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## years <br> manufacturing industrial machinery



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PRADA NARGESA, S.L.
Ctra. de Garrigàs a Sant Miquel $\mathrm{s} / \mathrm{n}$
17476 Palau de Santa Eulàlia (Girona) Spain
Tel. +34 972568085 nargesa@nargesa.com www.nargesa.com

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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

## Forge furnaces

## Forge furnace H 1

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 that 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.

| Reference | 100-04-03-001 |
| :--- | ---: |
| Dimensions of combustion chamber | $236 \times 140 \times 100 \mathrm{~mm}$ |
| Type of fuel | Propane gas (GLP) |
| Gas intake as 1 per bar | $0,35 \mathrm{Kg} / \mathrm{h}$ |
| Adjustable working pressure | $0,1-1,5 \mathrm{bar}$ |
| Power (Hi) | 4 kW |
| Maximum temperature | $1300{ }^{\circ} \mathrm{C}$ |
| Nr of burners | 1 |
| External dimensions | $310 \times 450 \times 370 \mathrm{~mm}$ |
| Weight | 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 that 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.

| Reference | 100-04-01-001 |
| :--- | ---: |
| Dimensions of combustion chamber | $324 \times 240 \times 100 \mathrm{~mm}$ |
| Type of fuel | Propane gas (GLP) |
| Gas intake as 1 per bar | $0,7 \mathrm{Kg} / \mathrm{h}$ |
| Adjustable working pressure | $0,1-1,5 \mathrm{bar}$ |
| Power (Hi) | 8 kW |
| Maximum temperature | $1300^{\circ} \mathrm{C}$ |
| Nr of burners | 2 |
| External dimensions | $500 \times 440 \times 370 \mathrm{~mm}$ |
| Weight | 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 that 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.

| Reference | 100-04-04-001 |
| :--- | ---: |
| Dimensions of combustion chamber | $464 \times 240 \times 100 \mathrm{~mm}$ |
| Type of fuel | Propane gas (GLP) |
| Gas intake as 1 per bar | $1 \mathrm{Kg} / \mathrm{h}$ |
| Adjustable working pressure | $0,1-1,5 \mathrm{bar}$ |
| Power (Hi) | 12 kW |
| Maximum temperature | $1300^{\circ} \mathrm{C}$ |
| Nr of burners | 3 |
| External dimensions | $510 \times 580 \times 370 \mathrm{~mm}$ |
| Weight | 53 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 | $0,75 \mathrm{KW} / 1 \mathrm{HP}$ |
| Tension Single-phase | 230 V |
| Speed | $6 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Axes diameter | 40 mm |
| Rollers diameter | 127 mm |
| Useful axes length | 74 mm |
| Dimensions | $680 \times 950 \times 1240 \mathrm{~mm}$ |
| 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 | $1,1 \mathrm{KW} / 1,5 \mathrm{HP}$ |
| Tension 3-phased | $230 / 400 \mathrm{~V}$ |
| Speed | $8 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Axes diameter | 40 mm |
| Rollers diameter | 127 mm |
| Useful axes length | 74 mm |
| Dimensions | $790 \times 810 \times 1300 \mathrm{~mm}$ |
| 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 | $1,1 \mathrm{KW} / 1,5 \mathrm{HP}$ |
| Tension 3-phased | $230 / 400 \mathrm{~V}$ |
| Speed | $7 \mathrm{r.p.m}$. |
| Axes diameter | 40 mm |
| Rollers diameter | 130 mm |
| Useful axes length | 80 mm |
| Dimensions | $660 \times 760 \times 1250 \mathrm{~mm}$ |
| 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 | $1,85 \mathrm{KW} / 2,5 \mathrm{HP}$ |
| Tension 3-phased | $230 / 400 \mathrm{~V}$ |
| Speed | $8 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Axes diameter | 40 mm |
| Rollers diameter | 127 mm |
| Useful axes length | 74 mm |
| Dimensions | $790 \times 810 \times 1540 \mathrm{~mm}$ |
| Weight | 360 Kg |



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

## Set of treated steel rollers • MC150B $\cdot$ MC200 $\cdot \mathrm{MC} 200 \mathrm{H} \cdot \mathrm{MC} 400$

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. $(25+30) \mathrm{o}\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4^{\prime \prime}\right)$
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 | $(20+35)$ | $16,50 \mathrm{Kg}$. |
| 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 | $\left(3 / 4^{\prime \prime}+1 / 2^{\prime \prime}\right)=(26,9+21,3 \mathrm{~mm})$ | 17,70 Kg. |
| 140-08-01-RHISOT0007 | $\left(1^{\prime \prime}+3 / 8^{\prime \prime}\right)=(33,7+17,2 \mathrm{~mm})$ | 17,00 Kg. |
| 140-08-01-RHISOT0002 | $1^{\prime \prime} 1 / 4=42,4 \mathrm{~mm}$ | 16,00 Kg. |
| 140-08-01-RHISOT0003 | $1^{\prime \prime} 1 / 2=48,3 \mathrm{~mm}$ | 14,40 Kg. |
| 140-08-01-RHISOT0004 | $2^{\prime \prime}=60,3 \mathrm{~mm}$ | 11,15 Kg. |
| For inches pipe |  |  |
| 140-08-01-RHWT-00001 | $\left(1 / 2^{\prime \prime}+1{ }^{\prime \prime} 1 / 4\right)=(12,700+31,751 \mathrm{~mm})$ | 18,00 Kg. |
| 140-08-01-RHWT-00002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(25,401+19,051 \mathrm{~mm})$ | 18,50 Kg. |
| 140-08-01-RHWT-00003 | $1 \prime 1 / 2=38,101 \mathrm{~mm}$ | 17,25 Kg. |
| 140-08-01-RHWT-00004 | $2^{\prime \prime}=50,802 \mathrm{~mm}$ | $13,60 \mathrm{Kg}$. |
| 140-08-01-RHWT-00005 | $2 \prime 1 / 2=63,502 \mathrm{~mm}$ | 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 inches pipe |  |  |
| 140-08-01-RIW-00001 | $\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4\right)=(12,700+31,751 \mathrm{~mm})$ | 1,80 Kg. |
| 140-08-01-RIW-00002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(25,401+19,051 \mathrm{~mm})$ | 1,50 Kg. |
| 140-08-01-RIW-00003 | $1 \prime 1 / 2=38,101 \mathrm{~mm}$ | 1,40 Kg. |
| 140-08-01-RIW-00004 | $2^{\prime \prime}=50,802 \mathrm{~mm}$ | 1,20 Kg. |
| 140-08-01-RIW-00005 | $2 \prime 1 / 2=63,502 \mathrm{~mm}$ | 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: $\mathbf{3 "}^{\prime \prime}$ inches ( $76,2 \mathrm{~mm}$ ) or $\mathbf{8 0} \mathbf{~ m m}$. 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 threedriven roller category, an essential condition for working tubes and large profiles with a perfect finish.

| Reference | $\mathbf{1 0 0 - 0 8 - 1 3 - 0 0 1}$ |
| :--- | ---: |
| Engine power | $1,5 \mathrm{Kw} / 2 \mathrm{HP}$ |
| Hydraulic motor power | $0,75 \mathrm{Kw} / 1 \mathrm{CV}$ |
| Tension Single-phase | 220 V |
| Adjustable roller speed | From 3 to 8 RPM. |
| Axes diameter | 50 mm |
| Useful axes length | 90 mm |
| Dimensions | $925 \times 1190 \times 1341 \mathrm{~mm}$ |
| 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

## 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 $\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4^{\prime \prime}\right)$
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 | $(25+30)$ | $40,04 \mathrm{Kg}$. |
| 140-08-13-RHT0002 | $(20+35)$ | $39,65 \mathrm{Kg}$. |
| 140-08-13-RHT0003 | 40 | $39,93 \mathrm{Kg}$. |
| 140-08-13-RHT0004 | 50 | $36,24 \mathrm{Kg}$. |
| 140-08-13-RHT0005 | 60 | $31,92 \mathrm{Kg}$. |
| 140-08-13-RHT0006 | 70 | 28,57 Kg. |
| 140-08-13-RHT0007 | 80 | 23,22 Kg. |
| For Schedule pipe |  |  |
| 140-08-13-RHISOT0001 | $\left(3 / 8^{\prime \prime}+1 / 2^{\prime \prime}\right)=(17,2+21,3 \mathrm{~mm})$ | 43,53 Kg. |
| 140-08-13-RHISOT0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(33,7+26,9 \mathrm{~mm})$ | $38,57 \mathrm{Kg}$. |
| 140-08-13-RHISOT0003 | $1 " 1 / 4=42,4 \mathrm{~mm}$ | $39,11 \mathrm{Kg}$. |
| 140-08-13-RHISOT0004 | $1^{\prime \prime} 1 / 2=48,3 \mathrm{~mm}$ | $36,91 \mathrm{Kg}$. |
| 140-08-13-RHISOT0005 | $2^{\prime \prime}=60,3 \mathrm{~mm}$ | $31,77 \mathrm{Kg}$. |
| 140-08-13-RHISOT0006 | $2^{\prime \prime} 1 / 2=73 \mathrm{~mm}$ | 27,01 Kg. |
| For inches pipe |  |  |
| 140-08-13-RHWT0001 | $\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4\right)=(12,70+31,75 \mathrm{~mm})$ | $41,67 \mathrm{Kg}$. |
| 140-08-13-RHWT0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(25,40+19,05 \mathrm{~mm})$ | $42,35 \mathrm{Kg}$. |
| 140-08-13-RHWT0003 | $111 / 2=38,1 \mathrm{~mm}$ | 40,56 Kg. |
| 140-08-13-RHWT0004 | $2^{\prime \prime}=50,8 \mathrm{~mm}$ | $35,92 \mathrm{Kg}$. |
| 140-08-13-RHWT0005 | $2^{\prime \prime} 1 / 2=63,5 \mathrm{~mm}$ | 30,28 Kg. |
| 140-08-13-RHWT0006 | $3^{\prime \prime}=76,2 \mathrm{~mm}$ | 25,31 Kg. |

## Accessories for Profile formers MC550

## 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 | $(20+35)$ | $7,17 \mathrm{Kg}$. |
| 140-08-13-RI0003 | 40 | 7,22 Kg. |
| 140-08-13-RI0004 | 50 | 6,55 Kg. |
| 140-08-13-RI0005 | 60 | $5,77 \mathrm{Kg}$. |
| 140-08-13-R10006 | 70 | $5,17 \mathrm{Kg}$. |
| 140-08-13-RI0007 | 80 | $4,20 \mathrm{Kg}$. |
| For Schedule pipe |  |  |
| 140-08-13-RIISO0001 | $\left(3 / 8{ }^{\prime \prime}+1 / 2^{\prime \prime}\right)=(17,2+21,3 \mathrm{~mm})$ | 7,87 Kg. |
| 140-08-13-RIISO0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(33,7+26,9 \mathrm{~mm})$ | 6,98 Kg. |
| 140-08-13-RIISO0003 | $1^{\prime \prime} 1 / 4=42,4 \mathrm{~mm}$ | 7,07 Kg. |
| 140-08-13-RIISO0004 | $1 " 1 / 2=48,3 \mathrm{~mm}$ | 6,68 Kg. |
| 140-08-13-RIISO0005 | $2^{\prime \prime}=60,3 \mathrm{~mm}$ | $5,75 \mathrm{Kg}$. |
| 140-08-13-RIISO0006 | $2^{\prime \prime} 1 / 2=73 \mathrm{~mm}$ | $4,89 \mathrm{Kg}$. |
| For inches pipe |  |  |
| 140-08-13-RIWT0001 | $\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4\right)=(12,70+31,75 \mathrm{~mm})$ | 7,54 Kg. |
| 140-08-13-RIWT0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(25,40+19,05 \mathrm{~mm})$ | 7,66 Kg. |
| 140-08-13-RIWT0003 | $111 / 2=38,1 \mathrm{~mm}$ | $7,33 \mathrm{Kg}$. |
| 140-08-13-RIWT0004 | $2^{\prime \prime}=50,8 \mathrm{~mm}$ | 6,50 Kg. |
| 140-08-13-RIWT0005 | $2^{\prime \prime} 1 / 2=63,5 \mathrm{~mm}$ | $5,47 \mathrm{Kg}$. |
| 140-08-13-RIWT0006 | $3^{\prime \prime}=76,2 \mathrm{~mm}$ | $4,58 \mathrm{Kg}$. |

## 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 $101,6 \mathrm{~mm}$.
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 | $3 \mathrm{Kw} / 4 \mathrm{HP}$ |
| Hydraulic motor power | $0,75 \mathrm{Kw} / 1 \mathrm{CV}$ |
| Tension 3-phased | $230 / 400 \mathrm{~V}$ |
| Adjustable roller speed | De $3 \mathrm{a} 7 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Axes diameter | Lower 65 mm <br>  <br> Higher 80 mm <br> Useful axes length$\quad 130 \mathrm{~mm}$ |
| Dimensions | $990 \times 1310 \times 1300 \mathrm{~mm}$ |
| 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

## 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 $\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4^{\prime \prime}\right)$
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 | $(20+35)$ | $44,80 \mathrm{Kg}$. |
| 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 | $57,40 \mathrm{Kg}$. |
| 140-08-08-RHT0008 | 90 | 49,50 Kg. |
| 140-08-08-RHT0009 | 100 | $41,00 \mathrm{Kg}$. |
| For Schedule pipe |  |  |
| 140-08-08-RHISOT0001 | $\left(3 / 8^{\prime \prime}+1 / 2^{\prime \prime}\right)=(17,2+21,3 \mathrm{~mm})$ | 49,50 Kg. |
| 140-08-08-RHISOT0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(33,7+26,9 \mathrm{~mm})$ | 43,75 Kg. |
| 140-08-08-RHISOT0003 | $1^{\prime \prime} 1 / 4=42,4 \mathrm{~mm}$ | $44,40 \mathrm{Kg}$. |
| 140-08-08-RHISOT0004 | $1^{\prime \prime} 1 / 2=48,3 \mathrm{~mm}$ | 41,60 Kg. |
| 140-08-08-RHISOT0005 | $2^{\prime \prime}=60,3 \mathrm{~mm}$ | 35,50 Kg. |
| 140-08-08-RHISOT0006 | $2^{\prime \prime} 1 / 2=73 \mathrm{~mm}$ | 60,20 Kg. |
| 140-08-08-RHWT0007 | $3^{\prime \prime}=88,9 \mathrm{~mm}$ | 50,35 Kg. |
| 140-08-08-RHWT0008 | $3^{\prime \prime} 1 / 2=101,6 \mathrm{~mm}$ | $39,50 \mathrm{Kg}$. |
| For inches pipe |  |  |
| 140-08-08-RHWT0001 | $\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4\right)=(12,70+31,75 \mathrm{~mm})$ | 47,25 Kg. |
| 140-08-08-RHWT0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(25,40+19,05 \mathrm{~mm})$ | 48,00 Kg. |
| 140-08-08-RHWT0003 | $111 / 2=38,1 \mathrm{~mm}$ | 45,90 Kg. |
| 140-08-08-RHWT0004 | $2^{\prime \prime}=50,8 \mathrm{~mm}$ | 40,70 Kg. |
| 140-08-08-RHWT0005 | $2^{\prime \prime} 1 / 2=63,5 \mathrm{~mm}$ | $33,70 \mathrm{Kg}$. |
| 140-08-08-RHWT0006 | $3^{\prime \prime}=76,2 \mathrm{~mm}$ | 60,20 Kg. |
| 140-08-08-RHWT0007 | $3^{\prime \prime} 1 / 2=88,9 \mathrm{~mm}$ | 50,35 Kg. |
| 140-08-08-RHWT0008 | $4^{\prime \prime}=101,6 \mathrm{~mm}$ | 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 |
| :---: | :---: | :---: |
| $\mathbf{1 4 0 - 0 8 - 0 8 - R H T 0 0 1 0 ~}$ | Adjustable from 100 to 120 mm | $52,72 \mathrm{Kg}$. |

