Press Brake, offering the possibility to get, automatically, the positioning of the "X" axis for the different operations programmed and calculated with the ESA S625 CNC control, thus improving the performance of operation and quality of work with this machine.

The automated gauge of the PP200CNC enables the user to make single or mass produced parts with top accuracy, speed and repeatability compared to the previous manual system. These are its main features and functions:

- Drive by ESA servomotor and HTD crowned belts that allow automatic positioning of the "X" axis with a precision of  $\pm 0.02\text{mm}$ .
- Manual adjustment of the cross slide, "Z" axis to cover all the operation possibilities offered by the PP200CNC horizontal press, folding, punching, bending...
- Longitudinal movements of both carriages using high-precision linear guides and recirculating ball runners.
- Automatic anti-collision control managed by the software itself.
- Easy mechanical and electrical installation for quick set up and run.

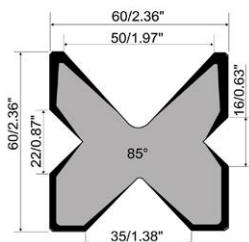
<b>Reference</b>	140-16-01-50000
<b>Electrical motor</b>	Servomotor 0,9Nm, 0,520kW, 5000rpm
<b>Electrical tension</b>	480V, 400V, 220V Three-phase 220V Single-phase
<b>X axis stroke length</b>	1210 mm
<b>Z axis stroke length</b>	300 mm
<b>Displacement speed</b>	1000mm /s
<b>Positioning accuracy</b>	$\pm 0.02\text{ mm}$
<b>Repeatability</b>	$\pm 0.02\text{ mm}$
<b>Maximum structural load</b>	2.000 Kg
<b>Dimensions</b>	1496x1041x426 mm
<b>Weight</b>	115 Kg





## Accessories for Horizontal Press Brake

### Folding die at 161 mm. · V16, 22 35 50 mm PP200CNC



Folding or bending die up to 161mm with 4 openings (16, 22, 35, 50mm). This multi-V die allows 1mm up to 8mm sheet to be folded.

**Reference:** 125-16-01-00006



**V 16:** Sheet from 1 to 3mm · M.460.R/16

**V 22:** Sheet from 2 to 4mm · M.460.R/22

**V 35:** Sheet from 3 to 6mm · M.460.R/35

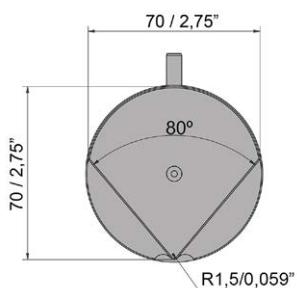
**V 50:** Sheet from 4 to 8mm · M.460.R/50

**Max. Folding length:** 161mm

**Max. Folding thickness:** 8mm

*Standard tooling provided along with the machine.*

### Bending punch at 100 mm and 80°



80° bending punch. The punch with an outer diameter of 70 mm allows for creating completely closed shapes with a minimum inner wing of 75 mm.

**Reference:** 131-16-01-00041 · P.70.80.R1.5



**Max. Folding length:** 100mm

*Standard tooling provided along with the machine.*

### Baluster forming die 01



**Reference:** 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



## Accessories for Horizontal Press Brake

### Ring forming



#### Reference: 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 sizes and applications consult the manufacturer*



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

### Baluster forming die 4



#### Reference: 140-16-01-00004

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

*For other shapes or capacities, request the manufacturer.*



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

### Bending tool for big radius PP200CNC



#### Reference: 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.



Max. bar capacity	Max. pipe capacity	Min. diameter	Max. diameter	Weight
40mm or 1 1/2"	80x80 mm or 3"	300mm	There is no maximum	35 Kg

### Baluster forming die 08



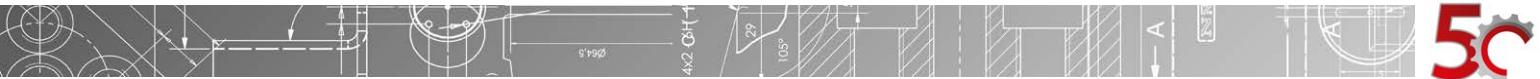
#### Reference: 140-16-01-00008

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	650mm	19,5Kg



## Accessories for Horizontal Press Brake

### Baluster forming die 09



Reference: 140-16-01-00009

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

*For other shapes or capacities, request the manufacturer.*



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

### Baluster forming die 10



Reference: 140-16-01-00010

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

*For other shapes or capacities, please consult the manufacturer.*



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

### Baluster forming die 11



Reference: 140-16-01-00011

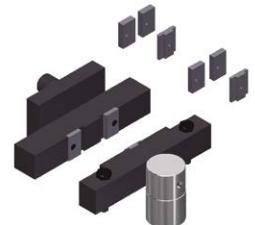
Die to form cold forging balusters for grills, gates, fences, handrails...

*For other shapes or capacities, request the manufacturer.*



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

### Twisted bars forming die



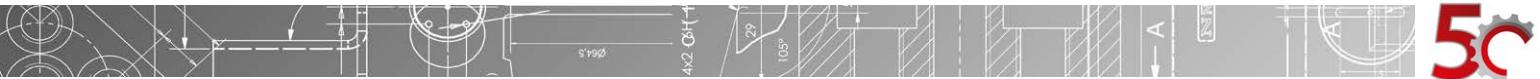
Reference: 140-16-01-00013

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*



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



## Accessories for Horizontal Press Brake

### Flat bar cutting tooling 100x10 mm.



**Reference: 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

### Tool to shape pipe ends PP200CNC



**Reference: 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.



*For special forms consult the manufacturer.*

**Weight:** 110 Kg aprox.

### Diameter reduction tools for PP200CNC

#### PP200CNC reduction cone



**Reference: 140-16-01-RE001**

This accessory is adapted to the **Tooling to shape pipe ends**, to perform the operation of reducing the ends of the tubes.

This accessory is used in all tube sizes, that is to say, it is not necessary to buy more than one since it is adaptable to all diameters.

**Weight:** 12,7 Kg.

#### Reducing clamp holder PP200CNC



**Reference: 140-16-01-RE002**

Accessory to set the **Reducing Clamps** of different diameters.

This accessory is used in all tube sizes, that is to say, it is not necessary to buy more than one since it is adaptable to all diameters.

**Weight:** 4,6 Kg.



## Accessories for Horizontal Press Brake

### PP200CNC reducer clamp



This accessory attaches to the **Reducing clamp holder**, to carry out the operation of reducing the ends of the tubes.

It is necessary to buy one specific reducing clamp for each tube according to its initial diameter and the final diameter that we want to achieve.

See the following table of Reducing Clamps:



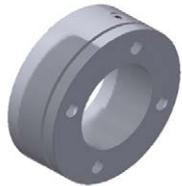
ØA max.	ØB min.	C max.	Reference	Description
16mm	10mm	76mm	140-16-01-RE16-10	Tube Reducer Clamp 16-10 Length Max. 76mm
19mm	13mm	76mm	140-16-01-RE19-13	Tube Reducer Clamp 19-13 Length Max. 76mm
22mm	16mm	76mm	140-16-01-RE22-16	Tube Reducer Clamp 22-16 Length Max. 76mm
25mm	19mm	76mm	140-16-01-RE25-19	Tube Reducer Clamp 25-19 Length Max. 76mm
28mm	22mm	76mm	140-16-01-RE28-22	Tube Reducer Clamp 28-22 Length Max. 76mm
32mm	26mm	76mm	140-16-01-RE32-26	Tube Reducer Clamp 32-26 Length Max. 76mm
35mm	29mm	76mm	140-16-01-RE35-29	Tube Reducer Clamp 35-29 Length Max. 76mm
38mm	32mm	76mm	140-16-01-RE38-32	Tube Reducer Clamp 38-32 Length Max. 76mm
42mm	36mm	76mm	140-16-01-RE42-36	Tube Reducer Clamp 42-36 Length Max. 76mm
45mm	39mm	76mm	140-16-01-RE45-39	Tube Reducer Clamp 45-39 Length Max. 76mm
48mm	42mm	76mm	140-16-01-RE48-42	Tube Reducer Clamp 48-42 Length Max. 76mm
51mm	45mm	76mm	140-16-01-RE51-45	Tube Reducer Clamp 51-45 Length Max. 76mm
54mm	48mm	76mm	140-16-01-RE54-48	Tube Reducer Clamp 54-48 Length Max. 76mm
57mm	51mm	76mm	140-16-01-RE57-51	Tube Reducer Clamp 57-51 Length Max. 76mm
60mm	54mm	76mm	140-16-01-RE60-54	Tube Reducer Clamp 60-54 Length Max. 76mm
63mm	57mm	76mm	140-16-01-RE63-57	Tube Reducer Clamp 63-57 Length Max. 76mm
66mm	60mm	76mm	140-16-01-RE66-60	Tube Reducer Clamp 66-60 Length Max. 76mm
69mm	63mm	76mm	140-16-01-RE69-63	Tube Reducer Clamp 69-63 Length Max. 76mm
73mm	67mm	76mm	140-16-01-RE73-67	Tube Reducer Clamp 73-67 Length Max. 76mm



## Accessories for Horizontal Press Brake

### Diameter expansion tools PP200CNC

#### Clamp Holder to Expand Tube PP200CNC



##### Reference: 140-16-01-EX001

This accessory is adapted to the **Tooling to shape pipe ends**, to perform the operation of expanding the ends of the tubes.

This accessory is used in all tube sizes, that is to say, it is not necessary to buy more than one since it is adaptable to all diameters.

#### Expansion Mandrel PP200CNC



##### Reference: 140-16-01-EX002

This accessory is adapted to the **Tooling to shape pipe ends**, to perform the operation of expanding the ends of the tubes.

This accessory is used in all tube sizes, that is to say, it is not necessary to buy more than one since it is adaptable to all diameters.

#### Tube Expander Clamp PP200CNC



This accessory is adapted to the **Tooling to shape pipe ends**, to perform the operation of expanding the ends of the tubes.

It is necessary to buy one specific expanding clamp for each tube according to its initial diameter and the final diameter that we want to achieve.

See the following table of Expanding Clamps:

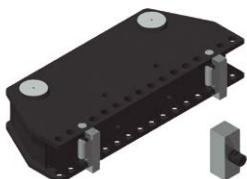


ØA min.	ØB max.	C max.	Reference	Description
22mm	28mm	40mm	140-16-01-EX22-28	Tube Expander Clamp 22-28 Length Max. 40mm
25mm	31mm	40mm	140-16-01-EX25-31	Tube Expander Clamp 25-31 Length Max. 40mm
28mm	34mm	50mm	140-16-01-EX28-34	Tube Expander Clamp 28-34 Length Max. 50mm
31mm	37mm	60mm	140-16-01-EX31-37	Tube Expander Clamp 31-37 Length Max. 60mm
35mm	41mm	60mm	140-16-01-EX35-41	Tube Expander Clamp 35-41 Length Max. 60mm
38mm	44mm	65mm	140-16-01-EX38-44	Tube Expander Clamp 38-44 Length Max. 65mm
41mm	47mm	65mm	140-16-01-EX41-47	Tube Expander Clamp 41-47 Length Max. 65mm
44mm	50mm	80mm	140-16-01-EX44-50	Tube Expander Clamp 44-50 Length Max. 80mm
47mm	53mm	80mm	140-16-01-EX47-53	Tube Expander Clamp 47-53 Length Max. 80mm
51mm	57mm	80mm	140-16-01-EX51-57	Tube Expander Clamp 51-57 Length Max. 80mm
54mm	60mm	80mm	140-16-01-EX54-60	Tube Expander Clamp 54-60 Length Max. 80mm
60mm	66mm	80mm	140-16-01-EX60-66	Tube Expander Clamp 60-66 Length Max. 80mm



## Accessories for Horizontal Press Brake

### Die to straighten out profiles



Reference: 140-16-01-00017

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



Maximum capacity	Weight
H 150 mm	72 Kg

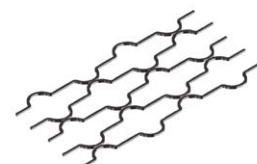
### Baluster forming die 20



Reference: 140-16-01-00020

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

*For other shapes or capacities, request the manufacturer.*



Square sizes	Circumference size	Weight
12x12mm	90mm	11 Kg

### Punching die

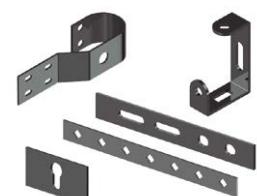


Reference: 140-16-01-00022

Punch-holder die, compatible with our Nargesa brand punches.

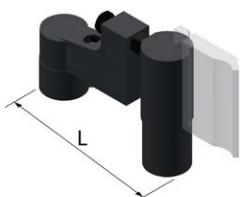
Gooseneck: 54 mm

Free distance of tooling: 95 mm



Max. Punching capacity	Round	Square	Rectangular	Oval	Weight
	43mm	35mm	20x34mm	21x40mm	52 Kg

### Promecam punch holder



Reference: 140-16-01-00023

Punch holder for all kind of punches for Promecam bending or folding press.

*Compatible with any Promecam punch.*



Max. Folding length	L Length	Weight
161mm	276 mm	14kg



## Accessories for Horizontal Press Brake

### Inverted Promecam-holder PP200CNC



**Reference: 140-16-01-00039**

Punch holder for all kind of punches for Promecam bending or folding press with inverted position.

*Compatible with any Promecam punch.*



Max. Folding length	Weight
161mm	19,8kg

### Clamp forming die PP200CNC



**Reference: 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.

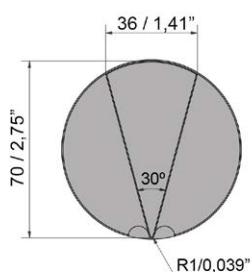


**Maximum capacity:** 100x4 mm

### Special punches

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

#### Folding Punch P.70.30.R1



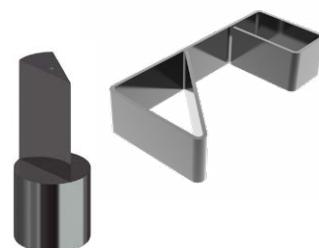
**Reference: 140-16-01-00025**

**Max. Folding length:** 100mm

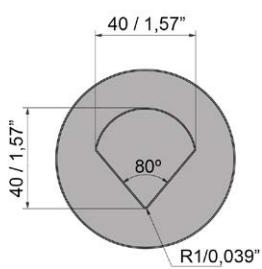
**Punch degrees:** 30°

**Punch diameter:** 70mm

**Weight:** 3 Kg.



#### Folding Punch P.40.80.R1



**Reference: 140-16-01-00026**

**Max. Folding length:** 60mm

**Punch degrees:** 80°

**Punch diameter:** 40mm

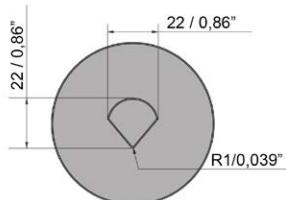
**Weight:** 3 Kg.





## Accessories for Horizontal Press Brake

### Folding Punch P.22.80.R1



**Reference: 140-16-01-00027**

**Max. Folding length: 60mm**

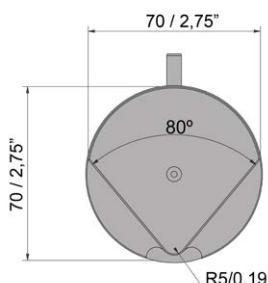
**Punch degrees: 80°**

**Punch diameter: 22mm**

**Weight: 3 Kg.**



### Folding Punch P.70.80.R5



**Reference: 140-16-01-00080**

**Max. Folding length: 100 mm**

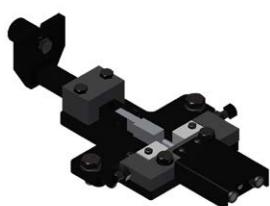
**Punch degrees: 80°**

**Punch diameter: 70 mm**

**Weight: 3 Kg.**



### Bar clamps forming die



**Reference: 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

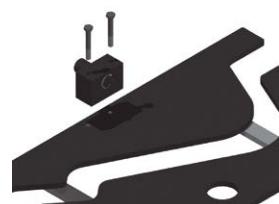
### Forming die adaptor



**Reference: 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.

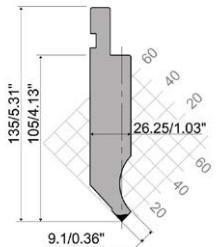
**Weight: 3,1 Kg.**





## Accessories for Horizontal Press Brake

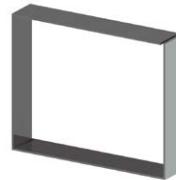
### Punch Promecam PS.135.85.R08



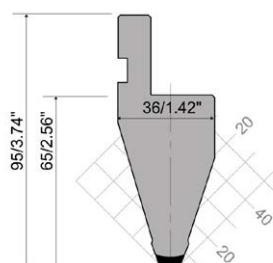
**Reference:** 140-16-01-00030

**Folding length:** 161 mm

**Weight:** 3,2 Kg.



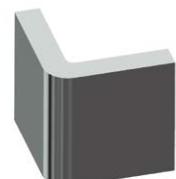
### Punch Promecam P.95.35.R5



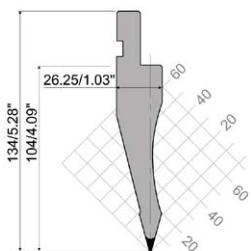
**Referencia:** 140-16-01-00031

**Folding length:** 161 mm

**Weight:** 2,3 Kg.



### Punch Promecam PS.134.30.R08



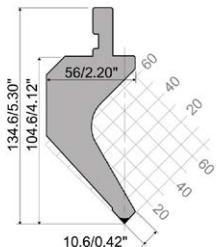
**Reference:** 140-16-01-00032

**Folding length:** 161 mm

**Weight:** 2,7 Kg.



### Punch Promecam PK.135.85.R08



**Reference:** 140-16-01-00038

**Folding length:** 161 mm

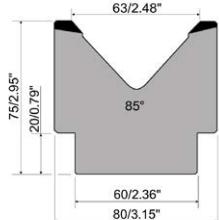
**Weight:** 4,4 Kg.





## Accessories for Horizontal Press Brake

### Folding die M75.85.63

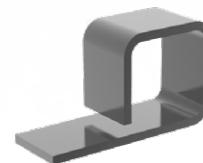


**Reference:** 140-16-01-00033

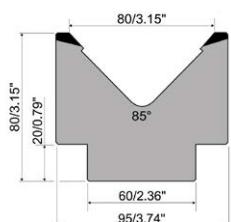
**Folding length:** 161 mm Max. 85°

**V63:** From 5 to 10 mm sheet

**Weight:** 5 Kg.



### Folding die M80.85.80

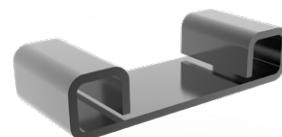


**Reference:** 140-16-01-00034

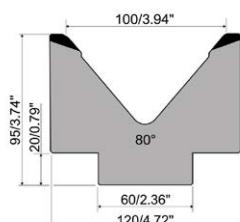
**Folding length:** 161 mm Max. 85°

**V80:** From 6 to 12 mm sheet

**Weight:** 6 Kg.



### Folding die M95.80.100



**Reference:** 140-16-01-00035

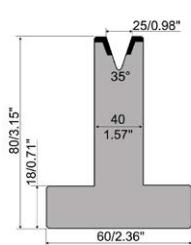
**Folding length:** 161 mm Max. 80°

**V100:** From 8 to 15 mm sheet

**Weight:** 9 Kg.



### Folding die T80.25.35



**Reference:** 140-16-01-00036

**Folding length:** 161 mm Max. 35°

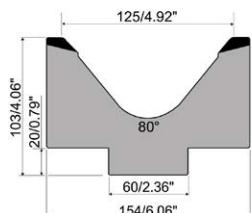
**V25:** From 1,5 to 5 mm sheet

**Weight:** 4 Kg.





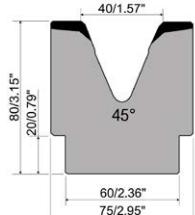
## Folding die MK103.80.125



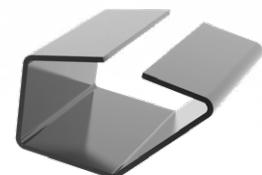
**Reference:** 140-16-01-00040  
**Folding length:** 161 mm Max. 80°  
**V125:** From 12 to 20 mm sheet  
**Weight:** 12,4 Kg.

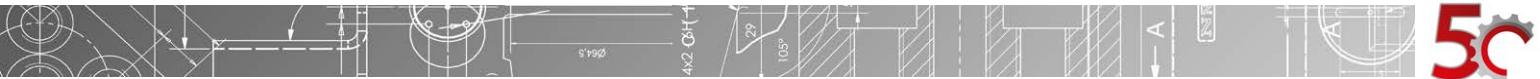


## Folding die M80.45.40



**Reference:** 140-16-01-00041  
**Folding length:** 161 mm Max. 45°  
**V40:** From 3 to 8 mm sheet  
**Weight:** 6,2 Kg.





## Accessories for Horizontal Press Brake

### Small radii holder PU.67.14-S

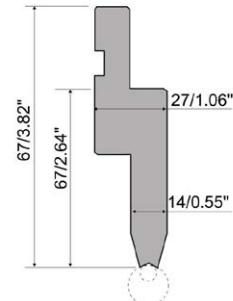


**Reference: 140-16-01-00042**

European style R1 bending tool holder. (For radii from 3 to 7,5 mm)

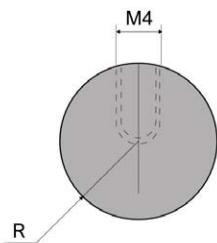
**Folding length:** 161 mm

**Weight:** 2 Kg.



### Radius elements for small radii holders PU.67.14-S

Radius elements to fold. Made of C45, a high quality, medium grade steel, with constant mechanical properties and good external chrome resistance.



**Maximum capacity:** 400kN/m.

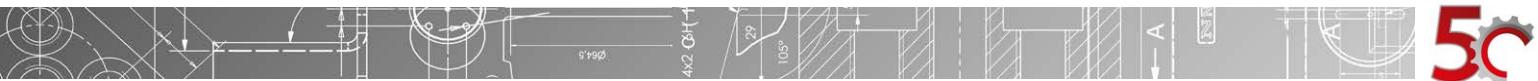
**Tonnage:** 400 kN/m max.

*For its use it requires the PU.67.14-S Small radius holder.*



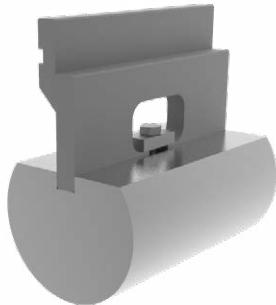
Please refer to the following radius chart:

Small Radius				
Type	Code	Reference	Radius	Weight
C3	PU.67.14-S-C3	140-16-01-00044	3 mm	0,04 Kg.
C3.5	PU.67.14-S-C3.5	140-16-01-00045	3,5 mm	0,04 Kg.
C4	PU.67.14-S-C4	140-16-01-00046	4 mm	0,07 Kg.
C4.5	PU.67.14-S-C4.5	140-16-01-00047	4,5 mm	0,10 Kg.
C5	PU.67.14-S-C5	140-16-01-00048	5 mm	0,12 Kg.
C5.5	PU.67.14-S-C5.5	140-16-01-00049	5,5 mm	0,14 Kg.
C6	PU.67.14-S-C6	140-16-01-00050	6 mm	0,16 Kg.
C6.5	PU.67.14-S-C6.5	140-16-01-00051	6,5 mm	0,20 Kg.
C7	PU.67.14-S-C7	140-16-01-00052	7 mm	0,16 Kg.
C7.5	PU.67.14-S-C7.5	140-16-01-00053	7,5 mm	0,20 Kg.



## Accessories for Horizontal Press Brake

### Big radii holder PU.67.14

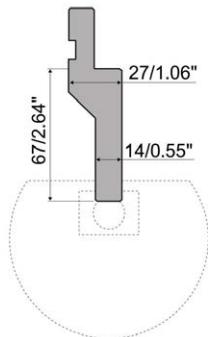


**Reference: 140-16-01-00043**

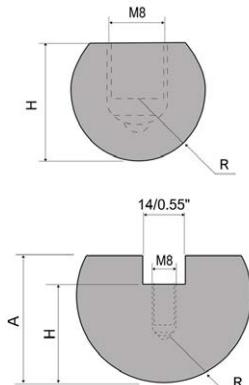
European style R1 bending tool holder. (For radii from 8 to 50 mm)

**Folding length:** 161 mm

**Weight:** 1,80 Kg.



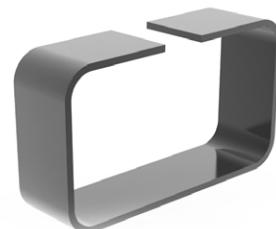
### Radius elements for large radii holders PU.67.14



Radius elements to fold. Made of C45, a high quality, medium grade steel, with constant mechanical properties and good external chrome resistance.

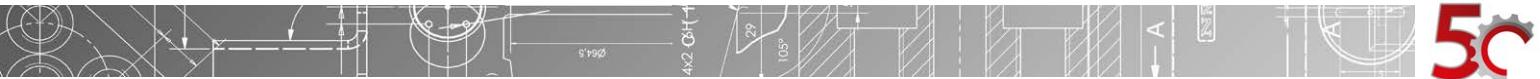
**Tonnage:** 800 kN/m max.

*For its use it requires the PU67.14 large radius holder.*



Please refer to the following radius chart:

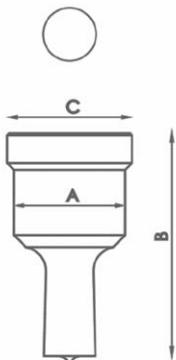
Big Radius					
Code	Reference	R (mm)	H (mm)	A (mm)	Weight
PU.67.14.R8	140-16-01-00054	8	13	-	0,04 Kg.
PU.67.14.R9	140-16-01-00055	9	16	-	0,04 Kg.
PU.67.14.R10	140-16-01-00056	10	16	-	0,04 Kg.
PU.67.14.R12,5	140-16-01-00057	12,5	17	22	0,50 Kg.
PU.67.14.R15	140-16-01-00058	15	20	27	0,75 Kg.
PU.67.14.R17,5	140-16-01-00059	17,5	22	32	1,00 Kg.
PU.67.14.R20	140-16-01-00060	20	24	34	1,40 Kg.
PU.67.14.R22,5	140-16-01-00061	22,5	25	35	1,50 Kg.
PU.67.14.R25	140-16-01-00062	25	29	39	2,00 Kg.
PU.67.14.R27,5	140-16-01-00063	27,5	34	44	2,50 Kg.
PU.67.14.R30	140-16-01-00064	30	34	44	2,70 Kg.
PU.67.14.R32,5	140-16-01-00065	32,5	37	47	3,20 Kg.
PU.67.14.R35	140-16-01-00066	35	45	55	4,10 Kg.
PU.67.14.R37,5	140-16-01-00067	37,5	42	52	4,10 Kg.
PU.67.14.R40	140-16-01-00068	40	45	55	4,60 Kg.
PU.67.14.R45	140-16-01-00069	45	60	70	6,80 Kg.
PU.67.14.R50	140-16-01-00070	50	70	80	8,70 Kg.



## Accessories for Horizontal Press Brake

### Punches and dies

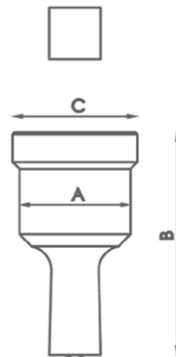
#### Standard round punches



Type	Available sizes in mm Ø	A	B	C	
N28	3/3'5/4/4'5/5/5'5/6/6'5/7/7'5/8/8'5 up to 28mm from 0'5 in 0'5mm	9mm	28 mm	58 mm	31,5 mm
N40	29/30/31/32/33/34/35/36/37/38/39/40mm		40 mm	64 mm	43,5 mm
N50	41/42/43mm		50 mm	58 mm	54 mm

*For different sizes, please ask the manufacturer*

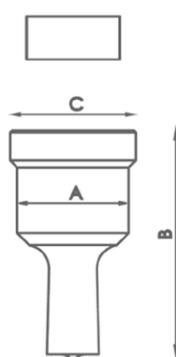
#### Standard square punches



Type	Available sizes in mm	A	B	C	
N28	4/5/6/7/8/9/10/11/12/13/14/15/16/17 18/19/20mm		28 mm	58 mm	31,5 mm
N40	21/22/24/26/28mm		40 mm	64 mm	43,5 mm
N50	31/33/35mm		50 mm	58 mm	54 mm

*For different sizes, please ask the manufacturer*

#### Standard rectangular punches



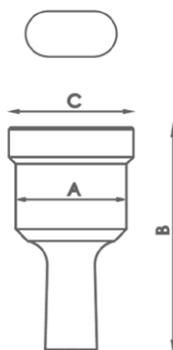
Type	Available sizes in mm	A	B	C	
N28	7x10/7x15/9x13/9x19/11x17/11x23 13x19/15x21mm		28 mm	58 mm	31,5 mm
N40	13x25/15x27/17x25/19x30/20x34mm		40 mm	64 mm	43,5 mm

*For different sizes, please ask the manufacturer*



## Accessories for Horizontal Press Brake

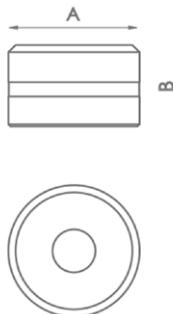
### Standard oval punches



Type	Available sizes in mm	A	B	C
N28	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18 /13x22/13x27/15x20/15x24 15x27/17x22/17x26 19x26/21x27mm	28 mm	58 mm	31,5 mm
N40	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	40 mm	64 mm	43,5 mm

*For different sizes, please ask the manufacturer*

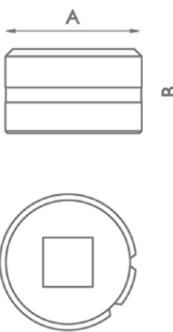
### Standard round dies



Type	Available sizes in mm Ø	A	B
N46	3/3,5/4/4,5/5/5,5/6/6,5/7/7,5/8/8,5 9mm up to 28mm from 0,5 in 0,5mm	46 mm	28,5 mm
N60	29/30/31/32/33/34/35/36/37/38/39/40mm	60 mm	32 mm
N78	41/42/43mm	78 mm	28,5 mm

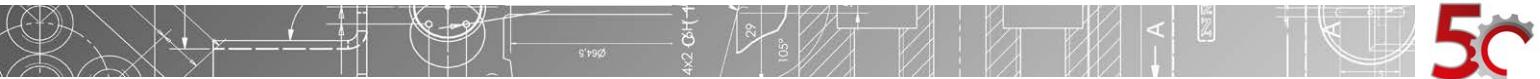
*For different sizes, please ask the manufacturer*

### Standard square dies



Type	Available sizes in mm	A	B
N46	4/5/6/7/8/9/10/11/12/13/14/15/16 17/18/19/20mm	46 mm	28,5 mm
N60	21/22/24/26/28mm	60 mm	32 mm
N78	31/33/35mm	78 mm	28,5 mm

*For different sizes, please ask the manufacturer*



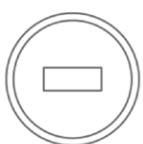
## Accessories for Horizontal Press Brake

### Standard rectangular dies

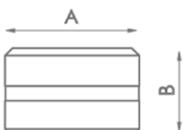


Type	Available sizes in mm	A	B
N46	7x10/7x15/9x13/9x19/11x17/11x23/ 13x19/13x25/ 15x21mm	46 mm	28,5 mm
N60	15x27/17x25/19x30/20x34mm	60 mm	32 mm

For different sizes, please ask the manufacturer



### Oval dies

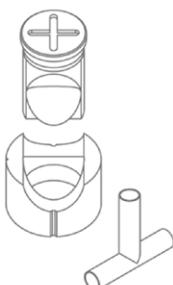


Type	Available sizes in mm	A	B
N46	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18/13x22/13x27/15x20/15x24/15x27 17x22/17x26/19x26/21x27mm	46 mm	28,5 mm
N60	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	60 mm	32 mm

For different sizes, please ask the manufacturer



### Tube notching tooling



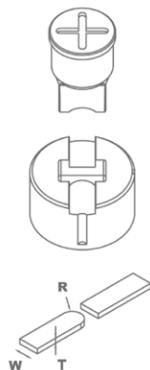
Reference	Available sizes in mm	Required fitting	
MAN28	Tube from 16 to 28mm	TAP 28	CAB 46
MAN40	Tube from 28,5 to 40mm	TAP 40	CAB 60
MAN50	Tube from 40,5 to 50mm	TAP 50	CAB 78

For different sizes, please ask the manufacturer

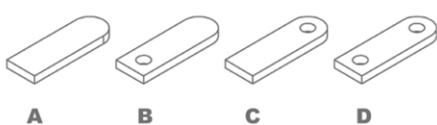


## Accessories for Horizontal Press Brake

### Flat bar round end tooling R1



Reference	Model	Width size	Required fitting
MOR1-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR1-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR1-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR1-35D	D	From 20 to 35mm	TAP28 / TAP40
MOR1-50A	A	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50B	B	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50C	C	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50D	D	From 40 to 50mm	TAP50 / TAP60 with ATAP



For different sizes, please ask the manufacturer.

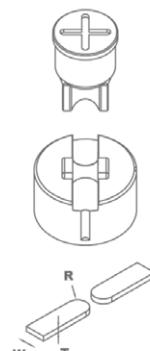
When placing order it must be specified the REFERENCE, MODEL, R (radius), W (flat bar width), T (flat bar thickness)

In models B, C and D specify diemeter of the hole.

The ear shaped length is always adjustable.

Production capacity: 450 to 600 parts per hour.

### Flat bar round end tooling R2



Reference	Model	Width size	Required fitting
MOR2-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR2-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR2-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR2-50A	A	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR2-50B	B	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR2-50C	C	From 40 to 50mm	TAP50 / TAP60 with ATAP

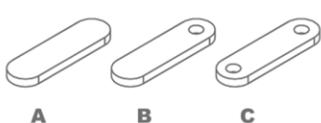
For different sizes, please ask the manufacturer.

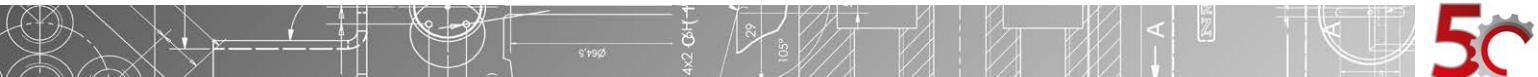
When placing order it must be specified the REFERENCE, MODEL, R (radius), W (flat bar width), T (flat bar thickness)

In models B and C specify hole diameter.

The ear shaped length is always adjustable.

Production capacity: 450 to 600 parts per hour.





## Accessories for Horizontal Press Brake

### Corner rounding tooling



Reference	Available sizes in mm	Required fitting	
<b>MRE28</b>	Radius from 3 to 15mm	TAP 28	CAB 46
<b>MRE40</b>	Radius from 16 to 26mm	TAP 40	CAB 60
<b>MRE50</b>	Radius from 26,5 to 32mm	TAP 50	CAB 78

*For different sizes, please ask the manufacturer*

### Fitting nuts for punches

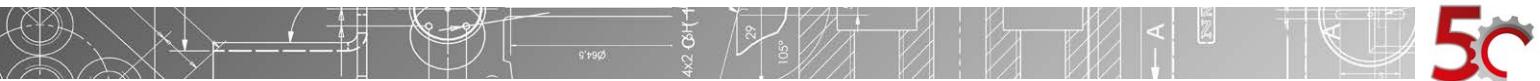


Reference	Type	Fitting nuts for punches
<b>120-02-01-00011</b>	TAP28	Fitting nuts for punches N28
<b>140-02-01-00019</b>	TAP40	Fitting nuts for punches N40
<b>140-02-01-00020</b>	TAP50	Fitting nuts for punches N50
<b>140-02-01-00021</b>	TAP60	Fitting nuts for punches N60

### Fitting for dies



Reference	Type	Fitting for dies
<b>120-02-01-00012</b>	N46	Fitting for dies N46
<b>140-02-01-00024</b>	N60	Fitting for dies N60
<b>140-02-01-00025</b>	N78	Fitting for dies N78



## PP200CNC Folding simulator software

### PP200CNC Folding simulator software

The new bending simulator for the PP200CNC Horizontal Press Brake is the ultimate tool for **manufacturers and operators aiming to maximize productivity and precision**.