## Accessories for Profile formers MC650

## Set of Sustarín rollers MC650

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 |
| 140-08-08-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 | $\left(3 / 8{ }^{\prime \prime}+1 / 2^{\prime \prime}\right)=(17,2+21,3 \mathrm{~mm})$ | 10,10 Kg. |
| 140-08-08-RIISOT0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(33,7+26,9 \mathrm{~mm})$ | 9,00 Kg. |
| 140-08-08-RIISOT0003 | $1^{\prime \prime} 1 / 4=42,4 \mathrm{~mm}$ | 9,15 Kg. |
| 140-08-08-RIISOT0004 | $1^{\prime \prime} 1 / 2=48,3 \mathrm{~mm}$ | 8,65 Kg. |
| 140-08-08-RIISOT0005 | $2^{\prime \prime}=60,3 \mathrm{~mm}$ | 7,55 Kg. |
| 140-08-08-RIISOT0006 | $2^{\prime \prime} 1 / 2=73 \mathrm{~mm}$ | $12,30 \mathrm{Kg}$. |
| 140-08-08-RIWT0007 | $3^{\prime \prime}=88,9 \mathrm{~mm}$ | 10,50 Kg. |
| 140-08-08-RIWT0008 | $3^{\prime \prime} 1 / 2=101,6 \mathrm{~mm}$ | 8,50 Kg. |
| For inches pipe |  |  |
| 140-08-08-RIWT0001 | $\left(1 / 2^{\prime \prime}+1^{\prime \prime} 1 / 4\right)=(12,70+31,75 \mathrm{~mm})$ | 9,65 Kg. |
| 140-08-08-RIWT0002 | $\left(1^{\prime \prime}+3 / 4^{\prime \prime}\right)=(25,40+19,05 \mathrm{~mm})$ | 9,80 Kg. |
| 140-08-08-RIWT0003 | $1 \prime 1 / 2=38,1 \mathrm{~mm}$ | 9,40 Kg. |
| 140-08-08-RIWT0004 | $2^{\prime \prime}=50,8 \mathrm{~mm}$ | $8,45 \mathrm{Kg}$. |
| 140-08-08-RIWT0005 | $2^{\prime \prime} 1 / 2=63,5 \mathrm{~mm}$ | 7,25 Kg. |
| 140-08-08-RIWT0006 | $3^{\prime \prime}=76,2 \mathrm{~mm}$ | $12,30 \mathrm{Kg}$. |
| 140-08-08-RIWT0007 | $3^{\prime \prime} 1 / 2=88,9 \mathrm{~mm}$ | 10,50 Kg. |
| 140-08-08-RIWT0008 | $4^{\prime \prime}=101,6 \mathrm{~mm}$ | 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.
\(\left.$$
\begin{array}{lr}\hline \text { Reference } & \begin{array}{r}\text { 140-MED08-00001 }\end{array} \\
\hline \text { Measurement scope } & \begin{array}{r}\text { De 55 a } 11.250 \mathrm{~m} \\
\text { o de 2" a } 443^{\prime \prime}\end{array}
$$ <br>

\hline Error tolerance over the radius \& \Delta R=\left(0.01^{*} \mathrm{R}\right) \mathrm{mm}\end{array}\right]\)| $\Delta \mathrm{L}=0.02 \mathrm{~mm}$ |  |
| :--- | ---: |
| Error toler. over the touch sensor | Pila de litio 3 V CR2032 |
| Power supply | $250 \times 60 \times 40 \mathrm{~mm}$ |
| Radius gauge dimensions | $125 \times 57 \times 20 \mathrm{~mm}$ |
| $\mathbf{1 0 0}$ arc meter dimensions | $225 \times 54 \times 20 \mathrm{~mm}$ |
| $\mathbf{2 0 0}$ arc meter dimensions | $325 \times 59 \times 20 \mathrm{~mm}$ |
| $\mathbf{3 0 0}$ arc meter dimensions | $1,3 \mathrm{Kg}$ |
| Weight |  |



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


## Non-Mandrel Pipe Benders

## Non-mandrel pipe bender CC60

The new generation of CC60 non-mandrel pipe benders makes up to $180^{\circ}$ 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" $1 / 4 \times 4 \mathrm{~mm}$.

| Reference | $100-17-01-001$ |
| :--- | ---: |
| Engine power | $1,1 \mathrm{KW} / 1,5 \mathrm{HP}$ |
| Tension | 230 V Single-phase $50 / 60 \mathrm{~Hz}$ |
| Automatic rotation speed | From 1,1 to $3,5 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Intensity | 5 A |
| Minimum radius of curvature | 3 times the pipe diameter |
| Maximum radius of curvature | 320 mm |
| Maximum working stroke on | $60,3 \mathrm{~mm}$ or 2" Schedule-40 |
| round steel pipe | or 2"1/4×4mm. |
| Maximum angle of curvature | $180^{\circ}$ |
| Dimensions | $630 \times 1000 \times 1150 \mathrm{~mm}$ |
| Weight | 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 $\cdot 12$ 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

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

## Accessories for Non-Mandrel Pipe Bender CC60

## Accessories for 60 mm round pipes



Rollers made of treated steel. Suitable kit to bend 60 mm tube of 3 mm 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

| Ext. | Radius | Min. thickness | Max. thickness | Weight |
| :---: | :---: | :---: | :---: | :---: |
| Set diameter | 60 mm Radius 180 with support holder |  |  | REF: 140-17-01-10009 |
| 60 mm | $3 \mathrm{D}=180 \mathrm{~mm}$ | 3 mm | 4 mm | $40,58 \mathrm{Kg}$ |

* 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 $3 / 8^{\prime \prime}$ to 1 " $1 / 2$ Schedule

|  | $\cdots$ | Rollers made of treated Steel. Units suitable for bending all types of round pipes $3 / 8^{\prime \prime}$ to 1 " $1 / 2$ Schedule. <br> The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener <br> Check with the manufacturer for other dimensions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\emptyset$ Ext. | $\varnothing$ Ext. | Radius | SCH10 | SCH40 | SCH80 | SCH160 | Weight |
| Set diameter 17,10mm Radius 60mm Diameter 3/8"Schedule |  |  |  |  |  | REF: 140-17-01-20001 |  |
| 3/8" | 17,1 mm | 60 mm | 1,65 mm | 2,31 mm | $3,20 \mathrm{~mm}$ | -- | $4,22 \mathrm{Kg}$ |
| Set diameter 21,30mm Radius 63,9mm Diameter 1/2" Schedule |  |  |  |  |  | REF: 140-17-01-20002 |  |
| 1/2" | 21,3 mm | $3 \mathrm{D}=63,9 \mathrm{~mm}$ | 2,11 mm | $2,77 \mathrm{~mm}$ | 3,73 mm | 4,78 mm | 3,56 Kg |
| Set diameter $\mathbf{2 6 , 7 0 \mathrm { mm }}$ Radius $\mathbf{8 0 , 1 \mathrm { mm }}$ Diameter 3/4" Schedule |  |  |  |  |  | REF: 140-17-01-20003 |  |
| 3/4" | 26,7 mm | $3 \mathrm{D}=80,1 \mathrm{~mm}$ | 2,11 mm | 2,87 mm | $3,91 \mathrm{~mm}$ | 5,56 mm | 6,74 Kg |
| Set diameter 33,70mm Radius 101,1mm Diameter 1" Schedule |  |  |  |  |  | REF: 140-17-01-20004 |  |
| $1 "$ | $33,7 \mathrm{~mm}$ | $3 \mathrm{D}=101,1 \mathrm{~mm}$ | 2,77 mm | $3,38 \mathrm{~mm}$ | $4,55 \mathrm{~mm}$ | 6,35 mm | $11,18 \mathrm{Kg}$ |
| Set diameter 42,40mm Radius 127,2mm Diameter 1"1/4 Schedule |  |  |  |  |  | REF: 140-17-01-20005 |  |
| 1"1/4 | $42,4 \mathrm{~mm}$ | $3 \mathrm{D}=127,2 \mathrm{~mm}$ | 2,77 mm | $3,56 \mathrm{~mm}$ | 4,85 mm | 6,35 mm | $18,86 \mathrm{Kg}$ |
| Set diameter 48,30mm Radius 144,9mm Diameter 1"1/2 Schedule |  |  |  |  |  | REF: 140-17-01-20006 |  |
| 1"1/2 | $48,3 \mathrm{~mm}$ | $3 \mathrm{D}=144,9 \mathrm{~mm}$ | 2,77 mm | $3,68 \mathrm{~mm}$ | 5,08 mm | -- | $27,05 \mathrm{Kg}$ |

## Accessories for 2" Schedule round pipes



Rollers made of treated steel. Suitable kit to bend $2^{\prime \prime}$ tube of $2,77 \mathrm{~mm}$ 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

| $\varnothing$ Ext. | $\varnothing$ Ext. | Radius | SCH10 | SCH40 | SCH80 | SCH160 | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Set diameter 60,3mm Radius 180,9mm Diameter 2" Schedule |  |  |  |  |  | REF: 140-17-01-20007 |  |
| $2 \prime$ | $60,3 \mathrm{~mm}$ | $3 \mathrm{D}=180,9 \mathrm{~mm}$ | 2,77 mm | $3,91 \mathrm{~mm}$ | -- | -- | $45,75 \mathrm{Kg}$ |

[^0]
## 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 $1 / 2^{\prime \prime}$ 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

| $\emptyset$ Ext. | $\varnothing$ Ext. | Radius | Min. thickness | Max. thickness | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Set diameter 9,52mm Radius 60mm Diameter 3/8" inches |  |  |  | REF: 140-17-01-30012 |  |
| 3/8" | 9,52 mm | 60 mm | 1 mm | 4 mm | $3,40 \mathrm{Kg}$ |
| Set diameter $12,7 \mathrm{~mm}$ Radius 60 mm Diameter $1 / 2^{\prime \prime}$ inches |  |  |  | REF: 140-17-01-30011 |  |
| 1/2" | $12,7 \mathrm{~mm}$ | 60 mm | 1 mm | 4 mm | 3,37 Kg |
| Set diameter 15,88mm Radius 60mm Diameter 5/8" inches |  |  |  | REF: 140-17-01-30001 |  |
| 5/8" | $15,88 \mathrm{~mm}$ | 60 mm | 1 mm | 4 mm | $3,61 \mathrm{Kg}$ |
| Set diameter 19,05mm Radius 60mm Diameter 3/4" inches |  |  |  | REF: 140-17-01-30002 |  |
| 3/4" | 19,05 mm | 60 mm | 1 mm | 4 mm | 2,79 Kg |
| Set diameter 22,22mm Radius 66 mm Diameter $\mathbf{7 / 8}{ }^{\prime \prime}$ inches |  |  |  | REF: 140-17-01-10014 |  |
| 7/8" | 22,22 mm | 66 mm | 1 mm | 5 mm | $4,10 \mathrm{Kg}$ |
| Set diameter $\mathbf{2 5 , 4 0 m m}$ Radius 76,20mm Diameter $\mathbf{1 " ~}^{\prime \prime}$ inches |  |  |  | REF: 140-17-01-30003 |  |
| $1 "$ | 25,40 mm | $3 \mathrm{D}=76,2 \mathrm{~mm}$ | 1,2 mm | 5 mm | 5,72 Kg |
| Set diameter 28,57mm Radius 85,7mm Diameter $\mathbf{1 " 1}^{\prime \prime} 1 / 8$ inches |  |  |  | REF: 140-17-01-30009 |  |
| 1"1/8 | 28,57 mm | $3 \mathrm{D}=85,7 \mathrm{~mm}$ | 1,5 mm | 5 mm | 7,70 Kg |
| Set diameter 31,75mm Radius $\mathbf{9 5 , 2 5 m m}$ Diameter 1" $1 / 4$ inches |  |  |  | REF: 140-17-01-30004 |  |
| 1"1/4 | $31,75 \mathrm{~mm}$ | $3 \mathrm{D}=95,25 \mathrm{~mm}$ | 1,5 mm | 6 mm | 10,21 Kg |
| Set diameter 38,10mm Radius 114,30mm Diameter 1"1/2 inches |  |  |  | REF: 140-17-01-30005 |  |
| 1"1/2 | $38,10 \mathrm{~mm}$ | $3 \mathrm{D}=114,3 \mathrm{~mm}$ | 1,5 mm | 7 mm | $15,69 \mathrm{Kg}$ |
| Set diameter 44,45mm Radius 133,35mm Diameter 1" $3 / 4$ inches |  |  |  | REF: 140-17-01-30010 |  |
| 1"3/4 | $44,45 \mathrm{~mm}$ | $3 \mathrm{D}=133,35 \mathrm{~mm}$ | 2 mm | 5 mm | 21,86 Kg |
| Set diameter 50,8mm Radius 152,4mm Diameter ${ }^{\prime \prime}$ " inches |  |  |  | REF: 140-17-01-30006 |  |
| $2 "$ | $50,80 \mathrm{~mm}$ | $3 \mathrm{D}=152,4 \mathrm{~mm}$ | 2 mm | 5 mm | $32,24 \mathrm{Kg}$ |
| Set diameter 57,15mm Radius 171,45mm Diameter 2" 1/4 inches |  |  |  | REF: 140-17-01-30007 |  |
| 2"1/4 | $57,15 \mathrm{~mm}$ | $3 \mathrm{D}=171,45 \mathrm{~mm}$ | 2 mm | 2,5 mm | $36,13 \mathrm{Kg}$ |

## 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 3 mm 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

| Ext. | Ø Ext. | Radius | Min. thickness | Max. thickness | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Set diameter | $57,15 \mathrm{~mm}$ | Radius $171,45 \mathrm{~mm}$ | Diameter 2" $1 / 4$ | with support holder | REF: 140-17-01-30008 |
| $2^{\prime \prime} 1 / 4$ | $57,15 \mathrm{~mm}$ | $3 \mathrm{D}=171,45 \mathrm{~mm}$ | 3 mm | 4 mm | $35,91 \mathrm{Kg}$ |

*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:
. 60 mm tube of 3 mm wall thickness or thicker

- $2^{\prime \prime}$ Schedule tube of $2,77 \mathrm{~mm}$ wall thickness or thicker
- 2" $1 / 4$ tube of 3 mm wall thickness or thicker

Weight: $9,85 \mathrm{Kg}$

## Accessories for Non-Mandrel Pipe Bender CC60

## Accessories for square pipes in millimeters $\cdot \mathbf{2 0}$ to $\mathbf{4 0} \mathbf{~ m m}$



## Accessories for square pipes in inches $\cdot 3 / 4^{\prime \prime}$ to 1 " $1 / 2$ inches

| Rollers made of treated Steel. Units suitable for bending all types of square pipes $3 / 4^{\prime \prime}$ to 1 " $1 / 2$ inches. <br> The following is supplied with the unit: A main roller, a counter-shape, a clamp with a fastener <br> Check with the manufacturer for other dimensions |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Section | Section | Radius | Radius | Min. Thick. | Max. Thick. | Weight |
| Square Tube Die Set 3/4" $(19,05 \mathrm{~mm})$ Radius 4 " $(101,6 \mathrm{~mm})$ |  |  |  |  | REF: 140-17-01-30101 |  |
| $3 / 4 " \times 3 / 4^{\prime \prime}$ | 19,05x19,05mm | 4" | 101,6mm | 1,5 mm | 4 mm | $11,5 \mathrm{Kg}$ |
| Square Tube Die Set $\mathbf{1}^{\prime \prime}$ ( $25,4 \mathrm{~mm}$ ) Radius 4,5" $1114,3 \mathrm{~mm}$ ) |  |  |  |  | REF: 140-17-01-30102 |  |
| 1"x1" | $25,4 \times 25,4 \mathrm{~mm}$ | 4"1/2 | 114,3mm | 2 mm | 4 mm | $14,6 \mathrm{Kg}$ |
| Square Tube Die Set $1^{\prime \prime} 1 / 4$ ( $31,75 \mathrm{~mm}$ ) Radius 5,5" $(139,7 \mathrm{~mm})$ |  |  |  |  | REF: 140-17-01-30103 |  |
| 1" $1 / 4 \times 1$ " $1 / 4$ | $31,75 \times 31,75 \mathrm{~mm}$ | 5"1/2 | 139,7mm | 2 mm | 4 mm | $23,3 \mathrm{Kg}$ |
| Square Tube Die Set $\mathbf{1 " \prime}^{\prime \prime} 1 / 2$ (38,1mm) Radius 6,5" $(165,1 \mathrm{~mm})$ |  |  |  |  | REF: 140-17-01-30104 |  |
| 1"1/2x1" $1 / 2$ | $38,1 \times 38,1 \mathrm{~mm}$ | 6" 1/2 | 165,1mm | 2 mm | 5 mm | $34,6 \mathrm{Kg}$ |