Developed for **Windows**, it is offered as a **perpetual license**—no monthly or annual subscriptions—and allows users to create bending programs in numeric or graphical mode remotely from a PC, without tying up the machine or an operator.

**Offline Programming:** Load a technical drawing (DXF or similar) and the software automatically recognizes bend lines to generate a complete CNC program.

**Manual Programming:** Very simple and intuitive—get a program for a highly complex part in under 3 minutes.

**Direct USB Export:** Save the program to a USB stick, import it into the PP200CNC, and start producing immediately.

**Automatic Calculations with hundredth-millimeter precision:** From a drawing or manual inputs, the simulator computes the flat blank, final inside radius, minimum tonnage, backgauge positions, and the best manufacturing strategy.

**Collision Analysis:** Detects and prevents possible collisions among tool, machine, and part during bending, ensuring feasibility and safety.

**Bending Process Optimizer:** Automatically calculates parameters such as part orientation and bend angle based on material and final-part characteristics.

**Backgauge Sequencer:** Determines the exact backgauge position at each step. If no automatic backgauge is available, the software guides the operator on the required positions.

**Virtual Simulation:** Simulates the bending process virtually, showing positions and potential collisions clearly.

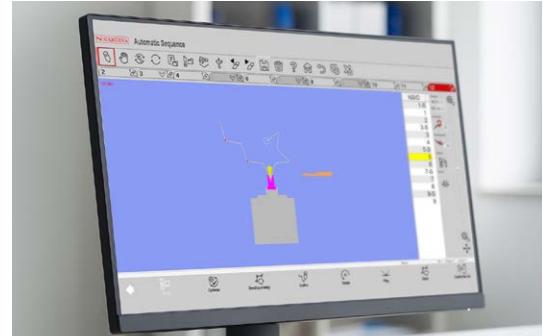
**Sequence Optimization:** Optimizes bend order via 2D graphical generation and adjusts parameters to provide the most efficient and safe sequence for the operator.

**Intuitive Interface:** A very user-friendly graphical UI that speeds configuration and simulation.

**Multi-Machine Compatibility:** Works with different brands and models of press brakes.

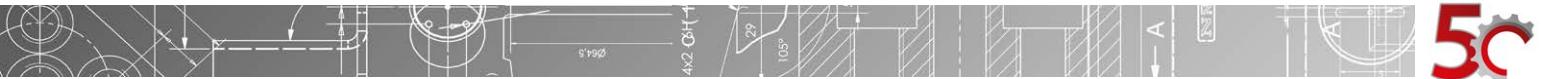
**Ideal for Training:** Practice and assess bending processes in a virtual environment without stopping real machines, reducing risk, material use, and classroom setup time.

**NEW**



Reference

140-16-OP-00001



## Shears

### Hydraulic shears C2006CNC

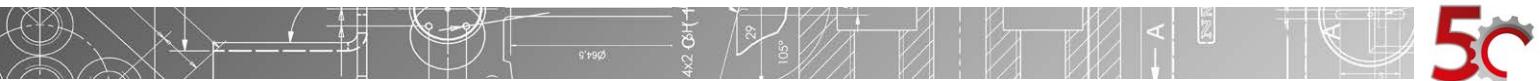
NEW vertical cut shears C2006CNC Nargesa, from the latest generation, are made with stabilized and welded steel which permits to stand big effort with no deformation.

Reference	100-06-01-001
Engine power	5,87 KW / 7,87 HP
Three-phased tension	230 / 400 V
Cutting Capacity: mild steel	6 mm (450N/mm <sup>2</sup> )
Cutting capacity: stainless steel	4 mm (700N/mm <sup>2</sup> )
Nº of hammers	10 units
Cutting length	2030 mm
Neck	190 mm
Gauge displacement	700 mm
Strokes per minute	10 strokes
Position accuracy and repeatability	+/- 0,1 mm
Dimensions	2880x2360x1790 mm
Weight	5100 Kg



Nargesa hydraulic Shears are controlled with a very intuitive and easy-to-use 7" color touchscreen with the latest 4.0 technology. The operator only has to enter the type of material, thickness, distance from the gauge and the CNC will automatically arrange all components to obtain an optimal result.

Can manage up 3 axes and 16+ 12 I/O with an integrated PLC.



## Shears

### Hydraulic shears C3006CNC

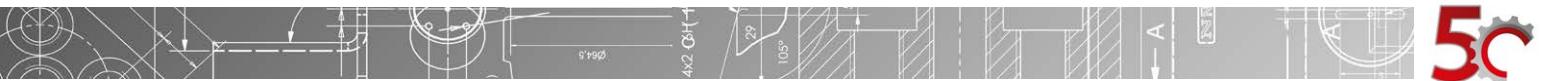
NEW vertical cut shears C3006CNC Nargesa, from the latest generation, are made with stabilized and welded steel which permits to stand big effort with no deformation.

Reference	100-06-02-003
Engine power	9,6 KW / 12,87 HP
Three-phased tension	230 / 400 V
Cutting Capacity: mild steel	6 mm (450N/mm2)
Cutting capacity: stainless steel	4 mm (700N/mm2)
Nº of hammers	15 units
Cutting length	3055 mm
Neck	173 mm
Gauge displacement	700 mm
Strokes per minute	12 strokes
Position accuracy and repeatability	+/- 0,1 mm
Dimensions	3880x2460x1820 mm
Weight	7500 Kg



Nargesa hydraulic Shears are controlled with a very intuitive and easy-to-use 7" color touchscreen with the latest 4.0 technology. The operator only has to enter the type of material, thickness, distance from the gauge and the CNC will automatically arrange all components to obtain an optimal result.

Can manage up 3 axes and 16+ 12 I/O with an integrated PLC.



## Press Brakes

### Hydraulic press brake MP1500CNC

The hydraulic sheet metal brake MP1500CNC Nargesa, from the last generation, has been made of welded and stabilized steel which permits it to stand big efforts without any kind of distortion.

<b>Reference</b>	<b>100-05-09-001</b>
<b>Engine Power</b>	<b>5,5 KW / 7,5 HP</b>
<b>Three-Phased tension</b>	<b>230 / 400 V</b>
<b>Hydraulic power</b>	<b>40 Tn</b>
<b>Punch working speed</b>	<b>8,3 mm/s</b>
<b>Punch return speed</b>	<b>120 mm/s</b>
<b>Punch lowering speed</b>	<b>200 mm/s</b>
<b>Max. Punch displacement</b>	<b>200 mm</b>
<b>Inner folding length</b>	<b>1250 mm</b>
<b>Total folding length</b>	<b>1500 mm</b>
<b>Back gauge displacement</b>	<b>600 mm</b>
<b>Neck</b>	<b>270 mm</b>
<b>Dimensions</b>	<b>2110x1880x2210 mm</b>
<b>Weight</b>	<b>4900 Kg</b>



The powerful ESA S630 CNC control system has outstanding processing capacity which permits up to four axes to be managed, interpolated in any combination Y, X, R and Z, providing solutions for the most complex bending operations, and a flash memory for 5000 programs and a full library of Promecam punches and dies.

The 10" high-resolution (1024 x 600 pixels) colour graphics touch screen responds efficiently to user operations and provides clear and detailed information at all times. It enables programs to be edited graphically or numerically, new dies and punches to be managed, edited and added to existing libraries, bending sequences to be controlled, bending collisions to be controlled, bending simulations to be done, sheet metalwork to be calculated and machine sensors and inputs/outputs to be diagnosed in an intuitive and straightforward manner.



## Press Brakes

### Hydraulic press brake MP3160CNC

The hydraulic sheet metal brake MP3160CNC Nargesa, from the last generation, has been made of welded and stabilized steel which permits it to stand big efforts without any kind of distortion.

Reference	100-05-10-001
Engine Power	15 KW / 20 CV
Three-Phased tension	230 / 400 V
Hydraulic power	160 Tn
Punch working speed	9 mm/s. 0,35"/s.
Punch return speed	97 mm/s. 3,84"/s.
Punch lowering speed	200 mm/s. 7,88"/s.
Max. Punch displacement	220mm. 8,66"
Free distance table/slice	445mm. 17,52"
Inner folding length	2630mm. 103,5"
Total folding length	3100mm. 122"
Back gauge displacement	600+100mm. 23,62"+4"
Neck	400mm. 15,75"
Dimensions	3751x1997x2585 mm
Weight	11.900 Kg



**NEW**



### ESA numerical control S840W

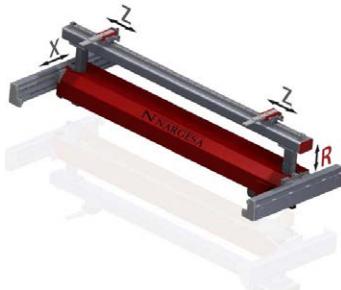
Microsoft Windows operating system  
PC simulator and optimizer for 2D and 3D graphic identification and programming of the fastest and most reliable bending sequences.  
CNC simulator and optimizer for 2D graphic identification and programming of the fastest and most reliable bending sequences.  
Connectivity with EsaBend 3D CadCam (Optional)  
Completely intuitive operating system  
Real-time program and tool file explorer  
Local and remote self-diagnosis system  
Alarm and warning system for preventive maintenance  
Multi-language  
15.6"HD LCD touchscreen with GlassOnly technology  
Industry 4.0  
Multiple ports: USB, Ethernet, EtherCAT, CanBus  
Metric and Imperial systems



## Accessories for Press Brakes

### R axis

The R Axis is not supplied as standard with the machine; the client may include it when purchasing the machine or add it later. This Axis has a Canopen communication system that enables it to be installed in a rapid and simple manner to the machine. The operator needs only to connect it to the motor of the X axis and Nargesa's technicians will configure the CNC remotely.



Reference	140-05-OP-00001
High speed measurement search	130 mm/sec.
Servo motor	1 Nm to 5000 rpm
R axis limit	150 mm
Mechanical precision	0,05 mm

### Graphs and folding calculation on CNC

The user can incorporate the optional software on the press brake CNC and buy it later on. There is also the possibility of carrying out the remote software installation, by our Nargesa Technicians.



Reference	140-05-OP-00002
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### Z1-Z2 axis

The Z1-Z2 axis enables us to optimize the set up time of the machine. The CNC optimizes the position of gauges Z1 and Z2 according to the dimensions of the piece and the position of the tools.

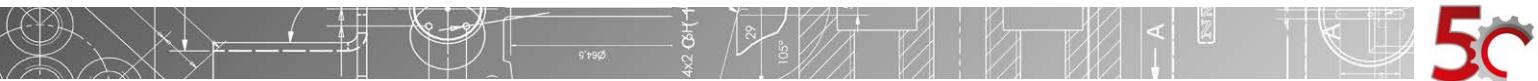
The parallelism of the gauge needles with the folding unit of the press brake fits automatically by means of micrometers to guarantee the maximum accuracy.



Reference	140-05-OP-00004
High search speed of size	400 mm/sec.
Linear guides for recirculation of high precision balls	
Servo motors	1 Nm a 5000 rpm
Stroke axis Z1, Z2	2600 mm
Mechanical precision	0,05 mm

\* In case of choosing this option the machine will be delivered with the ESA 640 CNC,

\* This option is only available if you have chosen the following optional accessories: R-axis and Graphics and CNC bending calculation

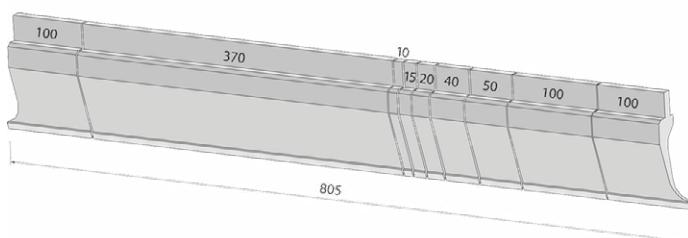


## Accessories for Press Brakes

### Punches

All accessories for Nargesa Pres Brakes are manufactured according to international standards. Therefore, guaranteeing high resilience and tensile strength. *For different sizes, please ask the manufacturer.*

Materia Type	Mechanical resistance of the material and the tool body	Hardness of the material and the tool body	Hardness of the operating surfaces after induction hardening
● 42CrMo4	900 - 1150 N/mm <sup>2</sup>	29.1 - 36.9 HRC	54 - 60 HRC
● C45	560 - 710 N/mm <sup>2</sup>	12 - 15.5 HRC	54 - 60 HRC



#### 805 mm segmented

100, 370, 10, 15, 20, 40, 50, 100, 100 mm

#### 795 mm segmented

100, 250, 20, 25, 30, 35, 40, 45, 50, 100, 100 mm

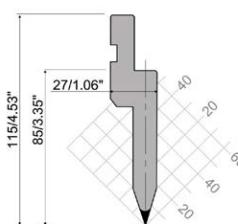
#### 800 mm segmented

100, 10, 15, 20, 40, 50, 165, 300, 100 mm

\*Conversion millimeters /inches:

415 mm / 16,34"	Length
520 mm / 20,47"	835 mm.
795 mm / 31,30"	415 mm.
805 mm / 31,69"	795 mm. Seg.
835 mm / 32,87"	805 mm. Seg.
900 mm / 35,43"	
1050 mm / 41,34"	

#### ● PU.85.35.R08



#### Length

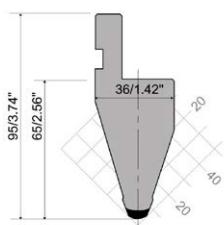
835 mm.

415 mm.

795 mm. Seg.

805 mm. Seg.

#### ● P.95.35.R5



#### Length

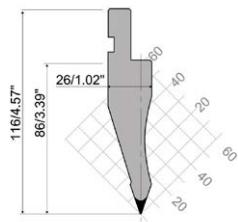
835 mm.

415 mm.

795 mm. Seg.

805 mm. Seg.

#### ● P.116.35.R08



#### Length

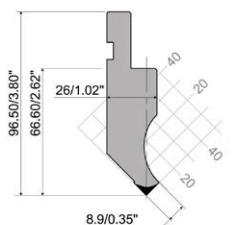
835 mm.

415 mm.

795 mm. Seg.

805 mm. Seg.

#### ● P.97.85.R08



#### Length

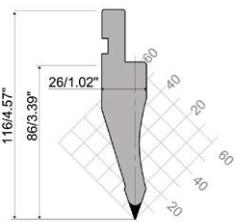
835 mm.

415 mm.

795 mm. Seg.

805 mm. Seg.

#### ● P.116.35.R15



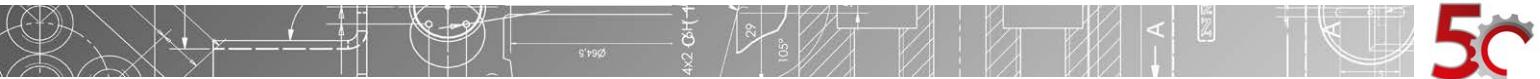
#### Length

835 mm.

415 mm.

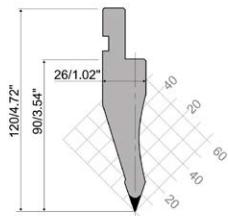
795 mm. Seg.

805 mm. Seg.



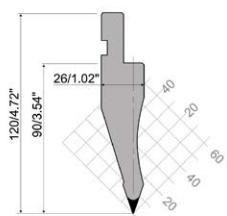
## Accessories for Press Brakes

### • P.120.35.R08



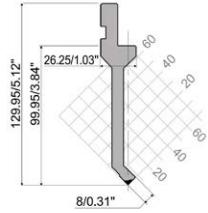
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • P.120.35.R3



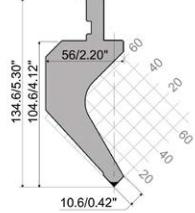
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • P.130.85.R025



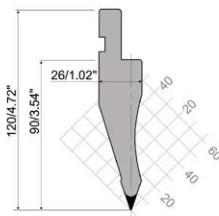
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • P.135.85.R08



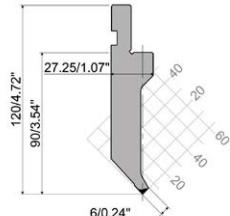
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • P.120.35.R15



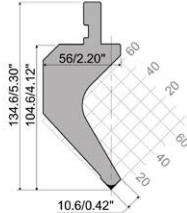
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • P.120.85.R1



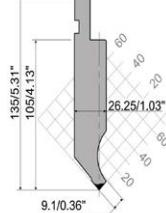
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • PK.135.85.R08

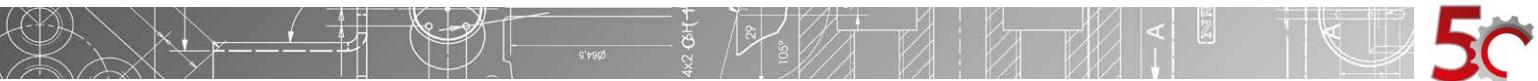


Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • PS.135.85.R08



Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

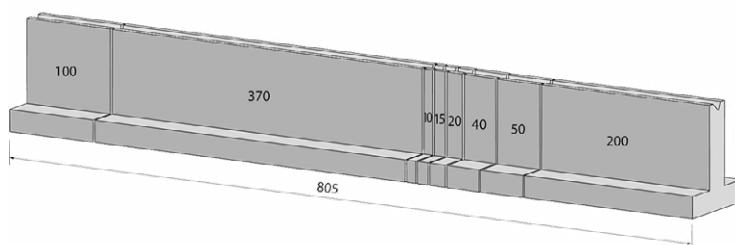


## Accessories for Press Brakes

### Dies

For different sizes, please ask the manufacturer.

Material Type	Mechanical resistance of the material and the tool body	Hardness of the material and the tool body	Hardness of the operating surfaces after induction hardening
● 42CrMo4	900 - 1150 N/mm <sup>2</sup>	29.1 - 36.9 HRC	54 - 60 HRC
● C45	560 - 710 N/mm <sup>2</sup>	12 - 15.5 HRC	54 - 60 HRC



#### 805 mm segmented

100, 370, 10, 15, 20, 40, 50, 200 mm

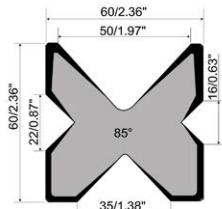
#### 795 mm segmented

100, 250, 20, 25, 30, 35, 40, 45, 50, 200 mm

#### 495 mm segmented

170, 100, 50, 45, 40, 35, 30, 25 mm

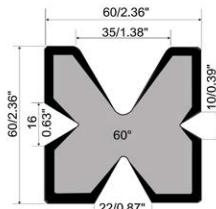
### ● M.460.R



#### Length

- 835 mm.
- 415 mm.
- 795 mm. Seg.
- 805 mm. Seg.

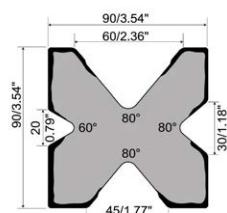
### ● M.460.60



#### Length

- 835 mm.
- 415 mm.
- 795 mm. Seg.
- 805 mm. Seg.

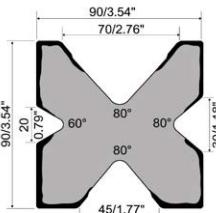
### ● M.490



#### Length

- 835 mm.
- 415 mm.
- 795 mm. Seg.
- 805 mm. Seg.

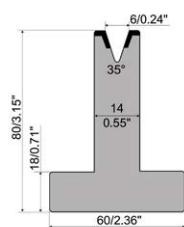
### ● M.490.70



#### Length

- 835 mm.
- 415 mm.
- 795 mm. Seg.
- 805 mm. Seg.

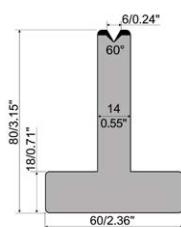
### ● T80.06.35



#### Length

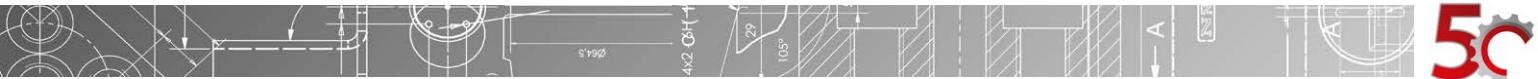
- 835 mm.
- 415 mm.
- 795 mm. Seg.
- 805 mm. Seg.

### ● T80.06.60



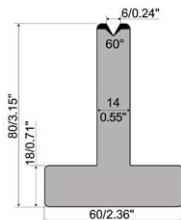
#### Length

- 835 mm.
- 415 mm.
- 795 mm. Seg.
- 805 mm. Seg.



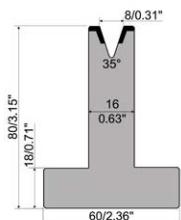
## Accessories for Press Brakes

### • TR80.06.60



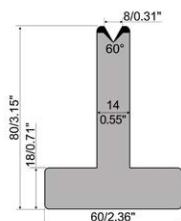
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.08.35



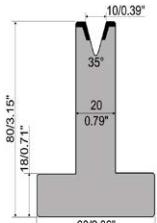
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.
900 mm.

### • TR80.08.60



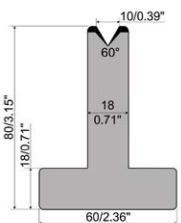
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.10.35



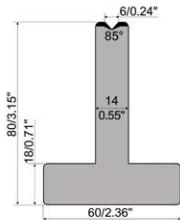
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • TR80.10.60



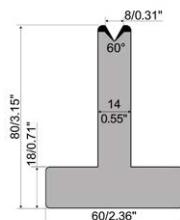
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.06.85



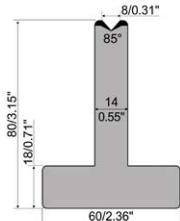
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.08.60



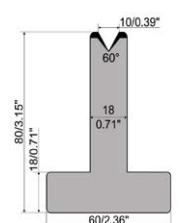
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.08.85



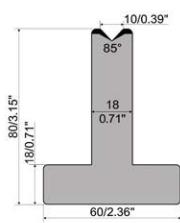
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.10.60

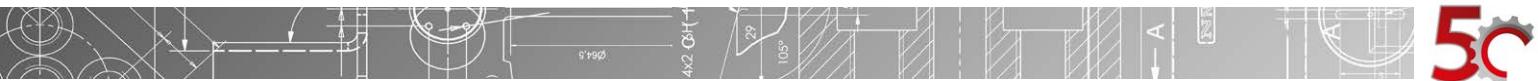


Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.
900 mm.

### • T80.10.85

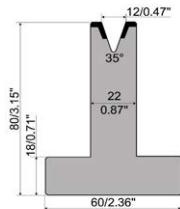


Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.



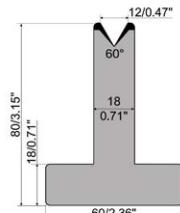
## Accessories for Press Brakes

### • T80.12.35



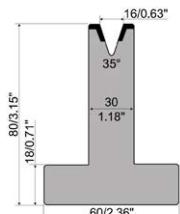
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • TR80.12.60



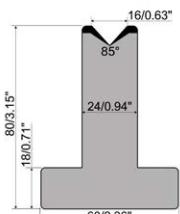
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.16.35



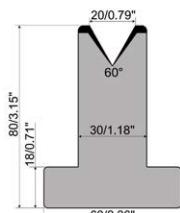
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.16.85



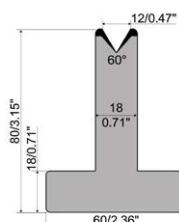
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.20.60



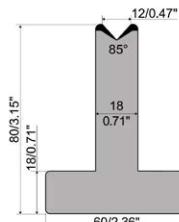
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.12.60



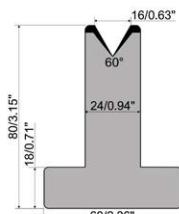
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.12.85



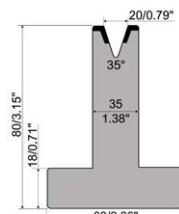
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.16.60



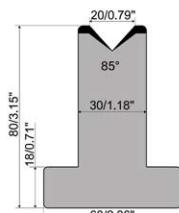
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.20.35

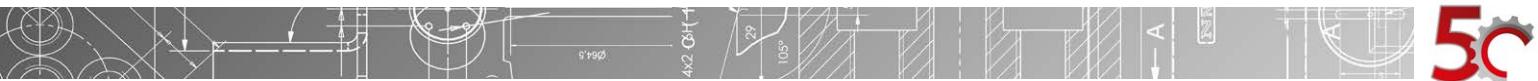


Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.20.85

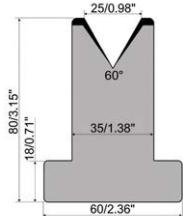


Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.



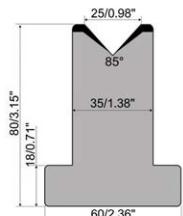
## Accessories for Press Brakes

### • T80.25.35



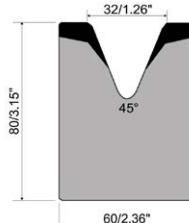
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.25.85



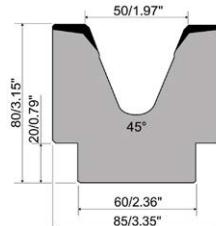
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M80.45.32



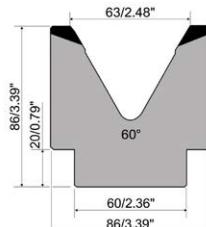
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M80.45.50



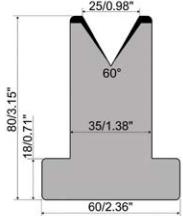
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M86.60.63



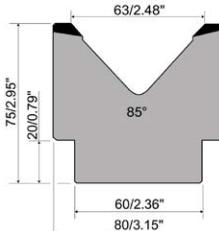
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • T80.25.60



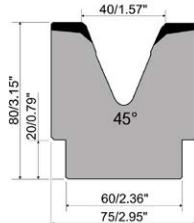
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M75.85.63



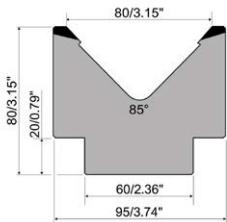
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M80.45.40



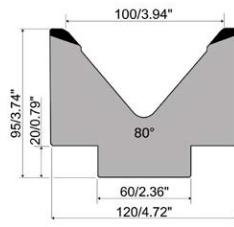
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M80.85.80

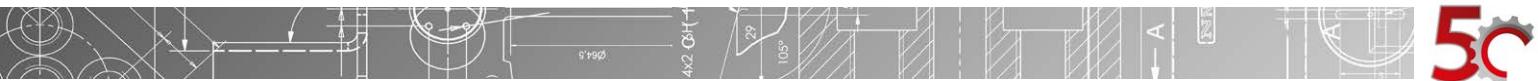


Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M95.80.100

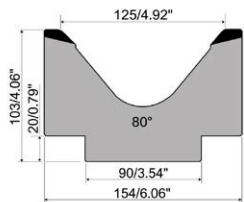


Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.



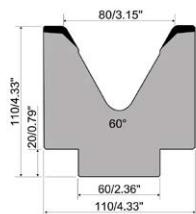
## Accessories for Press Brakes

### • MK103.80.125



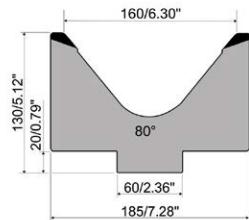
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M110.60.80



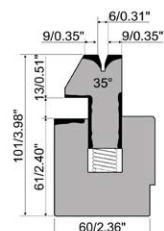
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M130.80.160



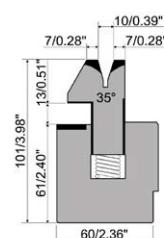
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • S101.35.06



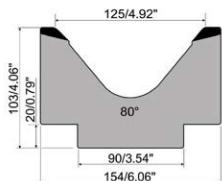
Length
835 mm.
415 mm.

### • S101.35.10



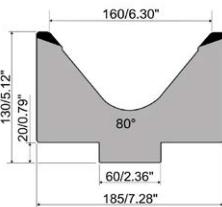
Length
835 mm.
415 mm.

### • M103.80.125



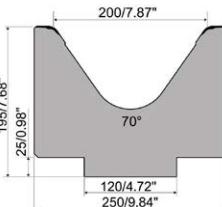
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • MK130.80.160



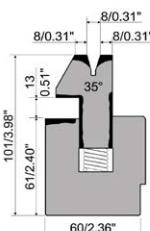
Length
835 mm.
415 mm.
795 mm. Seg.
805 mm. Seg.

### • M195.70.200



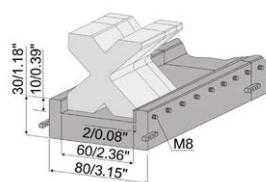
Length
415 mm.

### • S101.35.08



Length
835 mm.
415 mm.

### • Dies holder C1050/RS



Length
1050 mm.
520 mm.

\*Able only for MP1500CNC



## Broaching machine

### Broaching machine BM25

The Hydraulic Broaching machine BM25 Nargesa, has been manufactured in a welded and mechanized steel monoblock. It is a machine to make slots and broaching operations in all kinds of parts. Sprockets, belts, gears, etc... It is also used as a press to straigthen and unbolting oxidated parts, set baerings...

Reference	100-09-01-001
Motor power	2,2 KW / 3 HP
3-phased tensión	230 / 400 V
Hydraulic power	10 Tm
Working speed	24 mm/s
Return speed	54 mm/s
Pump Flow	7,5 L
Shank displacement	600 mm
Goosneck	300 mm
Maximum diameter of the piece	600 mm*
Bench dimensions	420x420 mm
Dimensions	750x1240x2400 mm
Weight	850 Kg



\* For different sizes, please ask the manufacturer



## Accessories for Broaching machine

### Keyway broaches 2mm REF: 125-09-01-BR-00001



Tolerance	JS9 (-0,014 +0,009)
Model	A
Broach dimensions	3,175 x 127mm
Standard keys	2 x 2mm
Min./Max. Cutting length	5,159mm / 28,575mm
Required pressure	720lbs / 326,58Kg
Required shims/ Nr of passes	0 shims / 1 pass
Bushing diameter	6, 8, 10, 12 and 15mm
Bushing length	28,575mm
Weight	0,020 Kg. Approx.

Broaching time  
0:30 min.



### Keyway broaches 3mm REF: 125-09-01-BR-00002



Tolerance	JS9 (-0,013 +0,009)
Model	A
Broach dimensions	3,175 x 127mm
Standard keys	3 x 3mm
Min./Max. Cutting length	5,159mm / 28,575mm
Required pressure	650lbs / 294,83Kg
Required shims/ Nr of passes	1 shim / 2 passes
Thickness	0,787mm
Bushing diameter	6, 8, 10, 12 y 15mm
Bushing length	28,575mm
Weight	0,020 Kg. Approx.

Broaching time  
0:45 min.

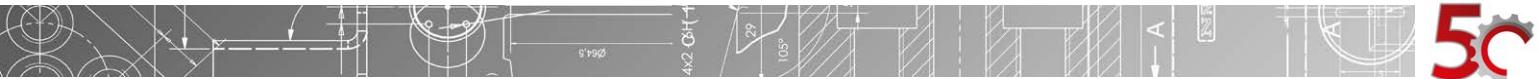


### Keyway broaches 4mm REF: 125-09-01-BR-00003



Tolerance	JS9 (-0,015 +0,01)
Model	B1
Broach dimensions	6,35 x 171,45mm
Standard keys	4 x 4mm
Min./Max. Cutting length	7,54mm / 42,862mm
Required pressure	1.140lbs / 517,09Kg
Required shims/ Nr of passes	1 shim / 2 passes
Thickness	0,965mm
Bushing diameter	12, 14, 15, 16, 17, 18 and 19mm
Bushing length	42,862mm
Weight	0,100 Kg. Approx.

Broaching time  
1:00 min.

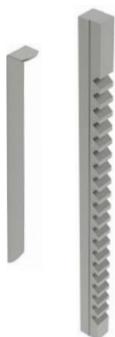


## Accessories for Broaching machine



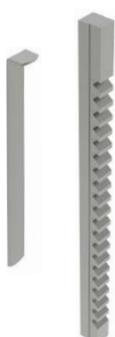
<b>Keyway broaches 5mm</b>	<b>REF: 125-09-01-BR-00004</b>
<b>Tolerance</b>	JS9 (-0,014 +0,008)
<b>Model</b>	B1
<b>Broach dimensions</b>	6,35 x 171,45mm
<b>Standard keys</b>	5 x 5mm
<b>Min./Max. Cutting length</b>	7,54mm / 42,862mm
<b>Required pressure</b>	1.860lbs / 843,68Kg
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	1,27mm
<b>Bushing diameter</b>	12, 14, 15, 16, 17, 18 and 19mm
<b>Bushing length</b>	42,862mm
<b>Weight</b>	0,100 Kg. Approx.

Broaching time  
1:00 min.



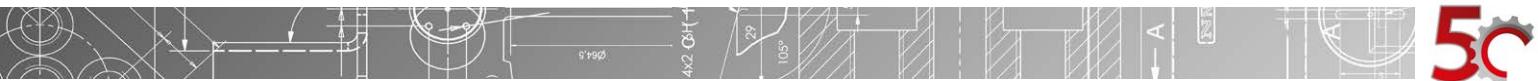
<b>Keyway broaches 5mm</b>	<b>REF: 125-09-01-BR-00005</b>
<b>Tolerance</b>	JS9 (-0,014 +0,008)
<b>Model</b>	C
<b>Broach dimensions</b>	9,52 x 298,45mm
<b>Standard keys</b>	5 x 5mm
<b>Min./Max. Cutting length</b>	9,921mm / 63,5mm
<b>Required pressure</b>	1.470lbs / 666,78Kg
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	1,193mm
<b>Bushing diameter</b>	18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34, 35 and 36mm
<b>Bushing length</b>	63,5mm
<b>Weight</b>	0,350 Kg. Approx.

Broaching time  
1:20 min.



<b>Keyway broaches 6mm</b>	<b>REF: 125-09-01-BR-00006</b>
<b>Tolerance</b>	JS9 (-0,016 +0,009)
<b>Model</b>	C
<b>Broach dimensions</b>	9,52 x 298,45mm
<b>Standard keys</b>	6 x 6mm
<b>Min./Max. Cutting length</b>	9,921mm / 63,5mm
<b>Required pressure</b>	2.100lbs / 952,54Kg
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	1,587mm
<b>Bushing diameter</b>	18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34, 35 and 36mm
<b>Bushing length</b>	63,5mm
<b>Weight</b>	0,350 Kg. Approx.

Broaching time  
1:20 min.



## Accessories for Broaching machine



Broaching time  
2:30 min.

<b>Keyway broaches 8mm</b>	
<b>REF: 125-09-01-BR-00008</b>	
<b>Tolerance</b>	JS9 (-0,017 +0,013)
<b>Model</b>	C
<b>Broach dimensions</b>	9,52 x 298,45mm
<b>Standard keys</b>	8 x 7mm
<b>Min./Max. Cutting length</b>	9,921mm / 63,5mm
<b>Required pressure</b>	3.680lbs / 1.669,22Kg
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	1,27mm
<b>Bushing diameter</b>	18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34, 35 and 36mm
<b>Bushing length</b>	63,5mm
<b>Weight</b>	0,350 Kg. Approx.



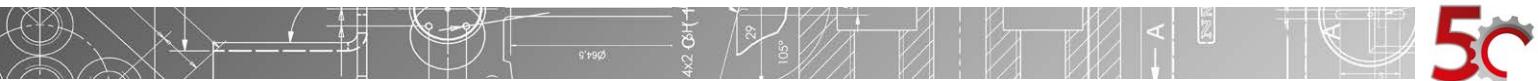
Broaching time  
2:30 min.

<b>Keyway broaches 10mm</b>	
<b>REF: 125-09-01-BR-00009</b>	
<b>Tolerance</b>	JS9 (-0,018 +0,012)
<b>Model</b>	D
<b>Broach dimensions</b>	14,28 x 352,42mm
<b>Standard keys</b>	10 x 8mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	6.500lbs / 2.948,35Kg
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	1,422mm
<b>Bushing diameter</b>	32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48, 50, 52, 54, 56mm
<b>Bushing length</b>	101,6 and 127mm
<b>Weight</b>	1 Kg. Approx.



Broaching time  
2:30 min.