## Accessories for Non-Mandrel Pipe Bender CC60

## Nargesa BEND8 aerosol lubricant



The CC60 pipe bender comes with a 400 ml bottle of BEND8 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 disolves corrosion
- Gives shine and protects
- Cleans up and removes dirt

| Reference | Description | Quantity | Weight |
| :---: | :---: | :---: | :---: |
| $\mathbf{0 6 0 - S P R}-00003$ | Aerosol lubricant bottle | 400 ml | $0,39 \mathrm{Kg}$ |
| $\mathbf{0 6 0 - S P R}-00004$ | Box of 12 bottles | $12 \times 400 \mathrm{ml}$ | $4,83 \mathrm{Kg}$ |

## 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 |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 4 0 - 1 7 - 0 1 - 5 0 0 0 0 ~}$ | 3000 mm | $60,3 \mathrm{~mm}, \mathbf{2}^{\prime \prime}$ Schedule | 125 Kg |

## Non-Mandrel Pipe Benders

## Non-mandrel pipe bender CC90

The new generation of CC90 non-mandrel pipe benders makes up to $180^{\circ}$ 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 .

| Reference | $100-17-02-001$ |
| :--- | ---: |
| Engine power | $2,2 \mathrm{Kw} / 3 \mathrm{HP}$ |
| Tension | $230 / 400 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ |
| Automatic rotation speed | From 0,75 to $2,2 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Intensity | $9 / 5 \mathrm{~A}$ |
| Minimum radius of curvature | 3 times the pipe diameter |
| Maximum radius of curvature | 346 mm |
| Maximum working stroke on round | 90 mm or $3^{\prime \prime}$ Schedule-40 or |
| steel pipe | $3^{\prime \prime} 1 / 2 \times 6 \mathrm{~mm}$. |
| Maximum angle of curvature | $180^{\circ}$ |
| Dimensions | $700 \times 1300 \times 1360 \mathrm{~mm}$ |
| Weight | 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


## Accessories for Non-Mandrel Pipe Bender CC90

## Accessories for 90 mm round pipes



Rollers made of treated steel. Suitable kit to bend 90 mm tube of 4 mm 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 |
| :---: | :---: | :---: | :---: | :---: |
| Set diameter 90 mm Radio 270 |  |  | REF: 140-17-02-10003 |  |
| 90 mm | $3 \mathrm{D}=270 \mathrm{~mm}$ | 4 mm | 5 mm | $114,36 \mathrm{Kg}$ |

* 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 $3 / 8^{\prime \prime}$ to 2" $1 / 2$ Schedule



Rollers made of treated Steel. Units suitable for bending all types of round pipes $3 / 8^{\prime \prime}$ 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

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

## Accessories for 3" Schedule round pipes



Rollers made of treated steel. Suitable kit to bend $3^{\prime \prime}$ Schedule tube of $3,05 \mathrm{~mm}$ 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

| $\varnothing$ Ext. | $\varnothing$ Ext. | Radius | SCH10 | SCH40 | SCH80 | SCH160 | Weight |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Set diameter 88,9mm Radius 266,7mm Diameter 3" Schedule REF: 140-17-02-30003

| $3^{\prime \prime}$ | $88,9 \mathrm{~mm}$ | $3 \mathrm{D}=266,7 \mathrm{~mm}$ | $3,05 \mathrm{~mm}$ | $5,49 \mathrm{~mm}$ | -- | -- | $110,80 \mathrm{Kg}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

${ }^{*}$ 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 330 MPa . 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 $\cdot 1 / 2^{\prime \prime}$ to $3^{\prime \prime}$ inches



Rollers made of treated Steel. Units suitable for bending all types of round pipes $1 / 2^{\prime \prime}$ 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

| $\varnothing$ Ext. | $\varnothing$ Ext. | Radius | Min. thickness | Max. thickness | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Set diameter 9,52mm Radius 60mm Diameter 3/8" inches |  |  |  | REF: 140-17-01-30012 |  |
| 3/8" | 9,52 mm | 60 mm | 1 mm | 4 mm | $3,40 \mathrm{Kg}$ |
| Set diameter $12,7 \mathrm{~mm}$ Radius 60 mm Diameter $1 / 2^{\prime \prime}$ inches |  |  |  | REF: 140-17-01-30011 |  |
| 1/2" | $12,7 \mathrm{~mm}$ | 60 mm | 1 mm | 4 mm | $3,37 \mathrm{Kg}$ |
| Set diameter 15,88mm Radius 60mm Diameter 5/8" inches |  |  |  | REF: 140-17-01-30001 |  |
| 5/8" | 15,88 mm | 60 mm | 1 mm | 4 mm | 3,61 Kg |
| Set diameter 19,05mm Radius 60mm Diameter 3/4" inches |  |  |  | REF: 140-17-01-30002 |  |
| $3 / 4^{\prime \prime}$ | 19,05 mm | 60 mm | 1 mm | 4 mm | 2,79 Kg |
| Set diameter 22,22mm Radius 66mm Diameter 7/8" inches |  |  |  | REF: 140-17-01-10014 |  |
| 7/8" | 22,22 mm | 66 mm | 1 mm | 5 mm | $4,10 \mathrm{Kg}$ |
|  |  |  |  | REF: 140-17-01-30003 |  |
| $1 "$ | 25,40 mm | $3 \mathrm{D}=76,2 \mathrm{~mm}$ | 1,2 mm | 5 mm | $5,72 \mathrm{Kg}$ |
| Set diameter 28,57mm Radius $85,7 \mathrm{~mm}$ Diameter $\mathbf{1 " 1}^{\prime \prime} 1 / 8$ inches |  |  |  | REF: 140-17-01-30009 |  |
| 1"1/8 | 28,57 mm | $3 \mathrm{D}=85,7 \mathrm{~mm}$ | 1,5 mm | 5 mm | 7,70 Kg |
| Set diameter 31,75mm Radius 95,25mm Diameter 1" $1 / 4$ inches |  |  |  | REF: 140-17-01-30004 |  |
| 1"1/4 | $31,75 \mathrm{~mm}$ | $3 \mathrm{D}=95,25 \mathrm{~mm}$ | 1,5 mm | 6 mm | $10,21 \mathrm{Kg}$ |
| Set diameter $\mathbf{3 8 , 1 0 m m}$ Radius $114,30 \mathrm{~mm}$ Diameter $\mathbf{1 " ~}^{1 / 2}$ inches |  |  |  | REF: 140-17-01-30005 |  |
| 1"1/2 | $38,10 \mathrm{~mm}$ | $3 \mathrm{D}=114,3 \mathrm{~mm}$ | 1,5 mm | 7 mm | $15,69 \mathrm{Kg}$ |
| Set diameter 44,45mm Radius 133,35mm Diameter 1"3/4 inches |  |  |  | REF: 140-17-01-30010 |  |
| 1"3/4 | $44,45 \mathrm{~mm}$ | $3 \mathrm{D}=133,35 \mathrm{~mm}$ | 2 mm | 5 mm | $21,86 \mathrm{Kg}$ |
| Set diameter 50,8mm Radius 152,4mm Diameter 2" inches |  |  |  | REF: 140-17-01-30006 |  |
| 2" | $50,80 \mathrm{~mm}$ | $3 \mathrm{D}=152,4 \mathrm{~mm}$ | 2 mm | 5 mm | $32,24 \mathrm{Kg}$ |
| Set diameter 57,15mm Radius 171,45mm Diameter 2" $1 / 4$ inches |  |  |  | REF: 140-17-01-30007 |  |
| 2"1/4 | $57,15 \mathrm{~mm}$ | $3 \mathrm{D}=171,45 \mathrm{~mm}$ | 2 mm | 5 mm | $36,13 \mathrm{Kg}$ |
| Set diameter 63,5mm Radius 190,5mm Diameter 2" $1 / 2$ inches |  |  |  | REF: 140-17-02-30001 |  |
| 2"1/2 | $63,50 \mathrm{~mm}$ | $3 \mathrm{D}=190,5 \mathrm{~mm}$ | 3 mm | 8,64 mm | $40,50 \mathrm{Kg}$ |
| Set diameter 76,2mm Radius 228,6mm Diameter 3" inches |  |  |  | REF: 140-17-02-30002 |  |
| $3 \prime \prime$ | $76,20 \mathrm{~mm}$ | $3 \mathrm{D}=228,6 \mathrm{~mm}$ | 3 mm | 7,21 mm | $80,68 \mathrm{Kg}$ |

## Accessories for Non-Mandrel Pipe Bender CC90

## Accessories for 3"1/2 round pipes



Rollers made of treated Steel. Suitable kit to bend $3^{\prime \prime} 1 / 2$ tube of 4 mm 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

| $\varnothing$ Ext. | $\varnothing$ Ext. | Radius | Min. thickness | Max. thickness | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Set diameter 88,9mm Radius 266,7mm Diameter 3"1/2 inches |  |  |  | REF: 140-17-02-30003 |  |
| 3"1/2 | 88,9 mm | $3 \mathrm{D}=266,7 \mathrm{~mm}$ | 4 mm | 6,05 mm | $110,80 \mathrm{Kg}$ |

* 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:
. 90 mm tube of 4 mm wall thickness or thicker

- 3" Schedule tube of $3,05 \mathrm{~mm}$ wall thickness or thicker
- $3^{\prime \prime} 1 / 2$ tube of 4 mm wall thickness or thicker.

Weight: $24,57 \mathrm{Kg}$.

## Accessories for Non-Mandrel Pipe Bender CC90

## Accessories for square pipes in millimeters $\cdot \mathbf{2 0}$ to $\mathbf{5 0} \mathbf{~ m m}$



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 |
| :---: | :---: | :---: | :---: |
| Square Tube Die Set 20 mm Radius 100 mm |  | REF: 140-17-01-10101 |  |
| $20 \times 20 \mathrm{~mm}$ - 5D $=100 \mathrm{~mm}$ | 1,5 mm | 4 mm | $11,1 \mathrm{Kg}$ |
| Square Tube Die Set $\mathbf{2 5 m m}$ Radius 115 mm |  | REF: 140-17-01-10102 |  |
| $25 \times 25 \mathrm{~mm}$ ( 115 mm | 2 mm | 4 mm | $14,75 \mathrm{Kg}$ |
| Square Tube Die Set 30 mm Radius 135 mm |  | REF: 140-17-01-10103 |  |
| $30 \times 30 \mathrm{~mm}$ ( 135 mm | 2 mm | 4 mm | 22 Kg |
| Square Tube Die Set 40 mm Radius 165 mm |  | REF: 140-17-01-10104 |  |
| $40 \times 40 \mathrm{~mm}$ ( 165 mm | 2 mm | 5 mm | $34,15 \mathrm{Kg}$ |
| Square Tube Die Set 50 mm Radius 180 mm |  | REF: 140-17-02-10101 |  |
|  | 2,5 mm | 5 mm | $45,7 \mathrm{Kg}$ |

Accessories for square pipes in inches $\cdot 3 / 4$ " to $2^{\prime \prime}$ inches


## Accessories for Non-Mandrel Pipe Bender CC90

## Nargesa BEND8 aerosol lubricant



The CC90 pipe bender comes with a 400 ml bottle of BEND8 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 disolves corrosion
- Gives shine and protects
- Cleans up and removes dirt

| Reference | Description | Quantity | Weight |
| :---: | :---: | :---: | :---: |
| $\mathbf{0 6 0 - S P R}-00003$ | Aerosol lubricant bottle | 400 ml | $0,39 \mathrm{Kg}$ |
| $\mathbf{0 6 0 - S P R}-00004$ | Box of 12 bottles | $12 \times 400 \mathrm{ml}$ | $4,83 \mathrm{Kg}$ |

## 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 |
| :---: | :---: | :---: | :---: |
| $140-17-02-50000$ | 3000 mm | $90 \mathrm{~mm}, 3^{\prime \prime}$ Schedule | 135 Kg |

## Forging twisting machines

## Forging twisting machine MT150A

The twisting machine MT150A Nargesa was patented by Prada Nargesa many yeasr 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...

| Reference | 100-01-02-001 |
| :--- | ---: |
| Engine Power | $0,37 \mathrm{KW} / 0,5 \mathrm{HP}$ |
| 2 phased tension | 230 V Single phased |
| Rotary speed | Adjustable 0 to $9 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Twisting máximum capacity | 20 mm or $3 / 4^{\prime \prime}$ |
| Bending máximum capacity | 16 mm or $5 / 8^{\prime \prime}$ |
| Max. Scrolling and bending in | $35 \times 10 \mathrm{~mm}$ or $11 / 4^{\prime \prime \times 3 / 8^{\prime \prime}}$ |
| flat bar |  |
| Máx. continued scrolling length | 960 mm |
| Dimensions | $2270 \times 635 \times 1115 \mathrm{~mm}$ |
| Weight | 260 Kg |



## Accessories for Forging twisting machine MT150A

Flat bent rings $96,100,110 \mathrm{~mm}$ MT150A

## Reference: 140-01-01-00001

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

| Inner diameter | Max. Capacity | Weight |
| :---: | :---: | :---: |
| $96,100,110 \mathrm{~mm}$ | Roun 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 balco-nies and windows.


| Inner diameter | Max. Capacity | Weight |
| :---: | :---: | :---: |
| 225 mm | Roun 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 clods in all kinds. Folding with mínimum external radius.

| Max. Capacity | Weight |
| :---: | :---: |
| $40 \times 10 \mathrm{~mm}$ flat bar | $3,1 \mathrm{Kg}$. |

## 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 | $0,75 \mathrm{Kg}$. |

## 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 yeasr 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...

| Reference | $100-01-03-001$ |
| :--- | ---: |
| Engine Power | $4 \mathrm{KW} / 5,5 \mathrm{HP}$ |
| Three-phased tension | $230 / 400 \mathrm{~V}$ |
| Rotary speed | Adjustable 0 to $10 \mathrm{r} . \mathrm{p} . \mathrm{m}$. |
| Twisting máximum capacity | 40 mm or $13 / 8^{\prime \prime}$ |
| Bending máximum capacity | 25 mm or $1^{\prime \prime}$ |
| Max. Scrolling and bending in flat bar | $50 \times 10 \mathrm{~mm}$ or $2^{\prime \prime \times 3 / 8^{\prime \prime}}$ |
| Máx. continued scrolling length | 1.620 mm |
| Dimensions | $2200 \times 800 \times 1270 \mathrm{~mm}$ |
| Weight | 1350 Kg |



## 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.

| Reference: 140-01-03-00001 |
| :--- |
| Tooling to make the folding commonly called" "pig's tail"it's <br> very used in balconies, handrails and many ornamental <br> utilities. |
| Max. Capacity |
| 16 mm round |

## Bent pipe die up to $180^{\circ}$



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 |
| :---: | :---: | :---: | :---: | :---: |
| 40 mm | 3 mm | $3 \times$ pipe diameter | Max. 180 degrees | $15 / 35 \mathrm{Kg}$. |

## 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 |
| :---: | :---: | :---: |
| 225 mm | 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 diemeter | Max. Capacity | Weight |
| :---: | :---: | :---: |
| $240 \times 190 \mathrm{~mm}$ | 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 mke folding operations in round or square bars such as the so called Eglish railings.

| Inner diameter | Max. Capacity | Weight |
| :---: | :---: | :---: |
| $96,100,110 \mathrm{~mm}$ | 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 | $0,400 \mathrm{Kg}$. |