<b>Keyway broaches 12mm</b>	
<b>REF: 125-09-01-BR-00010</b>	
<b>Tolerance</b>	JS9 (-0,022 +0,014)
<b>Model</b>	D
<b>Broach dimensions</b>	14,28 x 352,42mm
<b>Standard keys</b>	12 x 8mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	8.400lbs / 3.810,17Kg
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	1,422mm
<b>Bushing diameter</b>	32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48, 50, 52, 54, 56mm
<b>Bushing length</b>	101,6 and 127mm
<b>Weight</b>	1 Kg. Approx.



## Accessories for Broaching machine

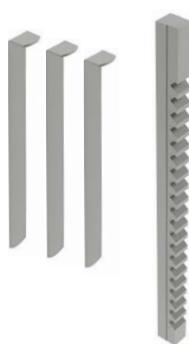
### Keyway broaches 14mm REF: 125-09-01-BR-00011



<b>Tolerance</b>	JS9 (-0,023 +0,013)
<b>Model</b>	D
<b>Broach dimensions</b>	14,28 x 352,42mm
<b>Standard keys</b>	14 x 9mm
<b>Min./Max. Cutting lenght</b>	25,4mm / 152,4mm
<b>Required pressure</b>	11.100lbs / 5.034,87Kg
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	1,587mm
<b>Bushing diameter</b>	32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48, 50, 52, 54, 56mm
<b>Bushing length</b>	101,6 and 127mm
<b>Weight</b>	1 Kg. Approx.

Broaching time  
2:30 min.

### Keyway broaches 16mm REF: 125-09-01-BR-00012



<b>Tolerance</b>	JS9 (-0,024 +0,012)
<b>Model</b>	E
<b>Broach dimensions</b>	19,05 x 393,7mm
<b>Standard keys</b>	16 x 10mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	9.400lbs / 4.263,76Kg
<b>Required shims/ Nr of passes</b>	3 shims / 4 passes
<b>Thickness</b>	1,422mm
<b>Bushing diameter</b>	52, 54, 55, 56, 58, 60, 62, 63, 64, 65, 66, 68, 70, 72mm
<b>Bushing length</b>	127 and 152,4mm
<b>Weight</b>	1,5 Kg. Approx.

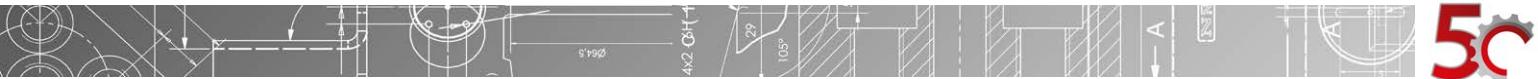
Broaching time  
3:40 min.

### Keyway broaches 18mm REF: 125-09-01-BR-00013

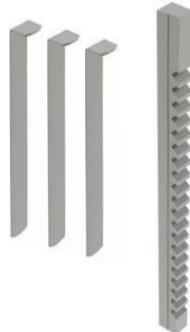


<b>Tolerance</b>	JS9 (-0,022 +0,013)
<b>Model</b>	E
<b>Broach dimensions</b>	19,05 x 393,7mm
<b>Standard keys</b>	18 x 11mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	10.600lbs / 4.808,07Kg
<b>Required shims/ Nr of passes</b>	3 shims / 4 passes
<b>Thickness</b>	1,422mm
<b>Bushing diameter</b>	52, 54, 55, 56, 58, 60, 62, 63, 64, 65, 66, 68, 70, 72mm
<b>Bushing length</b>	127 and 152,4mm
<b>Weight</b>	1,5 Kg. Approx.

Broaching time  
3:40 min.



## Accessories for Broaching machine



Broaching time  
4:20 min.

<b>Keyway broaches 20mm</b>	
<b>Tolerance</b>	JS9 (-0,026 +0,015)
<b>Model</b>	F
<b>Broach dimensions</b>	25,40 x 514,35mm
<b>Standard keys</b>	20 x 12mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	8.800lbs / 3.991,61Kg
<b>Required shims/ Nr of passes</b>	3 shims / 4 passes
<b>Thickness</b>	1,587mm
<b>Bushing diameter</b>	75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
<b>Bushing length</b>	152,4mm
<b>Weight</b>	3,5 Kg. Approx.



Broaching time  
5:00 min.

<b>Keyway broaches 22mm</b>	
<b>Tolerance</b>	JS9 (-0,027 +0,014)
<b>Model</b>	F
<b>Broach dimensions</b>	25,40 x 514,35mm
<b>Standard keys</b>	22 x 14mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	9.400lbs / 4.263,76Kg
<b>Required shims/ Nr of passes</b>	4 shims / 5 passes
<b>Thickness</b>	1,422mm
<b>Bushing diameter</b>	75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
<b>Bushing length</b>	152,4mm
<b>Weight</b>	3,5 Kg. Approx.



Broaching time  
5:00 min.

<b>Keyway broaches 24mm</b>	
<b>Tolerance</b>	JS9 (-0,025 +0,015)
<b>Model</b>	F
<b>Broach dimensions</b>	25,40 x 514,35mm
<b>Standard keys</b>	24 x 14mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	10.600lbs / 4.808,07Kg
<b>Required shims/ Nr of passes</b>	4 shims / 5 passes
<b>Thickness</b>	1,587mm
<b>Bushing diameter</b>	75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
<b>Bushing length</b>	152,4mm
<b>Weight</b>	3,5 Kg. Approx.



## Accessories for Broaching machine

### Keyway broaches 25mm REF: 125-09-01-BR-00017



<b>Tolerance</b>	JS9 (-0,027 +0,013)
<b>Model</b>	F
<b>Broach dimensions</b>	25,40 x 514,35mm
<b>Standard keys</b>	25 x 14mm
<b>Min./Max. Cutting length</b>	25,4mm / 152,4mm
<b>Required pressure</b>	12.300lbs / 5.579,18Kg
<b>Required shims/ Nr of passes</b>	4 shims / 5 passes
<b>Thickness</b>	1,422mm
<b>Bushing diameter</b>	75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
<b>Bushing length</b>	152,4mm
<b>Weight</b>	3,5 Kg. Approx.

Broaching time  
5:00 min.

### Keyway broaches 1/16 inch REF: 125-09-01-BRP-00001



<b>Tolerance</b>	JS9 (0,0625 - 0,0635)
<b>Model</b>	A
<b>Broach dimensions</b>	1/8 x 5 inches
<b>Min./Max. Cutting length</b>	13/64 inch / 1 1/8 inches
<b>Required pressure</b>	390lbs
<b>Required shims/ Nr of passes</b>	0 shims / 1 pass
<b>Bushing diameter</b>	1/4, 5/16, 3/8, 7/16 and 1/2 inch
<b>Bushing length</b>	1 1/8 inches
<b>Weight</b>	0,020 Kg. Approx.

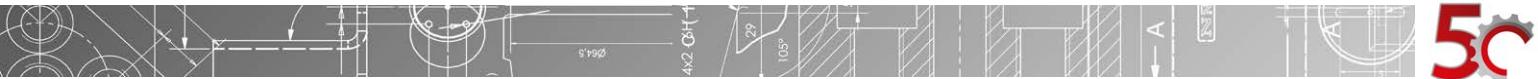
Broaching time  
0:30 min.

### Keyway broaches 3/32 inch REF: 125-09-01-BRP-00002



<b>Tolerance</b>	JS9 (0,0938 - 0,0948)
<b>Model</b>	A
<b>Broach dimensions</b>	1/8 x 5 inches
<b>Min./Max. Cutting length</b>	13/64 inch / 1 1/8 inches
<b>Required pressure</b>	780lbs
<b>Required shims/ Nr of passes</b>	0 shims / 1 pass
<b>Bushing diameter</b>	1/4, 5/16, 3/8, 7/16 and 1/2 inches
<b>Bushing length</b>	1 1/8 inches
<b>Weight</b>	0,020 Kg. Approx.

Broaching time  
0:30 min.



## Accessories for Broaching machine

### Keyway broaches 1/8 inch REF: 125-09-01-BRP-00003



Broaching time  
0:45 min.

<b>Tolerance</b>	JS9 (0,1252 · 0,1262)
<b>Model</b>	A
<b>Broach dimensions</b>	1/8 x 5 inches
<b>Min./Max. Cutting length</b>	13/64 inch / 1 1/8 inches
<b>Required pressure</b>	650lbs
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	0,0310 inches
<b>Bushing diameter</b>	1/4, 5/16, 3/8, 7/16 and 1/2 inches
<b>Bushing length</b>	1 1/8 inches
<b>Weight</b>	0,020 Kg. Approx.

### Keyway broaches 3/32 inch REF: 125-09-01-BRP-00004



Broaching time  
0:40 min.

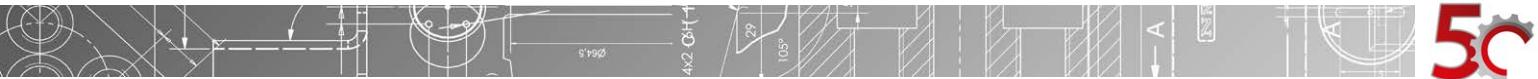
<b>Tolerance</b>	JS9 (0,0938 · 0,0948)
<b>Model</b>	B
<b>Broach dimensions</b>	3/16 x 6 3/4 inches
<b>Min./Max. Cutting length</b>	19/64 inch / 1 11/16 inches
<b>Required pressure</b>	930lbs
<b>Required shims/ Nr of passes</b>	0 shims / 1 pass
<b>Bushing diameter</b>	1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inch
<b>Bushing length</b>	1 11/16 inches
<b>Weight</b>	0,100 Kg. Approx.

### Keyway broaches 1/8 inch REF: 125-09-01-BRP-00005



Broaching time  
1:00 min.

<b>Tolerance</b>	JS9 (0,1252 · 0,1262)
<b>Model</b>	B
<b>Broach dimensions</b>	3/16 x 6 3/4 inches
<b>Min./Max. Cutting length</b>	19/64 inch / 1 11/16 inches
<b>Required pressure</b>	720lbs
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	0,0310 inches
<b>Bushing diameter</b>	1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inches
<b>Bushing length</b>	1 11/16 inches
<b>Weight</b>	0,100 Kg. Approx.



## Accessories for Broaching machine



Broaching time  
1:00 min.

<b>Keyway broaches 5/32 inch</b>	
<b>Tolerance</b>	JS9 (0,1564 · 0,1574)
<b>Model</b>	B
<b>Broach dimensions</b>	3/16 x 6 3/4 inches
<b>Min./Max. Cutting length</b>	19/64 inch / 1 11/16 inches
<b>Required pressure</b>	1.320lbs
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	0,0420 inches
<b>Bushing diameter</b>	1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inch
<b>Bushing length</b>	1 11/16 inches
<b>Weight</b>	0,100 Kg. Approx.



Broaching time  
1:00 min.

<b>Keyway broaches 3/16 inch</b>	
<b>Tolerance</b>	JS9 (0,1877 · 0,1887)
<b>Model</b>	B
<b>Broach dimensions</b>	3/16 x 6 3/4 inches
<b>Min./Max. Cutting length</b>	19/64 inch / 1 11/16 inches
<b>Required pressure</b>	1.860lbs
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	0,0500 inches
<b>Bushing diameter</b>	1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inches
<b>Bushing length</b>	1 11/16 inches
<b>Weight</b>	0,100 Kg. Approx.



Broaching time  
1:20 min.

<b>Keyway broaches 3/16 inch</b>	
<b>Tolerance</b>	JS9 (0,1877 · 0,1887)
<b>Model</b>	C
<b>Broach dimensions</b>	3/8 x 11 3/4 inches
<b>Min./Max. Cutting length</b>	25/64 inch / 2 1/2 inches
<b>Required pressure</b>	1.540lbs
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	0,0500 inches
<b>Bushing diameter</b>	3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
<b>Bushing length</b>	2 1/2 inches
<b>Weight</b>	0,350 Kg. Approx.



## Accessories for Broaching machine

### Keyway broaches 1/4 inch REF: 125-09-01-BRP-00009



<b>Tolerance</b>	JS9 (0,2502 · 0,2512)
<b>Model</b>	C
<b>Broach dimensions</b>	3/8 x 11 3/4 inches
<b>Min./Max. Cutting length</b>	25/64 inch / 2 1/2 inches
<b>Required pressure</b>	2.520lbs
<b>Required shims/ Nr of passes</b>	1 shim / 2 passes
<b>Thickness</b>	0,0625 inches
<b>Bushing diameter</b>	3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
<b>Bushing length</b>	2 1/2 inches
<b>Weight</b>	0,350 Kg. Approx.

Broaching time  
1:20 min.

### Keyway broaches 5/16 inch REF: 125-09-01-BRP-00010



<b>Tolerance</b>	JS9 (0,3127 · 0,3137)
<b>Model</b>	C
<b>Broach dimensions</b>	3/8 x 11 3/4 inches
<b>Min./Max. Cutting length</b>	25/64 inch / 2 1/2 inches
<b>Required pressure</b>	3.960lbs
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	0,0550 inches
<b>Bushing diameter</b>	3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
<b>Bushing length</b>	2 1/2 inches
<b>Weight</b>	0,350 Kg. Approx.

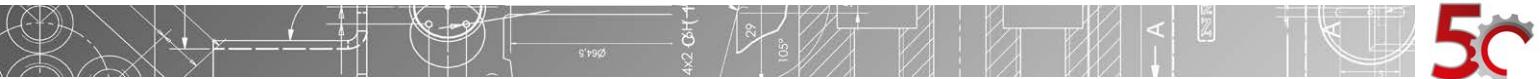
Broaching time  
2:30 min.

### Keyway broaches 3/8 inch REF: 125-09-01-BRP-00011



<b>Tolerance</b>	JS9 (0,3755 · 0,3765)
<b>Model</b>	C
<b>Broach dimensions</b>	3/8 x 11 3/4 inches
<b>Min./Max. Cutting length</b>	25/64 inch / 2 1/2 inches
<b>Required pressure</b>	4.340lbs
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	0,0625 inches
<b>Bushing diameter</b>	3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
<b>Bushing length</b>	2 1/2 inches
<b>Weight</b>	0,350 Kg. Approx.

Broaching time  
2:30 min.



## Accessories for Broaching machine

### Keyway broaches 5/16 inch REF: 125-09-01-BRP-00012



<b>Tolerance</b>	JS9 (0,3127 · 0,3137)
<b>Model</b>	D
<b>Broach dimensions</b>	9/16 x 13 7/8 inches
<b>Min./Max. Cutting length</b>	1 inch / 6 inches
<b>Required pressure</b>	8.000lbs
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	0,0560 inches
<b>Bushing diameter</b>	1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
<b>Bushing length</b>	4 inches
<b>Weight</b>	1,00 Kg. Approx.

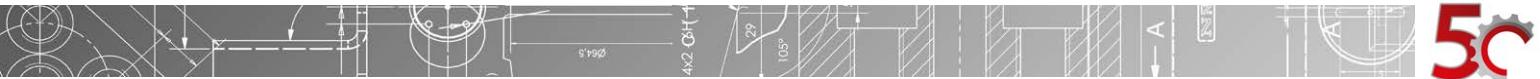
Broaching time  
2:30 min.

### Keyway broaches 3/8 inch REF: 125-09-01-BRP-00013

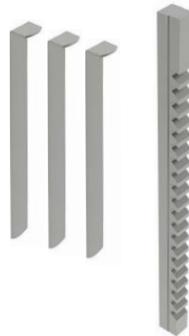


<b>Tolerance</b>	JS9 (0,3755 · 0,3765)
<b>Model</b>	D
<b>Broach dimensions</b>	9/16 x 13 7/8 inches
<b>Min./Max. Cutting length</b>	1 inch / 6 inches
<b>Required pressure</b>	7.000lbs
<b>Required shims/ Nr of passes</b>	2 shims / 3 passes
<b>Thickness</b>	0,0625 inches
<b>Bushing diameter</b>	1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
<b>Bushing length</b>	4 inches
<b>Weight</b>	1,00 Kg. Approx.

Broaching time  
2:30 min.

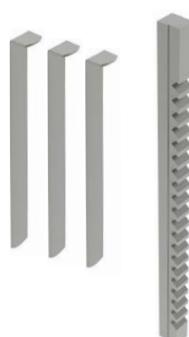


## Accessories for Broaching machine



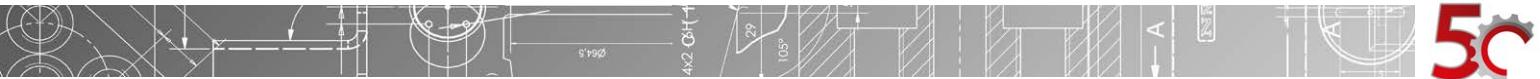
<b>Keyway broaches 7/16 inch</b>		<b>REF: 125-09-01-BRP-00014</b>
<b>Tolerance</b>	JS9 (0,4380 · 0,4390)	
<b>Model</b>	D	
<b>Broach dimensions</b>	9/16 x 13 7/8 inches	
<b>Min./Max. Cutting length</b>	1 inch / 6 inches	
<b>Required pressure</b>	9.400lbs	
<b>Required shims/ Nr of passes</b>	3 shims / 4 passes	
<b>Thickness</b>	0,0560 inches	
<b>Bushing diameter</b>	1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches	
<b>Bushing length</b>	4 inches	
<b>Weight</b>	1,00 Kg. Approx.	

Broaching time  
3:00 min.



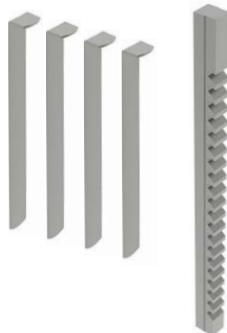
<b>Keyway broaches 1/2 inch</b>		<b>REF: 125-09-01-BRP-00015</b>
<b>Tolerance</b>	JS9 (0,5006 · 0,5016)	
<b>Model</b>	D	
<b>Broach dimensions</b>	9/16 x 13 7/8 inches	
<b>Min./Max. Cutting length</b>	1 inch / 6 inches	
<b>Required pressure</b>	9.800lbs	
<b>Required shims/ Nr of passes</b>	3 shims / 4 passes	
<b>Thickness</b>	0,0625 inches	
<b>Bushing diameter</b>	1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches	
<b>Bushing length</b>	4 inches	
<b>Weight</b>	1,00 Kg. Approx.	