## 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. |

## 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 | $\mathbf{1 0 0 - 1 5 - 0 1 - 0 0 1}$ |
| :--- | ---: |
| Engine power | $2,2 \mathrm{KW} / 3 \mathrm{HP}$ |
| Three phased tensión | $230 / 400 \mathrm{~V}$ |
| Maximum capacity in round | 20 mm |
| Maximum capacity in square | 20 mm |
| Maximum capacity in flat bar | $50 \times 10 \mathrm{~mm}$ |
| Working speed | $45 \mathrm{~mm} / \mathrm{s}$ |
| Return speed | $70 \mathrm{~mm} / \mathrm{s}$ |
| Cycle time | 10 s |
| Pieces per minute | 4 pieces |
| Dimensions | $640 \times 1300 \times 1110 \mathrm{~mm}$ |
| Weight | 336 Kg |



## Wrowght 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 | $\mathbf{1 0 0 - 1 2 - 0 2 - 0 0 1}$ |
| :--- | ---: |
| Engine power | $5,5 \mathrm{KW} / 7 \mathrm{HP}$ |
| Three phased tensión | $230 / 400 \mathrm{~V}$ |
| Maximum capacity in round | 20 mm |
| Maximum capacity in square | 20 mm |
| Maximum capacity in flat bar | $40 \times 10 \mathrm{~mm}$ |
| Rotation speed | 20 rpm a 50 Hz |
| Dimensions | $620 \times 1040 \times 1250 \mathrm{~mm}$ |
| 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 <br> Set of trilobular rollers to emboss decoration in the middle <br> of a baluster. |  |  |
| :---: | :---: | :---: | :---: |
| Units per set | Maximum capacity | Maximum capacity | Weight |
| 2 | Round and square 20 mm | Rectangular $50 \times 10 \mathrm{~mm}$ | $4,2 \mathrm{Kg} . / \mathrm{luni}$ |

## Set of triple middle marking rollers

|  | Reference: 140-12-02-00004 <br> Set of excentric rollers to emboss the middle of ba-lusters. <br> Triple design, flat, striped and discontiuous in the same <br> roller. |  |  |
| :---: | :---: | :---: | :---: |
| Units per set | Maximum capacity | Maximum capacity | Weight |
| 2 | Round and square 20 mm | Rectangular 50x10mm | $8,5 \mathrm{Kg} . / \mathrm{mni}$ |

## 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 | $7,7 \mathrm{Kg./uni}$ |

## 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.

| Reference | $100-11-01-002$ |
| :--- | ---: |
| Engine power | $5,5 \mathrm{KW} / 7,5 \mathrm{HP}$ |
| Three phased tensión | $230 / 400 \mathrm{~V}$ |
| Power consumption | $21 / 12 \mathrm{~A}$ |
| Nominal working speed | $20 \mathrm{r} . \mathrm{p} . \mathrm{m} . \mathrm{a} 50 \mathrm{~Hz}$ |
| Max. on square pipe | $60 \mathrm{~mm} \mathrm{o} \mathrm{2"1/2}$ |
| Max. on square bar | $20 \mathrm{~mm} \mathrm{o} \mathrm{3/4"} \mathrm{\prime}$ |
| Max. on handrail or flat bar | $60 \times 10 \mathrm{~mm} \mathrm{o} \mathrm{2"x3/8}$ |
| Dimensions | $780 \times 1230 \times 1400 \mathrm{~mm}$ |
| Weight | 746 Kg |



## 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 10 mm | $6,5 \mathrm{Kg}$. |

## 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 10 mm | $6,5 \mathrm{Kg}$. |

## 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 10 mm | $6,5 \mathrm{Kg}$. |

## 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

Material thickness

Weight

| 1 | From 6 to 10 mm | $6,5 \mathrm{Kg}$. |
| :---: | :---: | :---: |

## Accessories for Iron embossing machine NOA60

## Handrails embossing roller 05 NOA60



Reference: 140-11-01-00005.40
Roller to emboss a 40 mm or $1^{\prime \prime}-1 / 2$ 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 10 mm | $6,5 \mathrm{Kg}$. |

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 10 mm | $6,5 \mathrm{Kg}$. |

## Handrails embossing roller 07 NOA60



Reference: 140-11-01-00007.40
Roller to emboss a 40 mm or $1^{1 "-1 / 2}$ 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 10 mm | $6,5 \mathrm{Kg}$. |

## Handrails embossing roller 08 NOA60



Reference: 140-11-01-00008.40
Roller to emboss a 40 mm or $1^{\prime \prime}-1 / 2$ 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 10 mm | $6,4 \mathrm{Kg}$. |

## 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 10 mm | $6,1 \mathrm{Kg}$. |

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 10 mm | $6,5 \mathrm{Kg}$. |

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 10 mm | $6,5 \mathrm{Kg}$. |

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

Material thickness

Weight

| 1 | From 6 to 10 mm | $6,5 \mathrm{Kg}$. |
| :---: | :---: | :---: |

## 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 10 mm | $6,5 \mathrm{Kg}$. |

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 10 mm | $6,5 \mathrm{Kg}$. |

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 10 mm | $6,4 \mathrm{Kg}$. |

## Handrails embossing roller 16 NOA60



Reference: 140-11-01-00016.40
Roller to emboss a 40 mm or $1^{\prime \prime}-1 / 2$ inches handrail Guide 140-11-01-00401 or 140-11-01-00402 is required Ask the manufacturer about different dimensions


| 1 | From 6 to 10 mm | $6,4 \mathrm{Kg}$. |
| :---: | :---: | :---: |

## 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 10 mm | $6,4 \mathrm{Kg}$. |

## 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 10 mm | $6,4 \mathrm{Kg}$. |

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 10 mm | $6,4 \mathrm{Kg}$. |

## Handrails embossing roller 20 NOA60



Reference: 140-11-01-00020.40
Roller to emboss a 40 mm or $1^{\prime \prime}-1 / 2$ 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 10 mm | $6,5 \mathrm{Kg}$. |
| :---: | :---: | :---: |

## 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 $2^{\prime \prime}$ 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 10 mm | $6,4 \mathrm{Kg}$. |

## 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 10 mm | $6,4 \mathrm{Kg}$. |

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 140-11-01-00401, 140-11-01-00402,
140-11-01-00400 or 140-11-01-00300 is required
Ask the manufacturer about different dimensions


| Units per machine | Material thickness | Weight |
| :---: | :---: | :---: |
| 1 | From 6 to 10 mm | 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 10 mm | $6,4 \mathrm{Kg}$. |

## 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
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

## 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 25 mm o 1 ", $30 \mathrm{~mm} \circ 1^{\prime \prime}$ $1 / 4,40 \mathrm{~mm}$ o $1^{\prime \prime} 1 / 2$ and 50 mm o $2^{\prime \prime}$.
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 12 mm | $12,5 \mathrm{Kg}$. |

## Rollerstand



Reference: 140-00-00-00004
Seven-rollers stand
Ask the manufacturer about different dimensions

| Working Height | Dimensions | Load capacity | Weight |
| :---: | :---: | :---: | :---: |
| $650 / 1200 \mathrm{~mm}$ | $2050 \times 470 \mathrm{~mm}$ | 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: $4,3 \mathrm{Kg}$.

## 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: $4,3 \mathrm{Kg}$.

## Accessories for Iron embossing machine NOA60

## Handrails embossing roller 201 NOA60

|  | Reference: 140-11-01-00201 <br> Roller to emboss 12 and 15 mm or $1 / 2$ inch handrail. For <br> clamp forming <br> Guide 140-11-01-00200 is required <br> Ask the manufacturer about different dimensions |
| :---: | :--- |
| Mnits per machine | Material thickness |
| 1 | From 1 to 4 mm | 

## Handrails embossing roller 202 NOA60



## Entrance guide for 12 mm or $1 / \mathbf{2 " ~}^{\prime \prime}$ inch and 15 mm handrail NOA60



Reference: 140-11-01-00200
Entrance guide for 12 mm and 15 mm or $1 / 2^{\prime \prime}$ inch handrail

Weight: $4,6 \mathrm{Kg}$.

## 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 $3 / 4^{\prime \prime}$ inch
Guide 140-11-01-00401, 140-11-01-00402, 140-11-01-00400 o 140-11-01-00300 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 | -- | $11,4 \mathrm{Kg}$. |

## Entrance guide for edge square bar NOA60



Reference: 140-11-01-00027
Entrance guide to emboss edge square bar up to 20 mm or $3 / 4^{\prime \prime}$ 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 $3 / 8^{\prime \prime}, 14 \mathrm{~mm}$ or $9 / 16^{\prime \prime}$ and 20 mm or $3 / 4^{\prime \prime}$ inch
Guide 140-11-01-00300 is required
Ask the manufacturer about different dimensions


| Units per machine | Material thickness | Weight |
| :---: | :---: | :---: |
| 1 | -- | $12,6 \mathrm{Kg}$. |

## Set of square bar embossing rollers 302 NOA60



Referencia: 140-11-01-00302
Rollers to emboss square bar up to 12 mm or $1 / 2^{\prime \prime}, 16 \mathrm{~mm}$ or $5 / 8^{\prime \prime}$ and 18 mm .
Guide 140-11-01-00300 is required
Ask the manufacturer about different dimensions


| Units per machine | Material thickness | Weight |
| :---: | :---: | :---: |
| 1 | -- | $12,6 \mathrm{Kg}$. |

## 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 $3 / 8^{\prime \prime}, 14 \mathrm{~mm}$ or $9 / 16^{\prime \prime}$ and 20 mm o $3 / 4^{\prime \prime}$ inch
Guide 140-11-01-00300 is required
Ask the manufacturer about different Ask the manufacturer


| Units per machine | Material thickness | Weight |
| :---: | :---: | :---: |
| 1 | -- | $12,9 \mathrm{Kg}$. |

## Set of square bar embossing rollers 304 NOA60



Reference: 140-11-01-00304
Rollers to emboss square bar up to 12 mm or $1 / 2^{\prime \prime}, 16 \mathrm{~mm}$ or $5 / 8^{\prime \prime}$ and 18 mm .
Guide 140-11-01-00300 is required
Ask the manufacturer about different dimensions


| Units per machine | Material thickness | Weight |
| :---: | :---: | :---: |
| 1 | -- | $12,9 \mathrm{Kg}$. |

## Entrance guide for square bar NOA60



Reference: 140-11-01-00300
Entrance guide for square bar of 10 mm or $3 / 8$ ", 12 mm or $1 / 2^{\prime \prime}, 14 \mathrm{~mm}$ or $9 / 16^{\prime \prime}, 16 \mathrm{~mm}$ or $5 / 8^{\prime \prime}, 18 \mathrm{~mm}$ and 20 mm or $3 / 4^{\prime \prime}$ 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: 25 mm or $1^{\prime \prime}, 30 \mathrm{~mm}$ or $1^{\prime \prime} 1 / 4,35$ and 40 mm
 Rectangular pipes: $25 \times 20 \mathrm{~mm}$ or 1 " $\times 3 / 4$ ", $30 \times 20 \mathrm{~mm}$ or 1 " $1 / 4 \times 3 / 4$ ", $30 \times 25 \mathrm{~mm}, 35 \times 20 \mathrm{~mm}, 35 \times 25 \mathrm{~mm}, 40 \times 20 \mathrm{~mm}$, $40 \times 25 \mathrm{~mm}, 40 \times 30 \mathrm{~mm}, 40 \times 35 \mathrm{~mm}$
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 $\mathbf{2 5 m m}$ or $\mathbf{1 "}^{\prime \prime}$ and 30 mm or $\mathbf{1 " ~}^{1 / 4}$ pipe NOA60



Reference: 140-11-01-00501
Inlet guide for 25 mm or $1^{\prime \prime}$ 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: $2,8 \mathrm{Kg}$.

## Accessories for Iron embossing machine NOA60

## Set of embossing rollers for 50 and 60 mm 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: 50 mm or 60 mm
Rectangular pipes: $50 \times 20 \mathrm{~mm}, 50 \times 25 \mathrm{~mm}, 50 \times 30 \mathrm{~mm}$, $50 \times 35 \mathrm{~mm}, 50 \times 40 \mathrm{~mm}, 50 \times 45 \mathrm{~mm}, 60 \times 20 \mathrm{~mm}, 60 \times 25 \mathrm{~mm}$, $60 \times 30 \mathrm{~mm}, 60 \times 35 \mathrm{~mm}, 60 \times 40 \mathrm{~mm}, 60 \times 45 \mathrm{~mm}, 60 \times 50 \mathrm{~mm}$ or $60 \times 55 \mathrm{~mm}$
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: $2,4 \mathrm{Kg}$.

## Inlet guide for 60 mm pipe NOA60



Reference: 140-11-01-00506
Inlet guide for 60 mm pipe

Weight: $2,2 \mathrm{Kg}$.

## 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 <br> Set of sectioned rollers to emboss different square or rectangular pipe sizes with the same set. Adjustable to the following pipes: <br> Square pipes: $1^{\prime \prime} 1 / 2,2^{\prime \prime}$ and $2^{\prime \prime} 1 / 2$ inches <br> Rectangular pipes: 1 " $1 / 2 \times 3 / 4$ ", 1 " $1 / 2 \times 1$ ", $2 " x 1^{\prime \prime}, 2 " x 1^{\prime \prime} 1 / 4$, $2 " x 1$ " $1 / 2,2$ " $1 / 2 \times 1$ " $1 / 2$ 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 manufaturer | Weight |
| 1 | 3 mm | 6 Kg . |

## Inlet guide for 1" 1/2 inches pipe NOA60



Reference: 140-11-01-00508
Inlet guide for $1^{\prime \prime} 1 / 2$ inches pipe

Weight: $2,6 \mathrm{Kg}$.

## Inlet guide for 2" inches pipe NOA60



Reference: 140-11-01-00509
Inlet guide for 2 " inches pipe

Weight: $2,4 \mathrm{Kg}$.

## Inlet guide for 2" 1/2 inches pipe NOA60



Reference: 140-11-01-00510
Inlet guide for 2 " $1 / 2$ inches pipe

Weight: $2,2 \mathrm{Kg}$.