Broaching time  
3:00 min.



## Accessories for Broaching machine

### Keyway broaches 9/16 inch REF: 125-09-01-BRP-00016



<b>Tolerance</b>	JS9 (0,5631 · 0,5641)
<b>Model</b>	D
<b>Broach dimensions</b>	9/16 x 13 7/8 inches
<b>Min./Max. Cutting length</b>	1 inch / 6 inches
<b>Required pressure</b>	8.900lbs
<b>Required shims/ Nr of passes</b>	4 shims / 5 passes
<b>Thickness</b>	0,0560 inches
<b>Bushing diameter</b>	1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
<b>Bushing length</b>	6 inches
<b>Weight</b>	1,00 Kg. Approx.

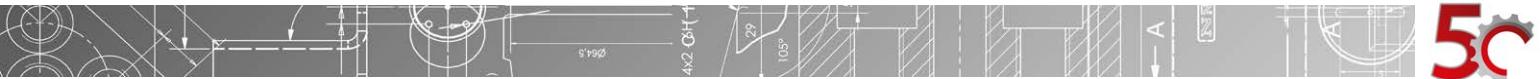
Broaching time  
3:40 min.

### Keyway broaches 5/8 inch REF: 125-09-01-BRP-00017

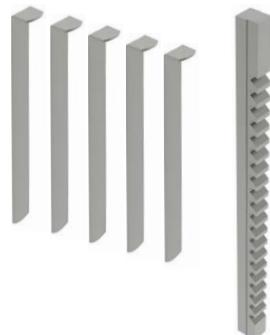


<b>Tolerance</b>	JS9 (0,6260 · 0,6270)
<b>Model</b>	E
<b>Broach dimensions</b>	3/4 x 15 1/2 inches
<b>Min./Max. Cutting length</b>	1 inch / 6 inches
<b>Required pressure</b>	9.600lbs
<b>Required shims/ Nr of passes</b>	4 shims / 5 passes
<b>Thickness</b>	0,0625 inches
<b>Bushing diameter</b>	2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16, 3, 3 1/16, 3 1/8, 3 3/16, 3 1/4, 3 5/16, 3 3/8, 3 7/16, 3 1/2, 3 9/16, 3 5/8, 3 11/16, 3 3/4, 3 13/16, 3 7/8, 3 15/16 and 4 inches
<b>Bushing length</b>	6 inches
<b>Weight</b>	1,500 Kg. Approx.

Broaching time  
4:00 min.



## Accessories for Broaching machine



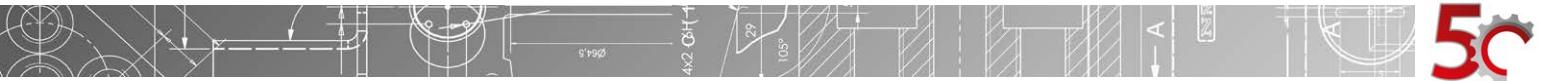
Keyway broaches 3/4 inch		REF: 125-09-01-BRP-00018
<b>Tolerance</b>	JS9 (0,7515 · 0,7525)	
<b>Model</b>	E	
<b>Broach dimensions</b>	3/4 x 15 1/2 inches	
<b>Min./Max. Cutting length</b>	1 inch / 6 inches	
<b>Required pressure</b>	11.900lbs	
<b>Required shims/ Nr of passes</b>	5 shims / 6 passes	
<b>Thickness</b>	0,0625 inches	
<b>Bushing diameter</b>	2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16, 3, 3 1/16, 3 1/8, 3 3/16, 3 1/4, 3 5/16, 3 3/8, 3 7/16, 3 1/2, 3 9/16, 3 5/8, 3 11/16, 3 3/4, 3 13/16, 3 7/8, 3 15/16 and 4 inches	
<b>Bushing length</b>	6 inches	
<b>Weight</b>	1,500 Kg. Approx.	

Broaching time  
5:00 min.



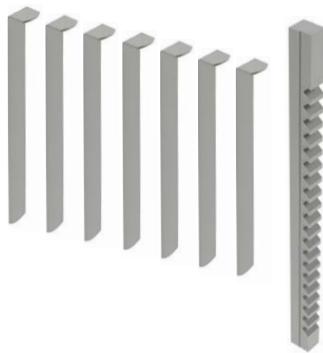
Keyway broaches 7/8 inch		REF: 125-09-01-BRP-00019
<b>Tolerance</b>	JS9 (0,8765 · 0,8775)	
<b>Model</b>	F	
<b>Broach dimensions</b>	1 x 20 1/4 inches	
<b>Min./Max. Cutting length</b>	1 inch / 6 inches	
<b>Required pressure</b>	9.800lbs	
<b>Required shims/ Nr of passes</b>	6 shims / 7 passes	
<b>Thickness</b>	0,0625 inches	
<b>Bushing diameter</b>	3 1/16, 3 1/8, 3 3/16, 3 1/4, 3 5/16, 3 3/8, 3 7/16, 3 1/2, 3 9/16, 3 5/8, 3 11/16, 3 3/4, 3 13/16, 3 7/8, 3 15/16, 4, 4 1/16, 4 1/8, 4 3/16, 4 1/4, 4 5/16, 4 3/8, 4 7/16, 4 1/2, 7 9/16, 4 5/8, 4 11/16, 4 3/4, 4 13/16, 4 7/8, 4 15/16 and 5 inches	
<b>Bushing length</b>	6 inches	
<b>Weight</b>	3,500 Kg. Approx.	

Broaching time  
6:00 min.



5C

## Accessories for Broaching machine



### Keyway broaches 1 inch

REF: 125-09-01-BRP-00020

<b>Tolerance</b>	JS9 (1,0015 · 1,0025)
<b>Model</b>	F
<b>Broach dimensions</b>	1 x 20 1/4 inches
<b>Min./Max. Cutting length</b>	1 inch / 6 inches
<b>Required pressure</b>	11.100lbs
<b>Required shims/ Nr of passes</b>	7 shims / 8 passes
<b>Thickness</b>	0,0625 inches
<b>Bushing diameter</b>	3 1/16, 3 1/8, 3 3/16, 3 1/4, 3 5/16, 3 3/8, 3 7/16, 3 1/2, 3 9/16, 3 5/8, 3 11/16, 3 3/4, 3 13/16, 3 7/8, 3 15/16, 4, 4 1/16, 4 1/8, 4 3/16, 4 1/4, 4 5/16, 4 3/8, 4 7/16, 4 1/2, 7 9/16, 4 5/8, 4 11/16, 4 3/4, 4 13/16, 4 7/8, 4 15/16 and 5 inches
<b>Bushing length</b>	6 inches
<b>Weight</b>	3,500 Kg. Approx.

 Broaching time  
8:00 min.



## Accessories for Broaching machine

### Bushings



F114 steel guide bushes in H8 diameter tolerance to optimize the perfect finish of the part.

*For other dimensions, request the manufacturer.*

Reference	Model	Diameter	Length	Tolerance	Broaches
125-09-01-CBR-00002	A	10 mm	32 mm	J9	2 - 3 mm
125-09-01-CBR-00004	B	12 mm	46 mm	J9	4 - 5C mm
125-09-01-CBR-00005	B	14 mm	46 mm	J9	4 - 5C mm
125-09-01-CBR-00006	B	16 mm	46 mm	J9	4 - 5C mm
125-09-01-CBR-00007	B	17 mm	46 mm	J9	4 - 5C mm
125-09-01-CBR-00008	C	18 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00009	C	19 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00010	C	20 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00011	C	22 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00012	C	24 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00013	C	25 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00014	C	28 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00015	C	30 mm	65 mm	J9	5 - 6 - 8 mm
125-09-01-CBR-00016	D	32 mm	102 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00017	D	35 mm	102 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00018	D	38 mm	102 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00020	D	40 mm	102 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00021	D	42 mm	102 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00022	D	45 mm	127 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00023	D	48 mm	127 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00024	D	50 mm	127 mm	J9	10 - 12 - 14 mm
125-09-01-CBR-00025	E	55 mm	127 mm	J9	16 - 18 mm
125-09-01-CBR-00026	E	60 mm	154 mm	J9	16 - 18 mm
125-09-01-CBR-00027	E	65 mm	154 mm	J9	16 - 18 mm
125-09-01-CBR-00028	F	70 mm	154 mm	J9	20 - 22 - 24 - 25 mm
125-09-01-CBR-00029	F	75 mm	154 mm	J9	20 - 22 - 24 - 25 mm
125-09-01-CBR-00030	F	80 mm	154 mm	J9	20 - 22 - 24 - 25 mm
125-09-01-CBR-00031	F	85 mm	154 mm	J9	20 - 22 - 24 - 25 mm
125-09-01-CBR-00032	F	90 mm	154 mm	J9	20 - 22 - 24 - 25 mm
125-09-01-CBR-00033	F	95 mm	154 mm	J9	20 - 22 - 24 - 25 mm



## Power hammer

### Power hammer PH50

In collaboration with some of the best blacksmiths in Spain, France and the United States, the Prada Nargesa engineers have designed a power hammer with all sorts of new advances in comparison to the other drop hammers on the market up until now. **Easier to manage, more precise, safer, quieter and with no need for any civil engineering work for installation in addition to many other features, it's the best choice available.**

Reference	100-14-03-001
Engine power	4 kW / 5,5 CV
Nominal dropping weight	50 kg / 110 lb
Strokes per minute	240
Ram range	180 mm / 7"
Operating range	220 mm / 9"
Max. round working capacity	70 mm / 2,75"
Max. square working capacity	60x60/ 2,36"
Dimensions	808x1289x1768mm
Weight	1002 Kg



Before purchasing a power hammer, a few basic details are needed before making a final decision:

**BUILT-IN COMPRESSOR:** The PH50 power hammer has a built-in compressor. This means, unlike with other brands, no external compressor is needed. A 50 kg or 110 lb power hammer without a built-in compressor would need a 5 HP external compressor.

**NO NEED FOR SPECIFIC CIVIL ENGINEERING FOR INSTALLATION:** Only 4 holes are needed in a concrete floor to insert the 4 chemical bolts that come with the machine when installing the PH50 power hammer.

**WELDED STEEL FRAME:** The machine frame is not casted; it's made of welded and die-cut steel. This reduces the possibility of cracking, as occurs with cast power hammers.

**MAXIMUM CONTROLLED DROP PRECISION:** We achieved maximum precision with the ability to even close a box of matches or position an egg and collide with it without breaking it.

**LAPPED CYLINDERS DESIGNED WITH LOW-FRICTION TECHNOLOGY:** The friction between the sleeve and piston is normally mechanical and through steel rings. This causes a risk of seizing up over time.

**INTAKE AND EXHAUST MUFFLERS:** Two mufflers, on the intake and exhaust, reduce the noise to xx dB.

**AUTOMATIC LUBRICATION SYSTEM:** The lubrication system on the PH50 power hammer features a completely transparent tank next to the power switch to monitor the level of oil in the container without having to use uncomfortable inspection peepholes.

**DOUBLE MECHANICAL STOP PROTECTION:** The piston on the front and pedal become completely mechanically blocked in an ideal position to easily and safely change the molds.

**COLLECTING AND FILTERING OIL FROM THE AIR:** The Nargesa PH50 drop hammer has a tank that collects this mix and separates the two components.

**SAFETY & CE MARKING:** All of our machines are compliant with EC industrial machinery manufacturing standards.





## Accessories for Power hammer

### Standard flat mold for Power Hammer PH50

REF: 140-14-04-00001



- > All our Power-hammers are equipped with an upper standard flat tooling and lower one.
- > This tooling is the most versatile one and it's bond to the operatives skilfulness.
- > Molds manufactured and tempered in 1.2344 steel / AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 / AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major impacts and high temperatures.

*Standard tool*

Nº of pieces	Dimensions
2	120x78mm

### Support braces/ adaptors for Power Hammer PH50

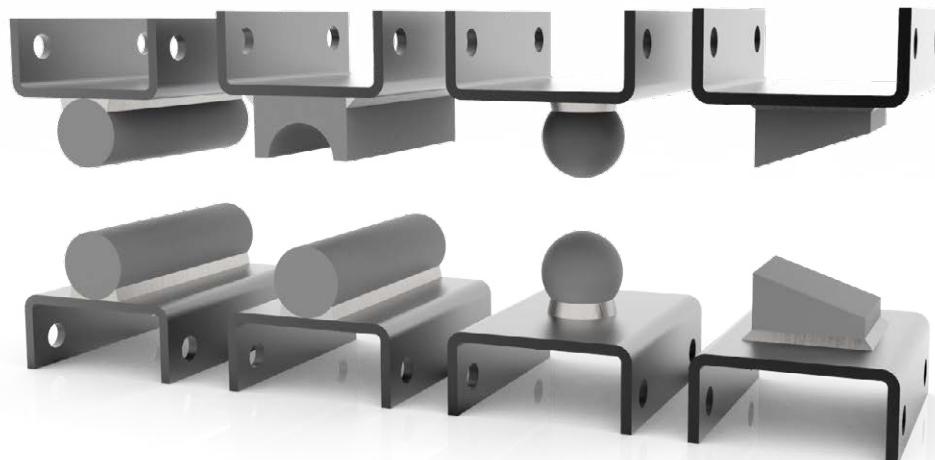
REF: 140-14-04-00002



- > We supply two sets of Support braces along with the power hammer PH50.
- These adaptors enable us to weld or fasten with bolts to them several kinds of elements, such as round and square solid bars, flat bars, rods etc... in order to manufacture our own tools.
- > Tools made of Steel F111.



*Standard tool*



Nº of pieces	Dimensions
4	120x89mm



## Accessories for Power hammer

### Tool for Power Hammer 04



REF: 140-14-01-00004

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.

Nº of pieces	Dimensions
2	100x60mm

### Tool for Power Hammer 06



REF: 140-14-01-00006

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.

Nº of pieces	Dimensions
2	120x60mm

### Tool for Power Hammer 07

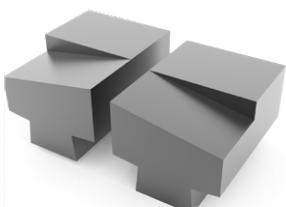


REF: 140-14-01-00007

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.

Nº of pieces	Dimensions
2	120x60mm

### Tool for Power Hammer 08



REF: 140-14-01-00008

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.

Nº of pieces	Dimensions
2	130x100mm



## Accessories for Power hammer

### Tool for Power Hammer 09



REF: 140-14-01-00009

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.

Nº of pieces	Dimensions
2	120x60mm

### Tool for Power Hammer 10



REF: 140-14-01-00010

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.

Nº of pieces	Dimensions
2	120x60mm

### Tool for Power Hammer 13



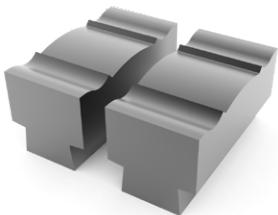
REF: 140-14-01-00013

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



Nº of pieces	Dimensions	PRICE
2	120x60mm	Ø 12mm □ 12mm

### Tool for Power Hammer 18



REF: 140-14-01-00018

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



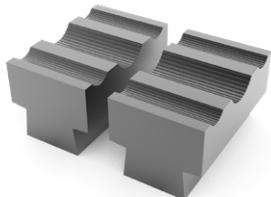
Nº of pieces	Dimensions
2	160x80mm



50

## Accessories for Power hammer

### Tool for Power Hammer 19

**REF: 140-14-01-00019**

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



#### Nº of pieces

#### Dimensions

#### Capacity

2

130x80mm

Ø12mm - 16mm - 20mm

### Tool for Power Hammer 20

**REF: 140-14-01-00020**

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



#### Nº of pieces

#### Dimensions

#### Capacity

2

120x100mm

12x12mm

### Tool for Power Hammer 21

**REF: 140-14-01-00021**

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



#### Nº of pieces

#### Dimensions

#### Capacity

2

120x70mm

Ø 14mm

### Tool for Power Hammer 22

**REF: 140-14-01-00022**

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



#### Nº of pieces

#### Dimensions

2

135x60mm



50

## Accessories for Power hammer

### Tool for Power Hammer 23

**REF: 140-14-01-00023**

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



### Nº of pieces

### Dimensions

### Capacity

2

70x60mm

Ø 16mm

### Tool for Power Hammer 24

**REF: 140-14-01-00024**

> Molds manufactured and tempered in 1.2344 steel /  
AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 /  
AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major  
impacts and high temperatures.



### Nº of pieces

### Dimensions

### Capacity

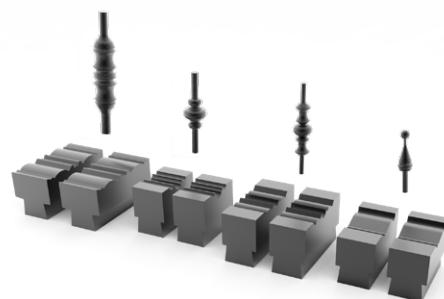
2

70x60mm

Ø 16mm □ 16mm

## Special dies

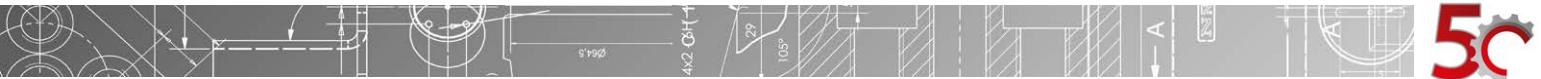
> Special customized tools  
> Molds manufactured and tempered in 1.2344 steel / AFNOR:  
Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 / AISI: SAE H13 / SKD61 /  
45Cr5MoSiV1 to withstand major impacts and high temperatures.



## Oil SIL CN-20

**REF: 060-BA-00030**

> Special refined mineral oil for pneumatic circuits.  
> Container: 5L



## Hot Forging Press

### Hot Forging Press PV21

New Generation of PV21 Hot Forging Presses, easier to operate, more precise, quieter, safer, and with many other features

In collaboration with some of the best blacksmiths in Spain, France and the United States, the Prada Nargesa engineers have designed a forging press with all sorts of features. Easier to handle, more accurate, more silent, safer and with many more features that make it the best choice among all the presses currently available on the market as more than 90% of the others unfortunately do not even comply with EC regulations.

<b>Reference</b>	<b>100-18-01-001</b>
<b>Motor power</b>	<b>2,2 Kw / 3 CV a 1460 r.p.m</b>
<b>Voltage</b>	<b>230/400V Trifásica 230V Monofásica</b>
<b>Intensity</b>	<b>9/5 A</b>
<b>Pump</b>	<b>7,5 l./m</b>
<b>Tank</b>	<b>27 litros</b>
<b>Double rotor</b>	<b>21 Tn</b>
<b>Hydraulic pressure</b>	<b>200 Kg/cm<sup>2</sup> (20 MPa)</b>
<b>Structure material</b>	<b>Chapa</b>
<b>Dimensions</b>	<b>790 x 800 x 1940 mm</b>
<b>Total weight</b>	<b>500 Kg</b>





## Accessories for Hot Forging Press

### 20 bending mold



REF: 140-18-01-00020

>Molds with two work areas to stretch and flatten material. Highly versatile.  
> Molds manufactured and tempered in 1.2344 steel / AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 / AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major effort and high temperatures. This material maintains its mechanical properties at high temperatures.

*Standard tooling*



---

Mold dimensions	Total weight
130x80x67 mm	6.60 kg

---

### PV21 single base



REF: 140-18-01-00001

>Two bases to be able to weld or screw together any mold manufactured by the customer, as per the work needs.  
Bases made of F-111 steel.

*Standard tooling*

---

Mold dimensions	Total weight
230x135x15 mm	6.10 kg

---

### PV21 base with hole in the middle



REF: 140-18-01-00004

>Two bases to be able to weld or screw together any mold manufactured by the customer, as per the work needs.  
These bases were designed for hot punching.  
Bases made of F-111 steel.

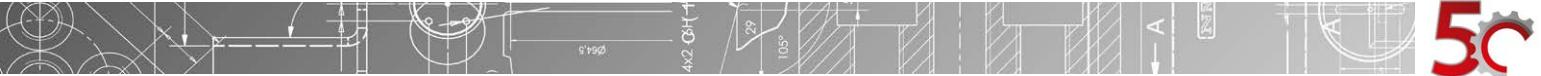
*Standard tooling*



---

Mold dimensions	Total weight
230x135x15mm	6,00kg

---



## Accessories for Hot Forging Press

### PV21 front assembly base



**REF:** 140-18-01-00005

> Two bases to be able to screw any of the molds we manufacture together, perpendicular to their original position.

Bases made of F-111 steel.

*Standard tooling*

Mold dimensions	Weight
230x185x15 mm	7.60 kg

### PV21 double base

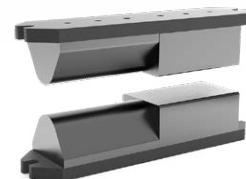


**REF:** 140-18-01-00006

> Two bases to be able to screw any of the molds we manufacture together, one next to the other.

Bases made of F-111 steel.

*Standard tooling*



Mold dimensions	Weight
325x80x15 mm	5.60 kg



## Accessories for Hot Forging Press

### 21 bending mold



**REF:** 140-18-01-00021

- > Pyramid-shaped molds to form the material and stretch it faster.
- > Molds manufactured and tempered in 1.2344 steel / AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 / AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major effort and high temperatures. This material maintains its mechanical properties at high temperatures.



*Optional tooling*

Mold dimensions	Weight
130x80x67 mm	6.10 kg

### 22 bending mold



**REF:** 140-18-01-00022

- > Molds with a rounded surface to stretch material without excessive deformation.
- > Molds manufactured and tempered in 1.2344 steel / AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 / AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major effort and high temperatures. This material maintains its mechanical properties at high temperatures.



*Optional tooling*

Mold dimensions	Weight
130x80x67 mm	7.20 kg

### 23 bending mold



**REF:** 140-18-01-00023

- > Flat molds to flatten material with small radius edges, to create steps.
- > Molds manufactured and tempered in 1.2344 steel / AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 / AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major effort and high temperatures. This material maintains its mechanical properties at high temperatures.



*Optional tooling*

Mold dimensions	Weight
130x80x67 mm	7.30 kg



## Accessories for Hot Forging Press

### 24 bending mold



REF: 140-18-01-00024

>Dies with three V-shaped slots (2", 1" 1/2 and 1") for pressing steel. Specially designed to avoid changing tools by unifying three sizes in the same tool. Ideal for manufacturing parts with Damascus steel.  
> Molds manufactured and tempered in 1.2344 steel / AFNOR: Z40CDV5 / DIN: X40CrMoV5-1 / UNE: F5318 / AISI: SAE H13 / SKD61 / 45Cr5MoSiV1 to withstand major effort and high temperatures. This material maintains its mechanical properties at high temperatures.



*Optional tooling*

Mold dimensions	Weight
325x80x67mm	14,5 kg



## Forge furnaces

### Forge furnace H1

The new propane forging furnace H1 NARGESA, has been designed to heat up steel in a more efficient and safe way, respecting environment.

More efficient: up to a 75% less gas, achieving higher temperature than any furnace of its range.

Safer: new safety systems for the operator, according to the regulation RD919/2006.

100% Respectful with environment: lower than 0.002€ CO. Inside cover with vermiculite 100% natural and eco-friendly.

<b>Reference</b>	100-04-03-001
<b>Dimensions of combustion chamber</b>	236x140x100 mm
<b>Type of fuel</b>	Propane gas (GLP)
<b>Gas intake as 1 per bar</b>	0,35 Kg/h
<b>Adjustable working pressure</b>	0,1 - 1,5 bar
<b>Power (Hi)</b>	4 kW
<b>Maximum temperature</b>	1300 °C
<b>Nr of burners</b>	1
<b>External dimensions</b>	310x450x370 mm
<b>Weight</b>	27 Kg



### Forge furnace H2

The new propane forging furnace H2 NARGESA, has been designed to heat up steel in a more efficient and safe way, respecting environment.

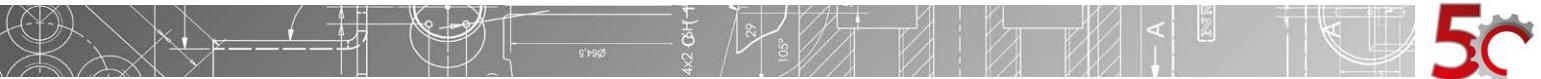
More efficient: up to a 75% less gas, achieving higher temperature than any furnace of its range.

Safer: new safety systems for the operator, according to the regulation RD919/2006.

100% Respectful with environment: lower than 0.002€ CO. Inside cover with vermiculite 100% natural and eco-friendly.

<b>Reference</b>	100-04-01-001
<b>Dimensions of combustion chamber</b>	324x240x100 mm
<b>Type of fuel</b>	Propane gas (GLP)
<b>Gas intake as 1 per bar</b>	0,7 Kg/h
<b>Adjustable working pressure</b>	0,1 - 1,5 bar
<b>Power (Hi)</b>	8 kW
<b>Maximum temperature</b>	1300 °C
<b>Nr of burners</b>	2
<b>External dimensions</b>	500x440x370 mm
<b>Weight</b>	40 Kg





## Forge furnaces

### Forge furnace H3

The new propane forging furnace H3 NARGESA, has been designed to heat up steel in a more efficient and safe way, respecting environment.

More efficient: up to a 75% less gas, achieving higher temperature than any furnace of its range.

Safer: new safety systems for the operator, according to the regulation RD919/2006.

100% Respectful with environment: lower than 0.002€ CO. Inside cover with vermiculite 100% natural and eco-friendly.

<b>Reference</b>	100-04-04-001
<b>Dimensions of combustion chamber</b>	464x240x100 mm
<b>Type of fuel</b>	Propane gas (GLP)
<b>Gas intake as 1 per bar</b>	1 Kg/h
<b>Adjustable working pressure</b>	0,1 - 1,5 bar
<b>Power (Hi)</b>	12 kW
<b>Maximum temperature</b>	1300 °C
<b>Nr of burners</b>	3
<b>External dimensions</b>	510x580x370 mm
<b>Weight</b>	53 Kg





## End Forging Machines

### End forgin machine PC16

The End Hot Wrought Machine Nargesa PC16, eases up the rolling job of hot steel. It rolls up the snail forged shaped end. This decorations are commonly used as extremes in scrolls and decorative parts.Gates, windows, fencing, metal furniture...

Reference	100-15-01-001
Engine power	2,2 KW / 3HP
Three phased tensión	230/400 V
Maximum capacity in round	20 mm
Maximum capacity in square	20 mm
Maximum capacity in flat bar	50x10 mm
Working speed	45 mm/s
Return speed	70 mm/s
Cycle time	10 s
Pieces per minute	4 pieces
Dimensions	640x1300x1110 mm
Weight	336 Kg



### Wrought iron machine NF70

The Wrought iron Machine Nargesa NF70 smashes and molds irons up to obtaining the desired shape depending on the mold design. It forges arrow ends or lances of different kinds; flat, pyramidal, etc. It also makes baluster extremes to accomplish nice ornamental parts by changing the die. It forges and smashes balusters in the middle to make different designs.

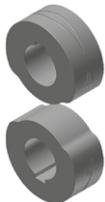
Reference	100-12-02-001
Engine power	5,5 KW / 7HP
Three phased tensión	230/400 V
Maximum capacity in round	20 mm
Maximum capacity in square	20 mm
Maximum capacity in flat bar	40x10 mm
Rotation speed	20 rpm a 50Hz
Dimensions	620x1040x1250 mm
Weight	493 Kg





## Accessories for End Forging Machine NF70

### Set of special rollers



**Reference: 140-12-02-00001**

We design and manufacture all kind of special rollers under request.

### Set of trilobular rollers



**Reference: 140-12-02-00003**

Set of trilobular rollers to emboss decoration in the middle of a baluster.



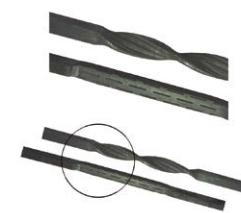
Units per set	Maximum capacity	Maximum capacity	Weight
2	Round and square 20mm	Rectangular 50x10mm	4,2 Kg./uni

### Set of triple middle marking rollers



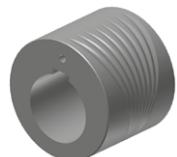
**Reference: 140-12-02-00004**

Set of excentric rollers to emboss the middle of ba-lusters. Triple design, flat, striped and discontinuous in the same roller.



Units per set	Maximum capacity	Maximum capacity	Weight
2	Round and square 20mm	Rectangular 50x10mm	8,5 Kg./uni

### Set of fishtail roller

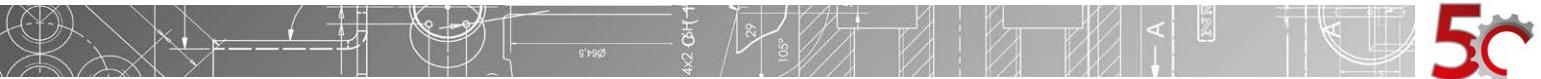


**Reference: 140-12-02-00005**

Two-grooved roller, one for big diameters and the other one for smaller diameters.



Units per set	Maximum capacity	Maximum capacity	Weight
1	Round and square 20mm	Rectangular 50x10mm	7,7 Kg./uni



## Iron embossing machine

### Iron embossing machine NOA60

The purpose of NOA60 Nargesa is to conform and emboss designs on cold flat bars, square bars and square pipes. The shape and the design of the job will depend on the rollers used.

<b>Reference</b>	<b>100-11-01-002</b>
<b>Engine power</b>	<b>5,5 KW / 7,5 HP</b>
<b>Three phased tensión</b>	<b>230 / 400 V</b>
<b>Power consumption</b>	<b>21/12 A</b>
<b>Nominal working speed</b>	<b>20 r.p.m. a 50 Hz</b>
<b>Max. on square pipe</b>	<b>60 mm o 2" 1/2"</b>
<b>Max. on square bar</b>	<b>20 mm o 3/4"</b>
<b>Max. on handrail or flat bar</b>	<b>60x10 mm o 2"x3/8"</b>
<b>Dimensions</b>	<b>780x1230x1400 mm</b>
<b>Weight</b>	<b>746 Kg</b>





## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 01 NOA60

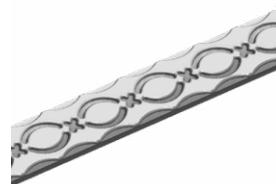


**Reference: 140-11-01-00001.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 02 NOA60



**Reference: 140-11-01-00002.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

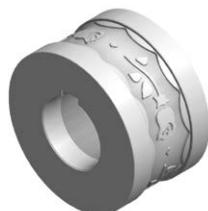
Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 03 NOA60



**Reference: 140-11-01-00003.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 04 NOA60

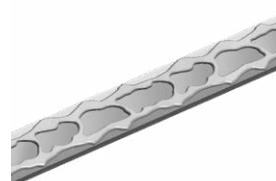


**Reference: 140-11-01-00004.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.



## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 05 NOA60

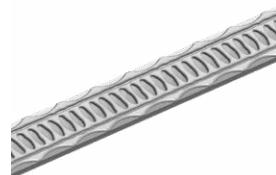


**Reference: 140-11-01-00005.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 06 NOA60

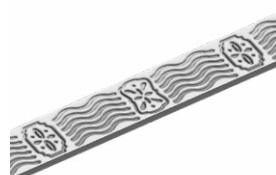


**Reference: 140-11-01-00006.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 07 NOA60



**Reference: 140-11-01-00007.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 08 NOA60



**Reference: 140-11-01-00008.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.



## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 09 NOA60



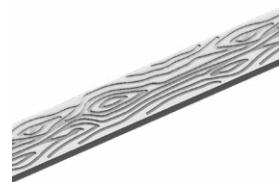
**Reference: 140-11-01-00009**

Roller to emboss handrail up to 60 mm

Guide 140-11-01-00401, 140-11-01-00402 or

140-11-01-00400 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,1 Kg.

### Handrails embossing roller 10 NOA60



**Reference: 140-11-01-00010.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 11 NOA60



**Reference: 140-11-01-00011.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 12 NOA60



**Reference: 140-11-01-00012.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.



## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 13 NOA60



**Reference: 140-11-01-00013.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 14 NOA60



**Reference: 140-11-01-00014.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.

### Handrails embossing roller 15 NOA60



**Reference: 140-11-01-00015.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.

### Handrails embossing roller 16 NOA60



**Reference: 140-11-01-00016.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.



## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 17 NOA60



**Reference: 140-11-01-00017.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

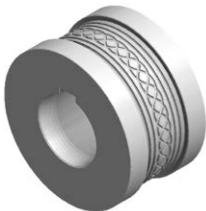
Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.

### Handrails embossing roller 18 NOA60

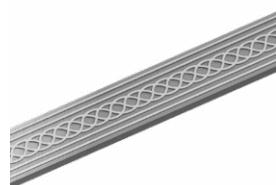


**Reference: 140-11-01-00018.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.

### Handrails embossing roller 19 NOA60



**Reference: 140-11-01-00019.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.

### Handrails embossing roller 20 NOA60



**Reference: 140-11-01-00020.40**

Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,5 Kg.



## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 21 NOA60

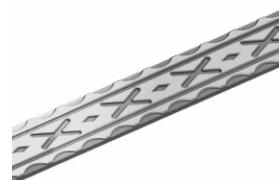


Referencia: 140-11-01-00021.50

Rodillo para grabar pasamano de 50 mm o 2" pulgadas.

Para su uso es necesaria la guía 140-11-01-00401 o la guía 140-11-01-00402.

Para medidas distintas consultar con el fabricante.



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.

### Handrails embossing roller 22 NOA60



Referencia: 140-11-01-00022.40

Rodillo para grabar pasamano de 40 mm o 1"1/2 pulgadas.

Para su uso es necesaria la guía 140-11-01-00401 o la guía 140-11-01-00402.

Para medidas distintas consultar con el fabricante.



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.

### Handrails and square bars embossing roller 23 NOA60



Referencia: 140-11-01-00023

Roller to emboss handrail up to 60 mm and square bar up to 25 mm.

Guide 140-11-01-00300, 140-11-01-00400, 140-11-01-00401, 140-11-01-00402, 140-11-01-00403 or 140-11-01-00404 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6 Kg.

### Handrails embossing roller 24 NOA60

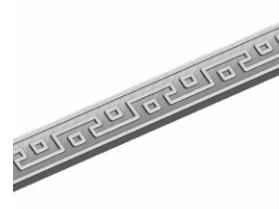


Reference: 140-11-01-00024.40

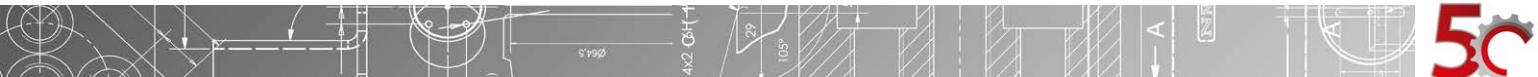
Roller to emboss a 40 mm or 1"-1/2 inches handrail

Guide 140-11-01-00401 or 140-11-01-00402 is required

Ask the manufacturer about different dimensions

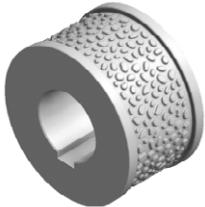


Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,4 Kg.



## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 25 NOA60



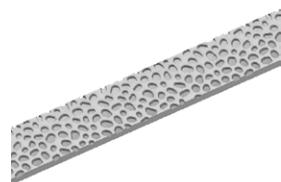
**Reference: 140-11-01-00025**

Roller to emboss handrail up to 60 mm

Guide 140-11-01-00401, 140-11-01-00402 or

140-11-01-00400 is required

*Ask the manufacturer about different dimensions*



Units per machine	Material thickness	Weight
1	From 6 to 10mm	6,3 Kg.

### Roller for the side marking of flat bar NOA60

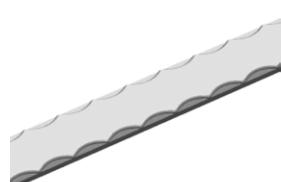


**Reference: 140-11-01-00028**

Sectioned roller to emboss different flat bar sizes on the same kit. Adjustable to flat bars of 25mm o 1", 30mm o 1" 1/4, 40mm o 1" 1/2 and 50mm o 2".

Guide 140-11-01-00401, 140-11-01-00402, 140-11-01-00403 or 140-11-01-00404 is required

*Ask the manufacturer about different dimensions*



Units per machine	Material thickness	Weight
1	From 5 to 12mm	12,5 Kg.