## Power hammer

## Power hammer MP60

Power hammers or pile drivers MP60 Nargesa, are manufactured in welded and mechanized steel sheet. They are used in many blacksmith workshops to make all kinds of forging ornamental pieces which eases the job of moulding hot steel. Different tooling are used: for inlaying, moulding, cutting, piercing, rivetting, embossing, etc, in all kinds of metals.

| Reference | $\mathbf{1 0 0 - 1 4 - 0 3 - 0 0 1}$ |
| :--- | ---: |
| Engine power | $5.5 \mathrm{KW} / 7,5 \mathrm{HP}$ |
| Nominal dropping weight | 60 Kg |
| Strokes per minute | 220 |
| Strokes max. Displacement | 230 mm |
| Max. round working capacity | 70 mm |
| Max. square working capacity | $60 \times 60 \mathrm{~mm}$ |
| Dimensions | $900 \times 1600 \times 1600 \mathrm{~mm}$ |
| Weight | 1190 Kg |



## Accessories for Power hammer

Reference: 140-14-01-00001


| Dimensions |
| :---: | :---: |
| $120 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00003


Dimensions
Ø 200 mm

Reference: 140-14-01-00005


| Dimensions |
| :---: | :---: |
| $120 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00007


## Dimensions

$120 \times 60 \mathrm{~mm}$

Reference: 140-14-01-00002


| Dimensions |
| :---: |
| $160 \times 80 \mathrm{~mm}$ |

Reference: 140-14-01-00004


Dimensions
$100 \times 60 \mathrm{~mm}$

Reference: 140-14-01-00006


| Dimensions |
| :--- |
| $120 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00008


## Dimensions

$130 \times 100 \mathrm{~mm}$

## Accessories for Power hammer

Reference: 140-14-01-00009


| Dimensions |
| :---: |
| $120 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00011


| Dimensions |
| :---: |
| L110 mm |

Reference: 140-14-01-00013


Reference: 140-14-01-00015


| Dimensions | Capacity |
| :---: | :---: |
| $130 \times 80 \mathrm{~mm}$ | $40 \times 8 / 40 \times 6 \mathrm{~mm}$ |

Reference: 140-14-01-00010
Dimensions

Reference: 140-14-01-00012


| Dimensions | Capacity |
| :---: | :--- |
| $100 \times 60 \mathrm{~mm}$ | $12 \times 6 \mathrm{~mm}$ |

Reference: 140-14-01-00014


| Dimensions | Capacity |
| :---: | :---: |
| $120 \times 80 \mathrm{~mm}$ | $20 \times 6 / 25 \times 8 \mathrm{~mm}$ |

Reference: 140-14-01-00016


| Dimensions | Capacity |
| :---: | :---: |
| $80 \times 80 \mathrm{~mm}$ | $60 \times 60 \mathrm{~mm}$ |

## Accessories for Power hammer

Reference: 140-14-01-00017


| Dimensions | Capacity |
| :---: | :---: |
| $100 \times 100 \mathrm{~mm}$ | $80 \times 80 \mathrm{~mm}$ |

Reference: 140-14-01-00019


|  | Dimensions |
| :--- | :--- |
| $130 \times 80 \mathrm{~mm}$ |  |

Reference: 140-14-01-00021


| Dimensions | Capacity |
| :---: | :---: |
| $120 \times 70 \mathrm{~mm}$ | $\varnothing 14 \mathrm{~mm}$ |

Reference: 140-14-01-00023


| Dimensions | Capacity |
| :---: | :--- |
| $70 \times 60 \mathrm{~mm}$ | $\varnothing 16 \mathrm{~mm}$ |

Reference: 140-14-01-00018


| Dimensions |
| :---: | :---: |
| $160 \times 80 \mathrm{~mm}$ |

Reference: 140-14-01-00020


| Dimensions | Capacity |
| :---: | :---: |
| $120 \times 100 \mathrm{~mm}$ | $12 \times 12 \mathrm{~mm}$ |

Reference: 140-14-01-00022


| Dimensions |
| :--- | :--- |
| $135 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00024


| Dimensions | Capacity |
| :---: | :---: |
| $70 \times 60 \mathrm{~mm}$ | $\boxed{\mathrm{~mm}} / \varnothing 16 \mathrm{~mm}$ |

## Accessories for Power hammer

Reference: 140-14-01-00025


Reference: 140-14-01-00027


| Dimensions |
| :--- |
| $100 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00029


| Dimensions | Capacity |
| :---: | :---: |
| $160 \times 80 \mathrm{~mm}$ | $\varnothing 40 \mathrm{~mm}$ |

Reference: 140-14-01-00031


| Dimensions | Capacity |
| :---: | :---: |
| $100 \times 60 \mathrm{~mm}$ | $\varnothing 40 \mathrm{~mm}$ |

Reference: 140-14-01-00026


| Dimensions |
| :--- |
| $120 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00028


| Dimensions |
| :---: |
| $130 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00030


| Dimensions | Capacity |
| :---: | :---: |
| $160 \times 80 \mathrm{~mm}$ | $\square 30 \mathrm{~mm}$ |

Reference: 140-14-01-00032


| Dimensions | Capacity |
| :---: | :---: |
| $100 \times 60 \mathrm{~mm}$ | $\varnothing 30 \mathrm{~mm}$ |

## Accessories for Power hammer

Reference: 140-14-01-00033


| Dimensions | Capacity |
| :---: | :---: |
| $160 \times 80 \mathrm{~mm}$ | $\square 40 \mathrm{~mm}$ |

Reference: 140-14-01-00035


| Dimensions | Capacity |
| :---: | :---: |
| $180 \times 80 \mathrm{~mm}$ | $\boxed{30 \mathrm{~mm}}$ |

Reference: 140-14-01-00037

## Dimensions <br> $120 \times 60 \mathrm{~mm}$



| Dimensions |
| :--- |
| $120 \times 60 \mathrm{~mm}$ |

Reference: 140-14-01-00034


| Dimensions | Capacity |
| :---: | :---: |
| $150 \times 60 \mathrm{~mm}$ | $\varnothing 40 \mathrm{~mm}$ |

Reference: 140-14-01-00036


| Dimensions | Capacity |
| :---: | :---: |
| $100 \times 60 \mathrm{~mm}$ | $\boxed{\mathrm{~mm}}$ |

## 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, reagrding trademarks and models.

|  |  |
| :--- | ---: |
| Reference | 100-07-01-001 |
| Engine power | $0,75 \mathrm{KW} / 1 \mathrm{HP}$ |
| Three-phased tension | $230 / 400 \mathrm{~V}$ |
| Pipe thickness | 1,5 and 2 mm |
| Lock entrance | Adjustable 18 to 37 mm |
| Dimensions | $1500 \times 570 \times 1470 \mathrm{~mm}$ |
| Weight | 200 Kg |



## Accessories for Hydraulic press for locks

## Tooling for 35X35. Wall thickness $1,5 \mathrm{~mm}$

| Reference | $140-07-01-00001$ |
| :--- | ---: |
| Pipe | $35 \times 35 \mathrm{~mm}$ |
| Thickness | $1,5 \mathrm{~mm}$ |
| Pieces by tooling | 3 units |
| Weight | 5 Kg |

Tooling for $40 \times 40 \mathrm{~mm}$ up to $40 \times 80 \mathrm{~mm}$. Wall $1,5 \mathrm{~mm}$


Tooling for $40 \times 40 \mathrm{~mm}$ up to $40 \times 80 \mathrm{~mm}$. Wall 2 mm


| Reference | $140-07-01-00004$ |
| :--- | ---: |
| Pipe | $40 \times 40 \mathrm{~mm}, 40 \times 50 \mathrm{~mm}, 40 \times 60 \mathrm{~mm}$ |
|  | $40 \times 70 \mathrm{~mm}, 40 \times 80 \mathrm{~mm}$ |
| Thickness | 2 mm |
| Pieces by tooling | 8 units |
| Weight | $5,3 \mathrm{Kg}$ |

Accessories for Hydraulic press for locks

## Tooling for $50 \times 50 \mathrm{~mm}$ up to $50 \times 80 \mathrm{~mm}$. Wall $1,5 \mathrm{~mm}$

| Reference | $140-07-01-00005$ |
| :--- | ---: |
| Pipe | $50 \times 50 \mathrm{~mm}, 50 \times 60 \mathrm{~mm}, 50 \times 70 \mathrm{~mm}$ |
| Thickness | $50 \times 80 \mathrm{~mm}$ |
| Pieces by tooling | $1,5 \mathrm{~mm}$ |
| Weight | 7 units |

Tooling for $50 \times 50$ up to $50 \times 80 \mathrm{~mm}$. Wall 2 mm


## 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 | $2,2 \mathrm{KW} / 3 \mathrm{HP}$ |
| 3-phased tensión | $230 / 400 \mathrm{~V}$ |
| Hydraulic power | 10 Tm |
| Working speed | $24 \mathrm{~mm} / \mathrm{s}$ |
| Return speed | $54 \mathrm{~mm} / \mathrm{s}$ |
| Pump Flow | $7,5 \mathrm{~L}$ |
| Shank displacement | 600 mm |
| Goosneck | 300 mm |
| Maximum diameter of the piece | 600 mm |
| Bench dimensions | $420 \times 420 \mathrm{~mm}$ |
| Dimensions | $750 \times 1240 \times 2400 \mathrm{~mm}$ |
| 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 | $3,175 \times 127 \mathrm{~mm}$ |  |
| Standard keys | $2 \times 2 \mathrm{~mm}$ |  |
| Min./Max. Cutting length | $5,159 \mathrm{~mm} / 28,575 \mathrm{~mm}$ |  |
| Required pressure | $720 \mathrm{lbs} / 326,58 \mathrm{Kg}$ |  |
| Required shims/ Nr of passes | 0 shims / 1 pass |  |
| Broaching time | Bushing diameter | $6,8,10,12 \mathrm{and} 15 \mathrm{~mm}$ |
| $0: 30$ min. | Bushing length | $28,575 \mathrm{~mm}$ |
| Weight | $0,020 \mathrm{Kg} . \mathrm{Approx}$. |  |

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

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

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

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

## Accessories for Broaching machine

|  | Keyway broaches 5mm | REF: 125-09-01-BR-00004 |
| :---: | :---: | :---: |
|  | Tolerance | JS9 (-0,014 +0,008) |
|  | Model | B1 |
|  | Broach dimensions | $6,35 \times 171,45 \mathrm{~mm}$ |
|  | Standard keys | $5 \times 5 \mathrm{~mm}$ |
|  | Min./Max. Cutting length | 7,54mm / 42,862mm |
| 15 | Required pressure | $1.860 \mathrm{lbs} / 843,68 \mathrm{Kg}$ |
|  | Required shims/ Nr of passes | 1 shim / 2 passes |
|  | Thickness | 1,27mm |
|  | Bushing diameter | 12, 14, 15, 16, 17, 18 and 19 mm |
| (2) Broaching time | Bushing length | $42,862 \mathrm{~mm}$ |
| 1:00 min. | Weight | 0,100 Kg. Approx. |
|  | Keyway broaches 5mm | REF: 125-09-01-BR-00005 |
|  | Tolerance | JS9 (-0,014 +0,008) |
|  | Model | C |
|  | Broach dimensions | 9,52 $\times 298,45 \mathrm{~mm}$ |
|  | Standard keys | $5 \times 5 \mathrm{~mm}$ |
|  | Min./Max. Cutting length | 9,921mm/63,5mm |
| 15 | Required pressure | $1.470 \mathrm{lbs} / 666,78 \mathrm{Kg}$ |
|  | Required shims/ Nr of passes | 1 shim / 2 passes |
|  | Thickness | 1,193mm |
|  | Bushing diameter | 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34,35 and 36 mm |
| (2)) Broaching time | Bushing length | 63,5mm |
| 1:20 min. | Weight | 0,350 Kg. Approx. |

## Accessories for Broaching machine

|  | Keyway broaches 8mm | REF: 125-09-01-BR-00008 |
| :---: | :---: | :---: |
|  | Tolerance | JS9 (-0,017 +0,013) |
|  | Model | C |
|  | Broach dimensions | 9,52 $\times 298,45 \mathrm{~mm}$ |
|  | Standard keys | $8 \times 7 \mathrm{~mm}$ |
|  | Min./Max. Cutting length | 9,921mm/63,5mm |
| - | Required pressure | $3.680 \mathrm{lbs} / 1.669,22 \mathrm{Kg}$ |
|  | Required shims/ Nr of passes | 2 shims / 3 passees |
|  | Thickness | 1,27mm |
|  | Bushing diameter | 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34, 35 and 36 mm |
| Broaching time | Bushing length | $63,5 \mathrm{~mm}$ |
| 2:30 min. | Weight | 0,350 Kg. Approx. |
|  | Keyway broaches 10mm | REF: 125-09-01-BR-00009 |
|  | Tolerance | JS9 ( $-0,018+0,012$ ) |
|  | Model | D |
|  | Broach dimensions | $14,28 \times 352,42 \mathrm{~mm}$ |
|  | Standard keys | $10 \times 8 \mathrm{~mm}$ |
|  | Min./Max. Cutting length | $25,4 \mathrm{~mm} / 152,4 \mathrm{~mm}$ |
|  | Required pressure | $6.500 \mathrm{lbs} / 2.948,35 \mathrm{Kg}$ |
|  | Required shims/ Nr of passes | 2 shims / 3 passes |
|  | Thickness | 1,422mm |
|  | Bushing diameter | $32,34,35,36,38,40,42,44,45,46,48,50,52,54,56 \mathrm{~mm}$ |
| Broaching time | Bushing length | 101,6 and 127mm |
| 2:30 min. | Weight | 1 Kg . Approx. |
|  | Keyway broaches 12mm | REF: 125-09-01-BR-00010 |
|  | Tolerance | JS9 (-0,022 +0,014) |
|  | Model | D |
|  | Broach dimensions | $14,28 \times 352,42 \mathrm{~mm}$ |
|  | Standard keys | $12 \times 8 \mathrm{~mm}$ |
|  | Min./Max. Cutting length | $25,4 \mathrm{~mm} / 152,4 \mathrm{~mm}$ |
| 1 | Required pressure | $8.400 \mathrm{lbs} / 3.810,17 \mathrm{Kg}$ |
|  | Required shims/ Nr of passes | 2 shims / 3 passes |
|  | Thickness | 1,422mm |
|  | Bushing diameter | $32,34,35,36,38,40,42,44,45,46,48,50,52,54,56 \mathrm{~mm}$ |
| Broaching time | Bushing length | 101,6 and 127mm |
|  | Weight | 1 Kg . Approx. |

## Accessories for Broaching machine



## Accessories for Broaching machine



[^1] 4:20 min.

(3) Broaching time 5:00 min.

(3) Broaching time 5:00 min.

Keyway broaches 20mm
REF: 125-09-01-BR-00014

| Tolerance | JS9 $(-0,026+0,015)$ |
| :--- | ---: |
| Model | F |

Broach dimensions $\quad 25,40 \times 514,35 \mathrm{~mm}$

| Standard keys | $20 \times 12 \mathrm{~mm}$ |
| :--- | ---: |
| Min./Max. Cutting length | $25,4 \mathrm{~mm} / 152,4 \mathrm{~mm}$ |

Required pressure $\quad 8.800 \mathrm{lbs} / 3.991,61 \mathrm{Kg}$
Required shims/ Nr of passes 3 shims / 4 passes

| Thickness | $1,587 \mathrm{~mm}$ |
| :--- | ---: |
| Bushing diameter $75,80,85,90,95,100,105,110,115$ and 120 mm |  |

Bushing length
$152,4 \mathrm{~mm}$
Weight $\quad 3,5 \mathrm{Kg}$. Approx.

Keyway broaches 22mm
REF: 125-09-01-BR-00015

| Tolerance | JS9 $(-0,027+0,014)$ |
| :--- | ---: |
| Model | F |


| Broach dimensions | $25,40 \times 514,35 \mathrm{~mm}$ |
| :--- | ---: |
| Standard keys | $22 \times 14 \mathrm{~mm}$ |
| Min./Max. Cutting length | $25,4 \mathrm{~mm} / 152,4 \mathrm{~mm}$ |
| Required pressure | $9.400 \mathrm{lbs} / 4.263,76 \mathrm{Kg}$ |


| Required shims/ Nr of passes | 4 shims / 5 passes |
| :--- | ---: |
| Thickness | $1,422 \mathrm{~mm}$ |
| Bushing diameter | $75,80,85,90,95,100,105,110,115$ and 120 mm |
| Bushing length | $152,4 \mathrm{~mm}$ |
| Weight | $3,5 \mathrm{Kg}$. Approx. |

Keyway broaches 24mm
REF: 125-09-01-BR-00016

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

## Accessories for Broaching machine



## Accessories for Broaching machine



## Accessories for Broaching machine



## Accessories for Broaching machine



## Accessories for Broaching machine

|  | Keyway broaches 5/16 inch | REF: 125-09-01-BRP-00012 |
| :---: | :---: | :---: |
|  | Tolerance | JS9 (0,3127 • 0,3137) |
|  | Model | D |
|  | Broach dimensions | 9/16 $\times 137 / 8$ inches |
|  | Min./Max. Cutting length | 1 inch / 6 inches |
|  | Required pressure | 8.000lbs |
|  | Required shims/ Nr of passes | 2 shims / 3 passes |
| , | Thickness | 0,0560 inches |
|  | Bushing diameter | $17 / 16,1$ 1/2, $19 / 16,15 / 8,111 / 16,13 / 4,113 / 16$, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, $23 / 8,27 / 16,21 / 2,2$ 9/16, $25 / 8,211 / 16,23 / 4,2$ 13/16, 2 7/8, 2 15/16 and 3 inches |
| (a) Broaching time | Bushing length | 4 inches |
| 2:30 min. | Weight | 1,00 Kg. Approx. |
|  | Keyway broaches 3/8 inch | REF: 125-09-01-BRP-00013 |
|  | Tolerance | JS9 (0,3755 • 0,3765) |
|  | Model | D |
|  | Broach dimensions | $9 / 16 \times 137 / 8$ inches |
|  | Min./Max. Cutting length | 1 inch / 6 inches |
|  | Required pressure | 7.0001 lbs |
|  | Required shims/ Nr of passes | 2 shims / 3 passes |
|  | Thickness | 0,0625 inches |
|  | Bushing diameter | $\begin{array}{r} 17 / 16,11 / 2,19 / 16,15 / 8,111 / 16,13 / 4,113 / 16,1 \\ 7 / 8,115 / 16,2,21 / 16,21 / 8,23 / 16,21 / 4,25 / 16, \\ 23 / 8,27 / 16,21 / 2,29 / 16,25 / 8,211 / 16,23 / 4,2 \\ 13 / 16,27 / 8,215 / 16 \text { and } 3 \text { inches } \end{array}$ |
| (a) Broaching time | Bushing length | 4 inches |
| 2:30 min. | Weight | 1,00 Kg. Approx. |