### Rollerstand

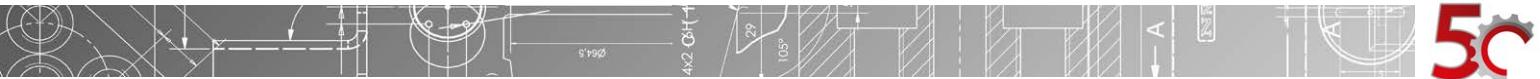


**Reference: 140-00-00-00004**

Seven-rollers stand

*Ask the manufacturer about different dimensions*

Working Height	Dimensions	Load capacity	Weight
650 / 1200 mm	2050x470 mm	800 Kg.	65 Kg.



## Accessories for Iron embossing machine NOA60

### Entrance guide for 60 mm handrail NOA60



**Reference:** 140-11-01-00400  
Entrance guide for 60 mm handrail.  
**Weight:** 4,3 Kg.

### Entrance guide for 40 and 50 mm handrail NOA60



**Reference:** 140-11-01-00401  
Inlet guide for 40 and 50 mm handrail  
**Weight:** 4 Kg.

### Entrance guide for 1" 1/2 y 2" inches handrail NOA60



**Reference:** 140-11-01-00402  
Inlet guide for 1" 1/2 and 2" inches handrail.  
**Weight:** 4 Kg.

### Entrance guide for 25 and 30mm handrail NOA60



**Reference:** 140-11-01-00403  
Inlet guide for 25 and 30 mm handrail.  
**Weight:** 4,3 Kg.

### Entrance guide for 1" and 1" 1/4 inches handrail NOA60



**Reference:** 140-11-01-00404  
Inlet guide for 1" and 1" 1/4 inches handrail.  
**Weight:** 4,3 Kg.



## Accessories for Iron embossing machine NOA60

### Handrails embossing roller 201 NOA60

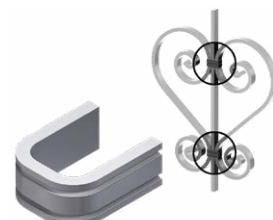


**Reference: 140-11-01-00201**

Roller to emboss 12 and 15 mm or 1/2 inch handrail. For clamp forming

*Guide 140-11-01-00200 is required*

*Ask the manufacturer about different dimensions*



Units per machine	Material thickness	Weight
1	From 1 to 4 mm	6,5 Kg.

### Handrails embossing roller 202 NOA60

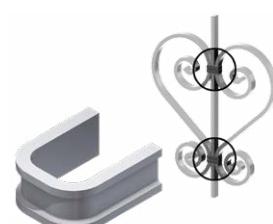


**Reference: 140-11-01-00202**

Roller to emboss 12 and 15 mm or 1/2 inch handrail. For clamp forming

*Guide 140-11-01-00200 is required*

*Ask the manufacturer about different dimensions*



Units per machine	Material thickness	Weight
1	From 1 to 4 mm	6,6 Kg.

### Entrance guide for 12mm or 1/2" inch and 15 mm handrail NOA60



**Reference: 140-11-01-00200**

Entrance guide for 12 mm and 15 mm or 1/2"inch handrail

**Weight: 4,6 Kg.**



## Accessories for Iron embossing machine NOA60

### Set of handrails and square bars embossing rollers 26 NOA60



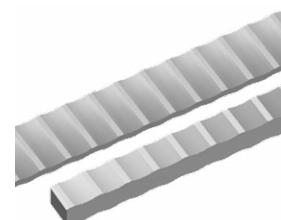
**Reference: 140-11-01-00026**

Rollers to emboss handrail up to 60 mm and square bar up to 20 mm or 3/4" inch

Guide 140-11-01-00300, 140-11-01-00400, 140-11-01-00401, 140-11-01-00402, 140-11-01-00403 or 140-11-01-00404 is required

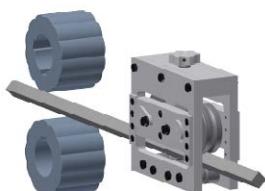
To emboss edge square bar, an entrance guide is required 140-11-01-00027

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	--	11,4 Kg.

### Entrance guide for edge square bar NOA60



**Reference: 140-11-01-00027**

Entrance guide to emboss edge square bar up to 20mm or 3/4" inch

Set of embossing rollers 140-11-01-00026 is required

**Weight:** 18 Kg.



### Set of square bar embossing rollers 301 NOA60



**Reference: 140-11-01-00301**

Rollers to emboss square bar up to 10 mm or 3/8", 14 mm or 9/16" and 20 mm or 3/4" inch

Guide 140-11-01-00300 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	--	12,6 Kg.

### Set of square bar embossing rollers 302 NOA60



**Referencia: 140-11-01-00302**

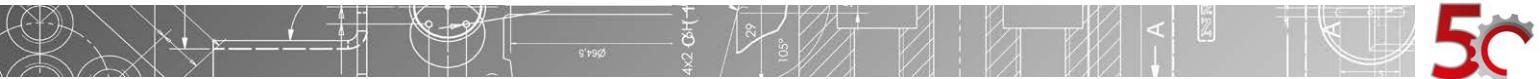
Rollers to emboss square bar up to 12 mm or 1/2", 16 mm or 5/8" and 18 mm.

Guide 140-11-01-00300 is required

Ask the manufacturer about different dimensions



Units per machine	Material thickness	Weight
1	--	12,6 Kg.



## Accessories for Iron embossing machine NOA60

### Set of square bar embossing rollers 303 NOA60



**Reference: 140-11-01-00303**

Rollers to emboss square bar up to 10 mm or 3/8", 14 mm or 9/16" and 20 mm or 3/4" inch

*Guide 140-11-01-00300 is required*

*Ask the manufacturer about different dimensions*



Units per machine	Material thickness	Weight
1	--	12,9 Kg.

### Set of square bar embossing rollers 304 NOA60



**Reference: 140-11-01-00304**

Rollers to emboss square bar up to 12 mm or 1/2", 16 mm or 5/8" and 18 mm.

*Guide 140-11-01-00300 is required*

*Ask the manufacturer about different dimensions*



Units per machine	Material thickness	Weight
1	--	12,9 Kg.

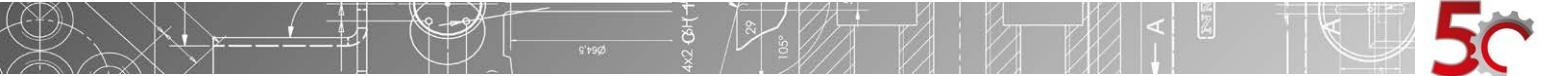
### Entrance guide for square bar NOA60



**Reference: 140-11-01-00300**

Entrance guide for square bar of 10mm or 3/8", 12mm or 1/2", 14mm or 9/16", 16mm or 5/8", 18mm and 20 mm or 3/4" inch

**Weight: 4 Kg.**



## Accessories for Iron embossing machine NOA60

### Set of embossing rollers for 25 mm or 1", 30 mm or 1" 1/4, 35 and 40 mm pipes NOA60



**Reference: 140-11-01-00500**

Set of sectioned rollers to emboss different square or rectangular pipe sizes with the same set. Adjustable to the following pipes:

**Square pipes:** 25mm or 1", 30mm or 1" 1/4, 35 and 40mm

**Rectangular pipes:** 25x20mm or 1"x3/4", 30x20mm or 1"1/4x3/4", 30x25mm, 35x20mm, 35x25mm, 40x20mm, 40x25mm, 40x30mm, 40x35mm

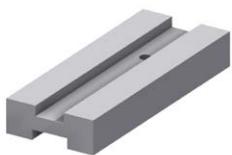
*Guide 140-11-01-00501 or 140-11-01-00502 is required*

*Ask the manufacturer about different dimensions*



Set per machine	Material minimum thickness suggested by manufaturer	Weight
1	3 mm	12 Kg.

### Inlet guide for 25 mm or 1" and 30 mm or 1" 1/4 pipe NOA60

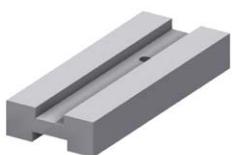


**Reference: 140-11-01-00501**

Inlet guide for 25 mm or 1" and 30 mm or 1" 1/4 pipe

**Weight:** 3 Kg.

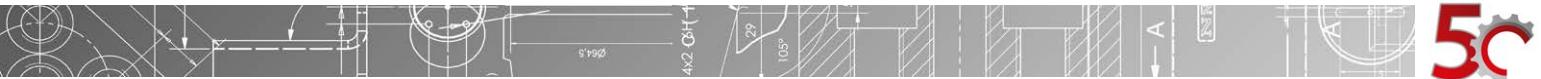
### Inlet guide for 35 and 40 mm pipe NOA60



**Reference: 140-11-01-00502**

Inlet guide for 35 and 40 mm pipe

**Weight:** 2,8 Kg.



## Accessories for Iron embossing machine NOA60

### Set of embossing rollers for 50 and 60mm pipes NOA60



**Reference: 140-11-01-00503**

Set of sectioned rollers to emboss different square or rectangular pipe sizes with the same set. Adjustable to the following pipes:



**Square pipes:** 50mm or 60mm

**Rectangular pipes:** 50x20mm, 50x25mm, 50x30mm, 50x35mm, 50x40mm, 50x45mm, 60x20mm, 60x25mm, 60x30mm, 60x35mm, 60x40mm, 60x45mm, 60x50mm or 60x55mm

*Guide 140-11-01-00505 or 140-11-01-00506 is required*

*Ask the manufacturer about different dimensions*

Set per machine	Material minimum thickness suggested by manufaturer	Weight
1	3 mm	6 Kg.

### Inlet guide for 50 mm pipe NOA60



**Reference: 140-11-01-00505**

Inlet guide for 50 mm pipe

**Weight:** 2,4 Kg.

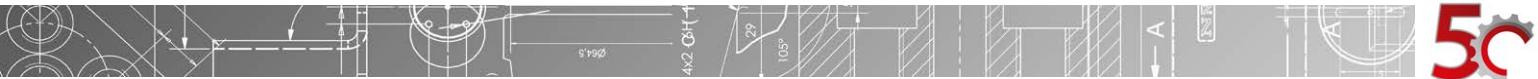
### Inlet guide for 60 mm pipe NOA60



**Reference: 140-11-01-00506**

Inlet guide for 60 mm pipe

**Weight:** 2,2 Kg.



## Accessories for Iron embossing machine NOA60

### Set of embossing rollers for 1" 1/2, 2" and 2" 1/2 inches pipes NOA60



**Reference: 140-11-01-00507**

Set of sectioned rollers to emboss different square or rectangular pipe sizes with the same set. Adjustable to the following pipes:

**Square pipes:** 1" 1/2, 2" and 2" 1/2 inches

**Rectangular pipes:** 1"1/2x3/4", 1"1/2x1", 2"x1", 2"x1"1/4, 2"x1"1/2, 2"1/2x1"1/2 inches

*Guide 140-11-01-00508, 140-11-01-00509*

*or 140-11-01-00510 is required*

*Ask the manufacturer about different dimensions*



Set per machine	Material minimum thickness suggested by manufacturer	Weight
1	3 mm	6 Kg.

### Inlet guide for 1" 1/2 inches pipe NOA60



**Reference: 140-11-01-00508**

Inlet guide for 1" 1/2 inches pipe

**Weight:** 2,6 Kg.

### Inlet guide for 2" inches pipe NOA60



**Reference: 140-11-01-00509**

Inlet guide for 2" inches pipe

**Weight:** 2,4 Kg.

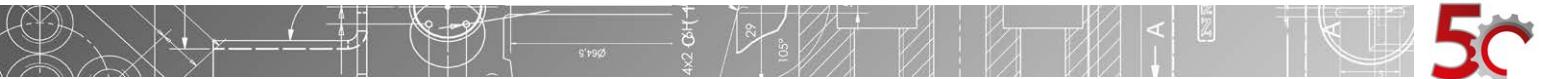
### Inlet guide for 2" 1/2 inches pipe NOA60



**Reference: 140-11-01-00510**

Inlet guide for 2" 1/2 inches pipe

**Weight:** 2,2 Kg.



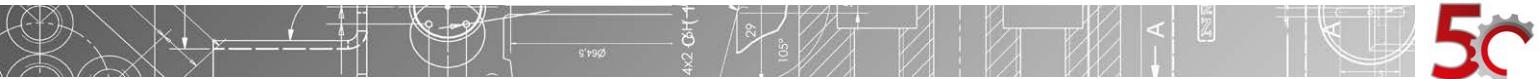
## Hydraulic press for locks

### Hydraulic press for locks PI85

Hydraulic Press for locks PI85 Nargesa, is a NOVELTY in the locksmith's branch. It was patented by Nargesa from year 2006. It makes us lead this kind of machinery. It is suitable for 85% locks in the market, regarding trademarks and models.

<b>Reference</b>	<b>100-07-01-001</b>
<b>Engine power</b>	<b>0,75 KW / 1 HP</b>
<b>Three-phased tension</b>	<b>230 / 400 V</b>
<b>Pipe thickness</b>	<b>1,5 and 2mm</b>
<b>Lock entrance</b>	<b>Adjustable 18 to 37mm</b>
<b>Dimensions</b>	<b>1500x570x1470mm</b>
<b>Weight</b>	<b>200 Kg</b>





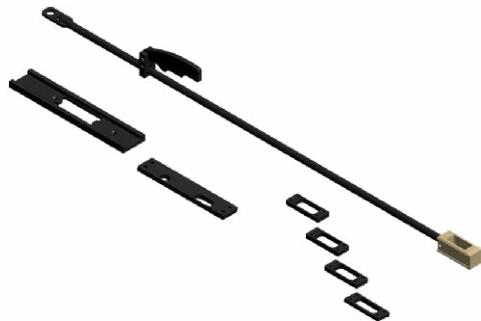
## Accessories for Hydraulic press for locks

### Tooling for 35X35. Wall thickness 1,5mm



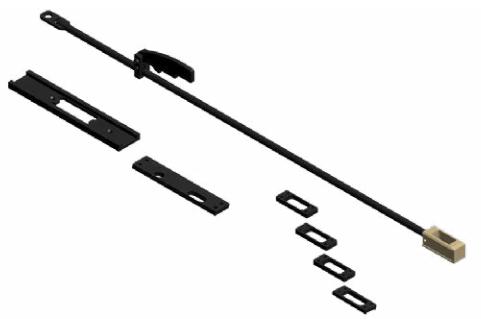
Reference	140-07-01-00001
Pipe	35 x 35 mm
Thickness	1,5 mm
Pieces by tooling	3 units
Weight	5 Kg

### Tooling for 40x40mm up to 40x80mm. Wall 1,5mm

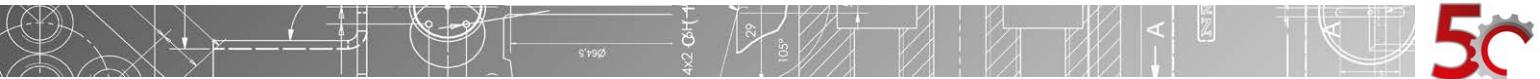


Reference	140-07-01-00003
Pipe	40x40 mm, 40x50 mm, 40x60 mm, 40x70 mm, 40x80mm
Thickness	1,5 mm
Pieces by tooling	8 units
Weight	5,3 Kg

### Tooling for 40x40mm up to 40x80mm. Wall 2mm

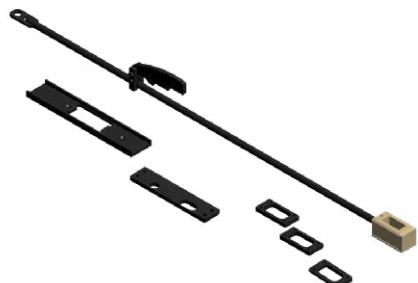


Reference	140-07-01-00004
Pipe	40x40 mm, 40x50 mm, 40x60 mm 40x70 mm, 40x80mm
Thickness	2 mm
Pieces by tooling	8 units
Weight	5,3 Kg



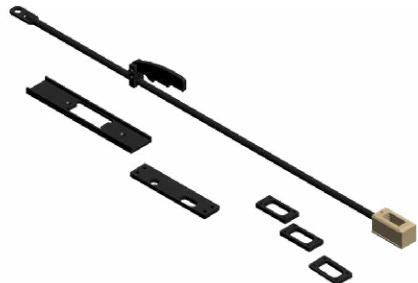
## Accessories for Hydraulic press for locks

### Tooling for 50x50mm up to 50x80mm. Wall 1,5mm

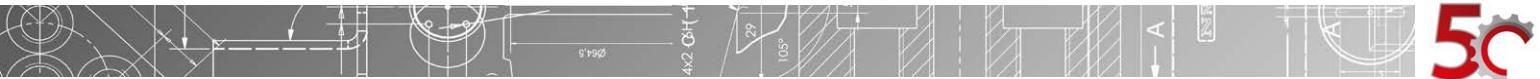


<b>Reference</b>	<b>140-07-01-00005</b>
<b>Pipe</b>	50x50 mm, 50x60 mm, 50x70 mm 50x80mm
<b>Thickness</b>	1,5 mm
<b>Pieces by tooling</b>	7 units
<b>Weight</b>	5,5 Kg

### Tooling for 50x50 up to 50x80mm. Wall 2mm



<b>Reference</b>	<b>140-07-01-00006</b>
<b>Pipe</b>	50x50 mm, 50x60 mm, 50x70 mm 50x80mm
<b>Thickness</b>	2 mm
<b>Pieces by tooling</b>	7 units
<b>Weight</b>	5,5 Kg



## Consumables

### Hydraulic Oil SIL POWER HV46



**Reference: 060-BA-00016**

Extreme Pressure hydraulic fluid for oleo dynamic circuits, power transmission systems that work under severe temperature and pressure conditions. Micro-filtered. It incorporates a viscosity level improver.

**Container:** 20L

**Weight:** 20 Kg

*\* Recommended for Nargesa Press Brakes*

### Hydraulic Oil SIL POWER HV68



**Reference: 060-BA-00017**

Extreme Pressure hydraulic fluid for oleo dynamic circuits, power transmission systems that work under severe temperature and pressure conditions. Micro-filtered. It incorporates a viscosity level improver

**Container:** 20L

**Weight:** 20 Kg



### PRADA NARGESA, S.L.

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