## Accessories for Broaching machine



| Keyway broaches 7/16 inch | REF: 125-09-01-BRP-00014 |
| :--- | ---: |
| Tolerance | JS9 $(0,4380 \cdot 0,4390)$ |
| Model | D |
| Broach dimensions | $9 / 16 \times 137 / 8$ inches |
| Min./Max. Cutting length | 1 inch / 6 inches |
| Required pressure | 9.400 lbs |
| Required shims/ Nr of passes | 3 shims / 4 passes |
| Thickness | 0,0560 inches |

$17 / 16,1$ 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,
23/8, 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

| Bushing length | 4 inches |
| :--- | ---: |
| Weight | $1,00 \mathrm{Kg}$. Approx. |


| Keyway broaches 1/2 inch | REF: 125-09-01-BRP-00015 |
| :---: | :---: |
| Tolerance | JS9 (0,5006 • 0,5016) |
| Model | D |
| Broach dimensions | 9/16 $\times 137 / 8$ inches |
| Min./Max. Cutting length | 1 inch / 6 inches |
| Required pressure | 9.800 lbs |
| Required shims/ Nr of passes | 3 shims / 4 passes |
| Thickness | 0,0625 inches |
| Bushing diameter | $\begin{array}{r} 17 / 16,11 / 2,19 / 16,15 / 8,111 / 16,13 / 4,113 / 16, \\ 17 / 8,115 / 16,2,21 / 16,21 / 8,23 / 16,21 / 4,25 / 16, \\ 23 / 8,27 / 16,21 / 2,29 / 16,25 / 8,211 / 16,23 / 4, \\ 213 / 16,27 / 8,215 / 16 \text { and } 3 \text { inches } \end{array}$ |
| Bushing length | 4 inches |
| Weight | 1,00 Kg. Approx. |

## Accessories for Broaching machine

Keyway broaches 9/16 inch
REF: 125-09-01-BRP-00016
Tolerance JS9 (0,5631 •0,5641)
Model D
Broach dimensions $\quad 9 / 16 \times 137 / 8$ inches

| Min./Max. Cutting length | 1 inch / 6 inches |
| :--- | ---: |
| Required pressure | 8.900 lbs |


| Required shims/ Nr of passes | 4 shims $/ 5$ passes |
| :--- | ---: |
| Thickness | 0,0560 inches |

$17 / 16,11 / 2,19 / 16,15 / 8,111 / 16,13 / 4,1$ 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

Broaching time 3:40 min.

| Bushing diameter | $23 / 8,27 / 16,21 / 2,29 / 16,25 / 8,211 / 16,23 / 4$, <br> $213 / 16,27 / 8,215 / 16 ~ a n d ~ 3 ~ i n c h e s ~$ |
| :--- | ---: |
| Bushing length | 6 inches |
| Weight | $1,00 \mathrm{Kg}$. Approx. |


| Keyway broaches 5/8 inch | REF: 125-09-01-BRP-00017 |
| :---: | :---: |
| Tolerance | JS9 (0,6260 • 0,6270) |
| Model | E |
| Broach dimensions | $3 / 4 \times 151 / 2$ inches |
| Min./Max. Cutting length | 1 inch / 6 inches |
| Required pressure | 9.600 lbs |
| Required shims/ Nr of passes | 4 shims / 5 passes |
| Thickness | 0,0625 inches |
| Bushing diameter | $\begin{array}{r} 25 / 16,23 / 8,27 / 16,21 / 2,29 / 16,25 / 8,211 / 16, \\ 23 / 4,213 / 16,27 / 8,215 / 16,3,31 / 16,31 / 8,33 / 16, \\ 31 / 4,35 / 16,33 / 8,37 / 16,31 / 2,39 / 16,35 / 8, \\ 311 / 16,33 / 4,313 / 16,37 / 8,315 / 16 \text { and } 4 \text { inches } \end{array}$ |
| Bushing length | 6 inches |
| Weight | 1,500 Kg. Approx. |

## Accessories for Broaching machine

|  | Keyway broaches 3/4 inch | REF: 125-09-01-BRP-00018 |
| :---: | :---: | :---: |
|  | Tolerance | JS9 (0,7515 - 0,7525) |
|  | Model | E |
|  | Broach dimensions | $3 / 4 \times 151 / 2$ inches |
|  | Min./Max. Cutting length | 1 inch / 6 inches |
|  | Required pressure | 11.900 lbs |
|  | Required shims/ Nr of passes | 5 shims / 6 passes |
|  | Thickness | 0,0625 inches |
|  | Bushing diameter | $\begin{array}{r} 25 / 16,23 / 8,27 / 16,21 / 2,29 / 16,25 / 8,211 / 16, \\ 23 / 4,213 / 16,27 / 8,215 / 16,3,31 / 16,31 / 8,33 / 16, \\ 31 / 4,35 / 16,33 / 8,37 / 16,31 / 2,39 / 16,35 / 8, \\ 311 / 16,33 / 4,313 / 16,37 / 8,315 / 16 \text { and } 4 \text { inches } \end{array}$ |
| (a) Broaching time | Bushing length | 6 inches |
| 5:00 min. | Weight | 1,500 Kg. Approx. |


|  | Keyway broaches 7/8 inch | REF: 125-09-01-BRP-00019 |
| :---: | :---: | :---: |
|  | Tolerance | JS9 (0,8765 - 0,8775) |
|  | Model | F |
|  | Broach dimensions | $1 \times 201 / 4$ inches |
|  | Min./Max. Cutting length | 1 inch / 6 inches |
|  | Required pressure | 9.800 lbs |
|  | Required shims/ Nr of passes | 6 shims / 7 passes |
|  | Thickness | 0,0625 inches |
|  | Bushing diameter | 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 |
| (0) Broaching time | Bushing length | 6 inches |
|  | Weight | $3,500 \mathrm{Kg}$. Approx. |

## Accessories for Broaching machine

|  | Keyway broaches 1 inch | REF: 125-09-01-BRP-00020 |
| :---: | :---: | :---: |
|  | Tolerance | JS9 (1,0015 - 1,0025) |
|  | Model | F |
|  | Broach dimensions | $1 \times 201 / 4$ inches |
|  | Min./Max. Cutting length | 1 inch / 6 inches |
|  | Required pressure | 11.100 lbs |
|  | Required shims/ Nr of passes | 7 shims / 8 passes |
|  | Thickness | 0,0625 inches |
|  | Bushing diameter | 3 1/16, 3 1/8, 3 3/16, 3 1/4, 3 5/16, 3 3/8, 3 7/16, $31 / 2,39 / 16,35 / 8,311 / 16,33 / 4,313 / 16$, $37 / 8,3$ 15/16, 4, $41 / 16,41 / 8,43 / 16,41 / 4$, $45 / 16,43 / 8,47 / 16,41 / 2,7$ 9/16, 4 5/8, 4 11/16, $43 / 4,413 / 16,47 / 8,415 / 16$ and 5 inches |
| (3) Broaching time 8:00 min. | Bushing length | 6 inches |
|  | Weight | 3,500 Kg. Approx. |

## Accessories for Broaching machine

## Bushings



F114 steel guide bushes in H 8 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 | 4-5Cmm |
| 125-09-01-CBR-00005 | B | 14 mm | 46 mm | J9 | 4-5Cmm |
| 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 | 4-5Cmm |
| 125-09-01-CBR-00008 | C | 18 mm | 65 mm | J9 | 5-6-8mm |
| 125-09-01-CBR-00009 | C | 19 mm | 65 mm | J9 | 5-6-8mm |
| 125-09-01-CBR-00010 | C | 20 mm | 65 mm | J9 | 5-6-8mm |
| 125-09-01-CBR-00011 | C | 22 mm | 65 mm | J9 | 5-6-8mm |
| 125-09-01-CBR-00012 | C | 24 mm | 65 mm | J9 | 5-6-8mm |
| 125-09-01-CBR-00013 | C | 25 mm | 65 mm | J9 | 5-6-8mm |
| 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 | 5-6-8mm |
| 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 | $16-18 \mathrm{~mm}$ |
| 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 | 20-22-24-25mm |
| 125-09-01-CBR-00029 | F | 75 mm | 154 mm | J9 | 20-22-24-25mm |
| 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 | 20-22-24-25mm |
| 125-09-01-CBR-00032 | F | 90 mm | 154 mm | J9 | 20-22-24-25mm |
| 125-09-01-CBR-00033 | F | 95 mm | 154 mm | J9 | 20-22-24-25mm |

## 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 inactivi-ty 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 | $2,2 \mathrm{KW} / 3 \mathrm{HP}$ to $1400 \mathrm{r} . \mathrm{p} . \mathrm{m}$ |
| Three-phased tension | $230 / 400 \mathrm{~V}$ |
| Working strength | $20.000 \mathrm{Kg} / 200 \mathrm{KN}$ |
| Working speed | $10 \mathrm{~mm} / \mathrm{s}$ |
| Return speed | $35 \mathrm{~mm} / \mathrm{s}$ |
| Maximum displacement | 250 mm |
| Repetitivity | $0,05 \mathrm{~mm}$ |
| Tooling support table | $600 \times 1170 \mathrm{~mm}$ |
| Dimensions | $660 \times 1180 \times 1130 \mathrm{~mm}$ |
| 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

## Folding die at 161 mm. •V16, 223550 mm PP200CNC



Folding or bending die up to 161 mm with 4 openings ( 16 , $22,35,50 \mathrm{~mm}$ ) and a punch of $80^{\circ}$. This multi-V die allows 1 mm up to 8 mm sheet to be folded. The 70 mm outer diejameter punch allows to make completely closed shapes to a minimum of 75 mm inner wing.


Folding die reference: 125-16-01-00006
Folding punch reference: 131-16-01-00041

V 16: Sheet from 1 to 3 mm
V 22: Sheet from 2 to 4 mm
V 35: Sheet from 3 to 6 mm
V 50: Sheet from 4 to 8 mm
Max. Folding length: 161 mm
Max. Folding thickness: 8 mm

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 |
| :---: | :---: | :---: | :---: |
| 20 mm | $4,5,6,8 \mathrm{~mm}$ | 656 mm | 21 Kg |

## 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 |
| :---: | :---: | :---: | :---: |
| 50 mm | 6 mm | 90 mm | $9,3 \mathrm{Kg}$ |

## Accessories for Horizontal Press Brake

## 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 |
| $5,6,8,10,12,14,16,18 \mathrm{~mm}$ |

## 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 |
| :---: | :---: | :---: | :---: | :---: |
| 40 mm or $11 / 2^{\prime \prime}$ | $80 \times 80 \mathrm{~mm}$ or $3^{\prime \prime}$ | 300 mm | 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 |
| :---: | :---: | :---: | :---: |
| 20 mm | $4,5,6,8 \mathrm{~mm}$ | 650 mm | $19,5 \mathrm{Kg}$ |

## 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 |
| :---: | :---: | :---: |
| $5,6,8,10,12 \mathrm{~mm}$ | 522 mm | 22 Kg |

## Accessories for Horizontal Press Brake

## 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 cosult the manufacturer.


| Flat bar size | Die length | Weight |
| :---: | :---: | :---: |
| 12 mm | 1165 mm | 50 Kg |

## 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 |
| :---: | :---: | :---: |
| $6,8,10,12 \mathrm{~mm}$ | 760 mm | $32,5 \mathrm{Kg}$ |

## Twisted bars forming die



Flat bar cutting tooling $100 \times 10 \mathrm{~mm}$.


Reference: 140-16-01-00014
Flat bar and metal sheet cutting die up to 100 mm through a maximum thickness of 10 mm in mild steel.


| Max. Cutting length | Max. Cutting thickness | Weight |
| :---: | :---: | :---: |
| 100 mm | 10 mm | 23 Kg |

## Accessories for Horizontal Press Brake

## 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 accoprding 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: $12,7 \mathrm{Kg}$.

## 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: $4,6 \mathrm{Kg}$.

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



## Refference: 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


Refference: 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 |
| :---: | :---: | :---: | :---: | :--- |
| 22 mm | 28 mm | 40 mm | $140-16-01-$ EX22-28 | Tube Expander Clamp 22-28 Length Max. 40mm |
| 25 mm | 31 mm | 40 mm | $140-16-01-$ EX25-31 | Tube Expander Clamp 25-31 Length Max. 40mm |
| 28 mm | 34 mm | 50 mm | $140-16-01-$ EX28-34 | Tube Expander Clamp 28-34 Length Max. 50mm |
| 31 mm | 37 mm | 60 mm | $140-16-01-$ EX31-37 | Tube Expander Clamp 31-37 Length Max. 60mm |
| 35 mm | 41 mm | 60 mm | $140-16-01-$ EX35-41 | Tube Expander Clamp 35-41 Length Max. 60mm |
| 38 mm | 44 mm | 65 mm | $140-16-01-$ EX38-44 | Tube Expander Clamp 38-44 Length Max. 65mm |
| 41 mm | 47 mm | 65 mm | $140-16-01-$ EX41-47 | Tube Expander Clamp 41-47 Length Max. 65mm |
| 44 mm | 50 mm | 80 mm | $140-16-01-$ EX44-50 | Tube Expander Clamp 44-50 Length Max. 80mm |
| 47 mm | 53 mm | 80 mm | $140-16-01-$ EX47-53 | Tube Expander Clamp 47-53 Length Max. 80mm |
| 51 mm | 57 mm | 80 mm | $140-16-01-$ EX51-57 | Tube Expander Clamp 51-57 Length Max. 80mm |
| 54 mm | 60 mm | 80 mm | $140-16-01-$ EX54-60 | Tube Expander Clamp 54-60 Length Max. 80mm |
| 60 mm | 66 mm | 80 mm | $140-16-01-$ 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 |
| :---: | :---: | :---: |
| $12 \times 12 \mathrm{~mm}$ | 90 mm | 11 Kg |

## Punching die

|  | Reference: 140-16-01-00022 <br> Punch-holder die, compatible with our Nargesa brand <br> punches. <br> Gooseneck: 54 mm <br> Free distance of tooling: 95 mm |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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 | Weight |
| :---: | :---: |
| 161 mm | 14 kg |

## 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 |
| :---: | :---: |
| 161 mm | $19,8 \mathrm{~kg}$ |

## 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.


## Special punches

Folding punches to bend special pieces of small sizes or folded up to $30^{\circ}$.


Folding Punch D70 30
REF: 140-16-01-00025
Max. Folding length: 100 mm
Punch degrees: $30^{\circ}$
Punch diameter: 70 mm


Folding Punch D40 $80^{\circ}$
REF: 140-16-01-00026
Max. Folding length: 60mm


Punch degrees: $80^{\circ}$
Punch diameter: 40 mm


Folding Punch D22 80
REF: 140-16-01-00027
Max. Folding length: 60mm
Punch degrees: $80^{\circ}$
Punch diameter: 22mm

Weight: 3 Kg each unit approximately

## Accessories for Horizontal Press Brake

## 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
$25 \times 5 \mathrm{~mm} \quad 9 \mathrm{Kg}$

## 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.

Punch Promecam PS.135.85.R08


Reference: 140-16-01-00030
Folding length: 161 mm Weight: $3,2 \mathrm{Kg}$.


Punch Promecam P.95.35.R5


Referencia: 140-16-01-00031
Folding length: 161 mm
Weight: $2,3 \mathrm{Kg}$.


## Accessories for Horizontal Press Brake

Punch Promecam PS.134.30.R08


Referencia: 140-16-01-00032
Folding length: 161 mm
Weight: $2,7 \mathrm{Kg}$.


## Punch Promecam PK.135.85.R08



Referencia: 140-16-01-00038
Folding length: 161 mm
Weight: $4,4 \mathrm{Kg}$.


## Dies to fold thick metal sheet

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


Folding die T80.25.35 PP200CNC
REF. 140-16-01-00036
Folding length: 161 mm
Thickness: From 1,5 to 5 mm
Weight: 4 Kg .


Folding die M75-85-63 PP200CNC
REF: 140-16-01-00033
Folding length: 161 mm
Thickness: From 5 to 10 mm
Weight: 5Kg.


Folding die M80-85-80 PP200CNC
REF: 140-16-01-00034
Folding length: 161 mm
Thickness: From 6 to 12 mm
Weight: 6Kg.


Folding die M95-80-100 PP200CNC
REF: 140-16-01-00035
Folding length: 161 mm
Thickness: From 8 to 15 mm
Weight: 9 Kg

## Accessories for Horizontal Press Brake

## Punches and dies

## Standard round punches



## Standard square punches



## Standard rectangular punches



| Type | Available sizes in mm | A | B | C |
| :--- | :---: | :---: | :---: | :---: |
| N28 | $7 \times 10 / 7 \times 15 / 9 \times 13 / 9 \times 19 / 11 \times 17 / 11 \times 23$ | 28 mm | 58 mm | $31,5 \mathrm{~mm}$ |
|  | $13 \times 19 / 15 \times 21 \mathrm{~mm}$ |  |  |  |
| N40 | $13 \times 25 / 15 \times 27 / 17 \times 25 / 19 \times 30 / 20 \times 34 \mathrm{~mm}$ | 40 mm | 64 mm | $43,5 \mathrm{~mm}$ |
| For different sizes, please ask the manufacturer |  |  |  |  |

## Accessories for Horizontal Press Brake

## Standard oval punches



| Type | Available sizes in mm | A | B | C |
| :--- | :---: | :---: | :---: | :---: |
| N28 | $7 \times 10 / 7 \times 15 / 7 \times 20 / 9 \times 13 / 9 \times 19 / 11 \times 17 / 11 \times 23$ | 28 mm | 58 mm | $31,5 \mathrm{~mm}$ |
|  | $13 \times 18 / 13 \times 22 / 13 \times 27 / 15 \times 20 / 15 \times 24 / 15 \times 27$ |  |  |  |
|  | $17 \times 22 / 17 \times 2619 \times 26 / 21 \times 27 \mathrm{~mm}$ |  |  |  |
| N40 | $13 \times 31 / 15 \times 31 / 17 \times 31 / 17 \times 40 / 19 \times 31$ | 40 mm | 64 mm | $43,5 \mathrm{~mm}$ |
|  | $19 \times 40 / 21 \times 31 / 21 \times 40 \mathrm{~mm}$ |  |  |  |
| For different sizes, please ask the manufacturer |  |  |  |  |

Standard round dies


For different sizes, please ask the manufacturer

Standard square dies


## Accessories for Horizontal Press Brake

## Standard rectangular dies



Oval dies


## Tube notching tooling

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

## Accessories for Horizontal Press Brake

## Flat bar round end tooling R1

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


A
C D

For different sizes, please ask the manufacturer.
When placing order it must be specified the REFFERENCE, 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

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

For different sizes, please ask the manufacturer.
When placing order it must be specified the REFFERENCE, MODEL,


R (radius), W (flat bar width), T (flkat 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 Horizontal Press Brake

## Corner rounding tooling



| Reference | Available sizes in $\mathbf{m m}$ | Required fitting |  |
| :---: | :---: | :---: | :---: |
| MRE28 | Radius from 3 to 15 mm | TAP 28 | CAB 46 |
| MRE40 | Radius from 16 to 26 mm | TAP 40 | CAB 60 |
| MRE50 | Radius from 26,5 to 32 mm | TAP 50 | CAB 78 |
| For different sizes, please ask the manufacturer |  |  |  |

Fitting nuts for punches

| Reference | Type | Fitting nuts for punches |
| :---: | :---: | :---: |
| $120-02-01-00011$ | TAP28 | Fitting nuts for punches N28 |
| $140-02-01-00019$ | 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 |

Fitting for dies


| Reference | Type | Fitting for dies |
| :---: | :---: | :--- |
| $120-02-01-00012$ | N46 | Fitting for dies N46 |
| $140-02-01-00024$ | N60 | Fitting for dies N60 |
| $140-02-01-00025$ | N78 | Fitting for dies N78 |

## Hydraulic iron worker

## Hydraulic iron worker MX340G

The Hydraulic Punching Machine MX340G Nargesa main feature is its verstility. 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.

| Reference | $\mathbf{1 0 0 - 0 2 - 0 1 - 0 0 2}$ |
| :--- | ---: |
| Engine power | $2,2 \mathrm{KW} / 3 \mathrm{HP}$ |
| Three-phased tension | $230 / 400 \mathrm{~V}$ |
| Hydraulic power | 40 Tn |
| Working speed | $7,1 \mathrm{~mm} / \mathrm{s}$ |
| Return speed | $9,3 \mathrm{~mm} / \mathrm{s}$ |
| Punch displacement | 100 mm |
| Neck | 180 mm |
| Tooling support table | $245 \times 265 \mathrm{~mm}$ |
| Dimensions | $690 \times 870 \times 1780 \mathrm{~mm}$ |
| Weight | 615 Kg |



## Accessories for Hydraulic iron worker MX340G

Fitting nuts for punches MX340


TAP

| Reference | Type | Fitting nuts for punches |
| :---: | :---: | :---: |
| $\mathbf{1 2 0 - 0 2 - 0 1 - 0 0 0 1 1 ~}$ | TAP28 | Fitting nuts for punches N28 Standard |
| $\mathbf{1 4 0 - 0 2 - 0 1 - 0 0 0 1 9 ~}$ | TAP40 | Fitting nuts for punches N40 |
| $\mathbf{1 4 0 - 0 2 - 0 1 - 0 0 0 2 0 ~}$ | TAP50 | Fitting nuts for punches N50 |
| $\mathbf{1 4 0 - 0 2 - 0 1 - 0 0 0 2 1 ~}$ | TAP60 | Fitting nuts for punches N60 |
| $\mathbf{1 2 5 - 0 2 - 0 1 - 0 0 0 0 2 ~}$ | ATAP | Fitting part for TAP60 |

ATAP

## Fitting parts for dies MX340

| Reference | Type | Fitting for dies |
| :---: | :---: | :---: | :---: |
| $120-02-01-00012$ | N 46 | Fitting for dies N46 Standard |
| $140-02-01-00024$ | N 60 | Fitting for dies N60 |
| $140-02-01-00025$ | N 78 | Fitting for dies N78 |
| $140-02-01-00037$ | N 100 | Base holder for dies N100 |
| $140-02-01-00038$ | N 125 | Base holder for dies N125 |

Standard round punches MX340

|  <br> C | Type | Available sizes in mm $\varnothing$ | A | B | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N28 | 3/3'5/4/4'5/5/5'5/6/6'5/7/7'5/8 <br> $5 / 9 \mathrm{~mm}$ up to 28 mm from $0^{\prime} 5$ in $0^{\prime} 5 \mathrm{~mm}$ | 28 mm | 58 mm | $31,5 \mathrm{~mm}$ |
| A | N40 | $\begin{gathered} 29 / 30 / 31 / 32 / 33 / 34 / 35 \\ 36 / 37 / 38 / 39 / 40 \mathrm{~mm} \end{gathered}$ | 40 mm | 64 mm | $43,5 \mathrm{~mm}$ |
|  | 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 | 100 mm | 58 mm | 104 mm |
|  |  | 90/92/94/96/98/100mm |  |  |  |
|  | For different sizes, please ask the manufacturer |  |  |  |  |

## Accessories for Hydraulic iron worker MX340G

## Standard square punches MX340



## Standard rectangular punches MX340

$\square$

| Type | Available sizes in mm | A | B | C |
| :---: | :---: | :---: | :---: | :---: |
| N28 | $7 \times 10 / 7 \times 15 / 9 \times 13 / 9 \times 19 / 11 \times 17 / 11 \times 23$ <br> $13 \times 19 / 15 \times 21 \mathrm{~mm}$ | 28 mm | 58 mm | $31,5 \mathrm{~mm}$ |
|  | $13 \times 25 / 15 \times 27 / 17 \times 25 / 19 \times 30 / 20 \times 34 \mathrm{~mm}$ | 40 mm | 64 mm | $43,5 \mathrm{~mm}$ |
| N40 | $25 \times 43 \mathrm{~mm}$ | 50 mm | 58 mm | 54 mm |
| N50 | $25 \times 70 \mathrm{~mm}$ | 75 mm | 58 mm | 79 mm |
| N75 | $25 \times 96 \mathrm{~mm}$ | 100 mm | 58 mm | 104 mm |
| N100 |  |  |  |  |
| Fordifferentsize please ask themanufacturer |  |  |  |  |

For different sizes, please ask the manufacturer

## Standard oval punches MX340



## Accessories for Hydraulic iron worker MX340G

## Standard round dies MX340



Standard square dies MX340


Standard rectangular dies MX340


For different sizes, please ask the manufacturer

## Accessories for Hydraulic iron worker MX340G

Oval dies MX340


Tube notching tooling MX340


| Reference | Available sizes in mm | Required fitting |  |
| :---: | :--- | :--- | :--- | :--- |
| MAN28 | Tube from 16 to 28 mm | TAP 28 | CAB 46 |
| MAN40 | Tube from 28,5 to 40 mm | TAP 40 | CAB 60 |
| MAN50 | Tube from 40,5 to 50 mm | TAP 50 | CAB 78 |
| MAN60 | Tube from 50,5 to 60 mm | 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 15 mm | TAP 28 | CAB 46 |
| MRE40 | Radius from 16 to 26 mm | TAP 40 | CAB 60 |
| MRE50 | Radius from 26,5 to 32 mm | 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 35 mm | TAP28 / TAP40 |
| MOR1-35B | B | From 20 to 35 mm | TAP28 / TAP40 |
| MOR1-35C | C | From 20 to 35 mm | TAP28 / TAP40 |
| MOR1-35D | D | From 20 to 35 mm | TAP28 / TAP40 |
| MOR1-50A | A | From 40 to 50 mm | TAP50 / TAP60 with ATAP |
| MOR1-50C | C | From 40 to 50 mm | TAP50 / TAP60 with ATAP |
| MOR1-50D | D | From 40 to 50 mm | TAP50 / TAP60 with ATAP |



When placing order it must be specified the REFFERENCE, 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 MX340

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

Para medidas distintas o superiores consultar con el fabricante.
Al realizar el pedido especificar REFERENCIA, MODELO, R (radio),

A


C

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 $90^{\circ}$ up to $45^{\circ}$.


| Units per machine | Max. Capacity for straight cut | Max. Cutting capacity for miter | Weight |
| :---: | :---: | :---: | :---: |
| 1 | $60 \times 60 \mathrm{~mm}$ | $50 \times 50 \mathrm{~mm}$ | 32 Kg |

Flat bar cutting tooling. MX340
Reference: 140-02-01-00002
Tooling for cutting sheet or flat bars from 0.8 mm up to 10 mm thickness.


| Units per machine | Max. Cutting capacity | Weight |
| :---: | :---: | :---: |
| 1 | $100 \times 10 \mathrm{~mm}$ | 28 Kg |

## Folding tooling 170mm. MX340

$\left.\begin{array}{cccc}\text { Reference: 140-02-01-00004 } \\ \text { Tooling for folding sheet and flat bar up to } 170 \mathrm{~mm} .88^{\circ} \\ \text { punch. Dies with } V \text { for } 56 \mathrm{~mm} \text { and } \vee \text { for } 26 \mathrm{~m} .\end{array}\right]$

Stripping tooling to $90^{\circ}$ adjustable 100x100 MX340


Reference: 140-02-01-00005
Stripping tooling for angle etc. Adjustable up to $100 \times 100 \mathrm{~mm}$ to $90^{\circ}$ fijos.


| Units per machine | Max. Cutting capacity | Weight |
| :---: | :---: | :---: |
| 1 | $100 \times 100 \times 4$ | 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 | 3 mm | 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 | $30 \times 2 \mathrm{~mm}$ | $10 \times 2 \mathrm{~mm}$ | 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 made one by one.


| Units per machine | Punchings sizes | Max. thickness | Weight |
| :---: | :---: | :---: | :---: |
| 1 | $100 \times 20 \mathrm{~mm}$ | 2 mm | 20 Kg |

## Angle \& U profile punching tooling MX340



Reference: 140-02-01-00031
Base holder for angle punching. Suitable for punches and dies of different diemeters, exchangeables.


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

## Accessories for Hydraulic iron worker MX340G

## Round bar cutting tooling. MX340



Reference: 140-02-01-00035
Tooling for cutting round barfrom 3 mm up to 35 mm .

| Units per machine | Max. Cutting diameter | Min. Cutting diameter | Weight |
| :---: | :---: | :---: | :---: |
| 1 | 35 mm | 3 mm | 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 | 6 mm | 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 | 15 mm | 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 diemeter | Hole diameter | Weight |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 50 mm | 10 mm | Exchangeable | 23 Kg |

## Hydraulic iron worker

## Hydraulic iron worker MX700

The Hydraulic Punching Machine MX700 Nargesa main feature is its verstility. 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.

| Reference | $\mathbf{1 0 0 - 0 2 - 0 2 - 0 0 3}$ |
| :--- | ---: |
| Engine power | $5,5 \mathrm{KW} / 7,5 \mathrm{HP}$ |
| Three-phased tension | 400 V |
| Hydraulic power | 70 Tn |
| Working speed | $9 \mathrm{~mm} / \mathrm{s}$ |
| Return speed | $14 \mathrm{~mm} / \mathrm{s}$ |
| Punch displacement | 160 mm |
| Neck | 350 mm |
| Tooling support table | $600 \times 350 \mathrm{~mm}$ |
| Dimensions | $1130 \times 1370 \times 2060 \mathrm{~mm}$ |
| Weight | 2000 Kg |



## Accessories for Hydraulic iron worker MX700

## Fitting nuts for punches MX700



Fitting parts for dies MX700


| Reference | Type | Fitting for dies |
| :---: | :---: | :---: |
| $\mathbf{1 2 0 - 0 2 - 0 2 - 0 0 3 1 3 ~}$ | N46 | Fitting for dies N46 Standard |
| $\mathbf{1 4 0 - 0 2 - 0 2 - 0 0 0 1 9 ~}$ | N60 | Fitting for dies N60 |
| $\mathbf{1 4 0 - 0 2 - 0 2 - 0 0 0 2 8 ~}$ | N78 | Fitting for dies N78 |
| $\mathbf{1 4 0 - 0 2 - 0 2 - 0 0 0 4 4 ~}$ | N85 | Fitting for dies N85 |
| $\mathbf{1 4 0 - 0 2 - 0 2 - 0 0 0 2 9 ~}$ | N100 | Fitting for dies N100 |
| $\mathbf{1 4 0 - 0 2 - 0 2 - 0 0 0 2 7 ~}$ | N125 | Fitting for dies N125 |

## Standard round punches MX700



## Accessories for Hydraulic iron worker MX700

## Standard square punches MX700



## Standard rectangular punches MX700



Standard oval punches MX700

|  | Type | Available sizes in mm | A | B | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N28 | $7 \times 10 / 7 \times 15 / 7 \times 20 / 9 \times 13 / 9 \times 19 / 11 \times 17$ | 28 mm | 58 mm | $31,5 \mathrm{~mm}$ |
| c | $11 \times 23 / 13 \times 18 / 13 \times 22 / 13 \times 27 / 15 \times 20 / 15 \times 24$ |  |  |  |  |
| $15 \times 27 / 17 \times 22 / 17 \times 26 / 19 \times 26 / 21 \times 27 \mathrm{~mm}$ |  |  |  |  |  |
| A | N40 | $13 \times 31 / 15 \times 31 / 17 \times 31 / 17 \times 40 / 19 \times 31$ | 40 mm | 64 mm | $43,5 \mathrm{~mm}$ |
| 19x40/21x31/21x40mm |  |  |  |  |  |
|  | N50 | $25 \times 45 / 25 \times 50 \mathrm{~mm}$ | 50 mm | 58 mm | 54 mm |
|  | N75 | $27 \times 63 / 27 \times 75 \mathrm{~mm}$ | 75 mm | 58 mm | 79 mm |
|  | N100 | $30 \times 87 / 30 \times 100 \mathrm{~mm}$ | 100 mm | 58 mm | 104 mm |
| For different sizes, please ask the manufacturer |  |  |  |  |  |

## Accessories for Hydraulic iron worker MX700

## Standard round dies MX700



For different sizes, please ask the manufacturer

## Standard square dies MX700

| A |  | Type | Available sizes in mm | A | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ |  | 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 | $31 / 33 / 35 \mathrm{~mm}$ | 78 mm | 28,5 mm |
|  |  | N100 | 40/44/48/53mm | 100 mm | 28,5 mm |
|  |  | N125 | 58/64/70mm | 125 mm | 28,5 mm |
|  |  | or differ | zes, please ask the manufacturer |  |  |

Standard rectangular dies MX700


## Accessories for Hydraulic iron worker MX700

## Oval dies MX700

| A | Type | Available sizes in mm | A | B |
| :---: | :---: | :---: | :---: | :---: |
|  | N46 | $7 \times 10 / 7 \times 15 / 7 \times 20 / 9 \times 13 / 9 \times 19 / 11 \times 17 / 11 \times 23$ | 46 mm | 28,5 mm |
| $\infty$ |  | $13 \times 18 / 13 \times 22 / 13 \times 2715 \times 20 / 15 \times 24 / 15 \times 27$ |  |  |
| $1$ |  | $17 \times 22 / 17 \times 26 / 19 \times 26 / 21 \times 27 \mathrm{~mm}$ |  |  |
|  | N60 | $13 \times 31 / 15 \times 31 / 17 \times 31 / 17 \times 40 / 19 \times 31$ | 60 mm | 32 mm |
| $\rightarrow$ |  | $19 \times 40 / 21 \times 31 / 21 \times 40 \mathrm{~mm}$ |  |  |
| ) | N78 | $25 \times 45 / 25 \times 50 \mathrm{~mm}$ | 78 mm | 28,5 mm |
| N | N100 | $27 \times 63 / 27 \times 75 \mathrm{~mm}$ | 100 mm | 28,5 mm |
|  | N125 | $30 \times 87 / 30 \times 100 \mathrm{~mm}$ | 125 mm | 28,5 mm |
|  | or differ | lease ask the manufacturer |  |  |

Tube notching tooling MX700

| Reference | Available sizes in $\mathbf{m m}$ |  | Required fitting |  |
| :--- | :--- | :--- | :--- | :---: |
| MAN28 | Tube from 16 to 28 mm | TAP 28 | CAB 46 |  |
| MAN40 | Tube from 28,5 to 40 mm | TAP 40 | CAB 60 |  |
| MAN50 | Tube from 40,5 to 50 mm | TAP 50 | CAB 78 |  |
| MAN60 | Tube from 50,5 to 60 mm | TAP 60 |  |  |
| For different sizes, please ask the manufacturer |  |  |  |  |

## Corner rounding tooling MX



| Reference | Available sizes in $\mathbf{m m}$ | Required fitting |  |
| :---: | :---: | :---: | :---: |
| MRE28 | Radius from 3 to 15 mm | TAP 28 | CAB 46 |
| MRE40 | Radius from 16 to 26 mm | TAP 40 | CAB 60 |
| MRE50 | Radius from 26,5 to 32 mm | 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 35 mm | TAP28 / TAP40 |
| MOR1-35B | B | From 20 to 35 mm | TAP28 / TAP40 |
| MOR1-35C | C | From 20 to 35 mm | TAP28 / TAP40 |
| MOR1-35D | D | From 20 to 35 mm | TAP28 / TAP40 |
| MOR1-50A | A | From 40 to 50 mm | TAP50 / TAP60 with ATAP |
| MOR1-50B | B | From 40 to 50 mm | TAP50 / TAP60 with ATAP |
| MOR1-50C | C | From 40 to 50 mm | TAP50 / TAP60 with ATAP |
| MOR1-50D | D | From 40 to 50 mm | TAP50 / TAP60 with ATAP |



For different sizes, please ask the manufacturer.
When placing order it must be specified the REFFERENCE, 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


## Accessories for Hydraulic iron worker MX700

## Ventilation grip tooling MX700



Reference: 140-02-02-00031
Tooling to make ventiolation 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 | $100 \times 20 \mathrm{~mm}$ | 2 mm | 21 Kg |

## 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 | 6 mm | 1 Kg |

## Stripping tooling $90^{\circ}$ adjustable 150x150 MX700



Reference: 140-02-02-00001
Stripping tooling for metal sheet, angle... Adjustable up to $150 \times 150 \mathrm{~mm}$ to $90^{\circ}$ fixed.


| Units per machine | Max. Cutting capacity | Weight |
| :---: | :---: | :---: |
| 1 | $150 \times 150 \times 8 \mathrm{~mm}$ | 38 Kg |

Flat bar cutting tooling $200 \times 20$. MX700


Reference: 140-02-02-00002
Tooling for cutting flat bar or metal sheet from 0.8 mm up to 20 mm Thickness.


| Units per machine | Max. Cutting capacity | Weight |
| :---: | :---: | :---: |
| 1 | $200 \times 20 \mathrm{~mm}$ | 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 | 28 mm | 2 mm | 7 Kg |

## Folding tooling 170mm. MX700



## Angle cutting tooling. MX700



Reference: 140-02-02-00036
Tooling for cutting angles from $90^{\circ}$ up to $45^{\circ}$.


| Units per machine | Max cutting capacity Straight cut | Max. Cutting capacity Miter cut | Weight |
| :---: | :---: | :---: | :---: |
| 1 | $80 \times 80 \mathrm{~mm}$ | $50 \times 50 \mathrm{~mm}$ | 32 Kg |

Flat bar cutting tooling $100 \times 12$. MX700


## Reference: 140-02-02-00037

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


| Units per machine | Max. Cutting capacity | Weight |
| :---: | :---: | :---: |
| 1 | $100 \times 12 \mathrm{~mm}$ | 29 Kg |

## Accessories for Hydraulic iron worker MX700

## Round bar cutting tooling MX700



Reference: 140-02-02-00038
Tooling for cutting round bar from 3 mm up to 35 mm .

| Units per machine | Max. Cutting diameter | Min. Cutting diameter | Weight |
| :---: | :---: | :---: | :---: |
| 1 | 35 mm | 3 mm | 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 | 50 mm | 10 mm | Exchangeable | 24 Kg |

## Arrow tooling for pipes MX700



Reference: 140-02-02-00040
Tooling for flattening and cutting pipes in arrow sha-pes.
Suitable for different diameters.


| Units per machine | Pipe Max. Diameter | Pipe Min. Diameter | Weight |
| :---: | :---: | :---: | :---: |
| 1 | $30 \times 2 \mathrm{~mm}$ | $10 \times 2 \mathrm{~mm}$ | 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 | 3 mm | 22 Kg |
|  | -114 |  |

## 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 | 15 mm | 15 Kg |

## Folding tooling 350mm. MX700



Reference: 140-02-02-00043
Tooling to fold metal sheet and flat bar up to 350 mm . Punch: $88^{\circ}$. Die with adjustable V of $120 \mathrm{~mm}, 80 \mathrm{~mm}$, 40 mm and 16 mm .

| Units per machine | Max. Folding Length | Max. Folding Thicknesss | Weight |
| :---: | :---: | :---: | :---: |
| 1 | 350 mm | 20 mm | 45 Kg |

## Shears

## Hydraulic shears C2006CNC

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

| Reference | 100-06-01-001 |
| :--- | ---: |
| Engine power | $5,87 \mathrm{KW} / 7,87 \mathrm{HP}$ |
| Three-phased tension | $230 / 400 \mathrm{~V}$ |
| Cutting Capacity: mild steel | $6 \mathrm{~mm}(450 \mathrm{~N} / \mathrm{mm} 2)$ |
| Cutting capacity: stailess steel | $4 \mathrm{~mm}(700 \mathrm{~N} / \mathrm{mm} 2)$ |
| $\mathrm{N}^{\circ}$ of hammers | 10 units |
| Cutting length | 2030 mm |
| Neck | 190 mm |
| Gauge displacement | 700 mm |
| Strokes per minute | 10 strokes |
| Position accuracy and repeatibility | $+/-0,1 \mathrm{~mm}$ |
| Dimensions | $2880 \times 2360 \times 1790 \mathrm{~mm}$ |
| 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.

## Accessories for Shears

## Sheet metal back support C2006 CNC

The C2006 CNC sheet metal back support is a holder to prevent sheet metal bending, thus ensuring that it has good contact with the stop.
It is equipped with 56 wheels placed in 8 rows at different distances. These are specifically distributed to provide optimum support on sheets of different sizes.
The support also offers two options to take the material off. In the first choice, when it has performed the support function, it descends and tilts to be able to extract the sheet metal from the rear of the machine. In the second option, after cutting, the support rises and the stop pushes the sheet for its extraction from the front of the machine.

- Pneumatic operation through an external air supply.
- Pressure switch and pressure regulator supplied with the accessory
- Integrated pneumatic system
- Ball recirculation guide for up and down movement


| Reference | 140-06-01-00002 |
| :--- | ---: |
| Work pressure | $4 / 7 \mathrm{Kg}$. |
| Dimensions | $2260 \times 718 \times 872 \mathrm{~mm}$ |
| Weight | 240 Kg |

## Shears

## Hydrauilic shears C3006CNC

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



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.

## Accessories for Shears

## Sheet metal back support C3006 CNC

The C3006 CNC sheet metal back support is a holder to prevent sheet metal bending, thus ensuring that it has good contact with the stop.
It is equipped with 63 wheels placed in 9 rows at different distances. These are specifically distributed to provide optimum support on sheets of different sizes.
The support also offers two options to take the material off. In the first choice, when it has performed the support function, it descends and tilts to be able to extract the sheet metal from the rear of the machine. In the second option, after cutting, the support rises and the stop pushes the sheet for its extraction from the front of the machine.

- Pneumatic operation through an external air supply.
- Pressure switch and pressure regulator supplied with the accessory
- Integrated pneumatic system
- Ball recirculation guide for up and down movement


| Reference | $140-06-02-00002$ |
| :--- | ---: |
| Work pressure | $4 / 7 \mathrm{Kg}$. |
| Dimensions | $3260 \times 913 \times 760 \mathrm{~mm}$ |
| Weight | 250 Kg. |

## 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 wothout any kind of distortion.

| Reference | 100-05-09-001 |
| :--- | ---: |
| Engine Power | $5,5 \mathrm{KW} / 7,5 \mathrm{HP}$ |
| Three-Phased tension | $230 / 400 \mathrm{~V}$ |
| Hydraulic power | 40 Tn |
| Punch working speed | $8,3 \mathrm{~mm} / \mathrm{s}$ |
| Punch return speed | $120 \mathrm{~mm} / \mathrm{s}$ |
| Punch lowering speed | $200 \mathrm{~mm} / \mathrm{s}$ |
| Max. Punch displacement | 200 mm |
| Inner folding length | 1250 mm |
| Total folding length | 1500 mm |
| Back gauge displacement | 600 mm |
| Neck | 270 mm |
| Dimensions | $2110 \times 1880 \times 2210 \mathrm{~mm}$ |
| Weight | 4900 Kg |



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 $10^{\prime \prime}$ high-resolution ( $1024 \times 600$ 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 MP3003CNC

The hydraulic sheet metal brake MP3003CNC Nargesa, from the last generation, has been made of welded and stabilized steel which permits it to stand big efforts wothout any kind of distortion.


The powerful ESA S630 CNC control system has outstanding processing capacity which permits up to four axes to be managed, interpolated in any combination $\mathrm{Y}, \mathrm{X}, \mathrm{R}$ 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 $10^{\prime \prime}$ high-resolution ( $1024 \times 600$ 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

## 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 | $130 \mathrm{~mm} / \mathrm{sec}$. |
| Servo motor | 1 Nm to 5000 rpm |
| R axis limit | 150 mm |
| Mechanical precision | $0,05 \mathrm{~mm}$ |

## 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

## 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 | $400 \mathrm{~mm} / \mathrm{sec}$. |
| Linear guides for recirculation of high precision balls |  |
| Servo motors | 1 Nm a 5000 rpm |
| Stroke axis Z1, Z2 | 2600 mm |
| Mechanical precision | $0,05 \mathrm{~mm}$ |

[^2]
## 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 <br> Type | Mechanical resistance of the <br> material and the tool body | Hardness of the material <br> and the tool body | Hardness of the operating surfaces <br> after induction hardening |
| :--- | :---: | :---: | :---: |
| $-42 \mathrm{CrM04}$ | $900-1150 \mathrm{~N} / \mathrm{mm} 2$ | $29.1-36.9 \mathrm{HRC}$ | $54-60$ HRC |
| - C45 | $560-710 \mathrm{~N} / \mathrm{mm} 2$ | $12-15.5 \mathrm{HRC}$ | $54-60 \mathrm{HRC}$ |



## 805 mm segmented

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

795 mm segmented
$100,250,20,25,30,35,40,45,50,100,100 \mathrm{~mm}$

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

PU.85.35.R08


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

PK.95.85.R3


- P.116.35.R08


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

P.95.35.R5

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


P.120.85.R1


- PK.135.85.R08


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

P.120.35.R15


PK.120.85.R08


| 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. |

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.

| Materia <br> Type | Mechanical resistance of the <br> material and the tool body | Hardness of the material <br> and the tool body | Hardness of the operating surfaces <br> after induction hardening |
| :--- | :---: | :---: | :---: |
| - 42CrM04 | $900-1150 \mathrm{~N} / \mathrm{mm} 2$ | $29.1-36.9 \mathrm{HRC}$ | $54-60$ HRC |
| - C45 | $560-710 \mathrm{~N} / \mathrm{mm} 2$ | $12-15.5 \mathrm{HRC}$ | $54-60 \mathrm{HRC}$ |



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

795 mm segmented
$100,250,20,25,30,35,40,45,50,200 \mathrm{~mm}$

495 mm segmented
$170,100,50,45,40,35,30,25 \mathrm{~mm}$

## - M.460.R



| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

- M. 490

- T80.06.35


| 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.490.70

- 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. |

T80.06.90


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |
| 900 mm. |

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. |

T80.10.35


- T80.06.85


| 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. |

TR80.08.60


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

- T80.08.90

- T80.10.60


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

## Accessories for Press Brakes

- TR80.10.60


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

- T80.10.90


| 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

- T80.16.35


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

- T80.10.85

- T80.12.35

- TR80.12.60
(
- T80.12.90

- T80.16.60



## Accessories for Press Brakes

- 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. |

- T80.25.35


| 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. |

- T80.20.35


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

- T80.20.85

- 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. |

## Accessories for Press Brakes

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. |

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. |

M80.85.80


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

M95.80.100


- M103.80.125

- MK130.80.160


| Length |
| :---: |
| 835 mm. |
| 415 mm. |
| 795 mm. Seg. |
| 805 mm. Seg. |

- M195.70.200


Length
415 mm .

## Accessories for Press Brakes

-S101.35.06


- S101.35.08


| Length |
| :---: |
| 835 mm. |
| 415 mm. |

Length
835 mm .
415 mm .

Length
1050 mm .
520 mm .

## 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

PRICE: 135,00 €

## 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 vis-cosity level improver
Container: 20L
Weight: 20 Kg
PRICE: 138,00 €


PRADA NARGESA, S.L.
Ctra. de Garrigàs a Sant Miquel $\mathrm{s} / \mathrm{n} 17476$ Palau de Santa Eulàlia (Girona) Spain
Tel. +34 972568085 www.nargesa.com nargesa@nargesa.com


[^0]:    * 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 330 MPa . 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.

[^1]:    Broaching time

[^2]:    * 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

