VERTICAL BROACHING MACHINE

The Hydraulic Broaching machines BM25 NARGESA is a machine to make notches or keyways in all kind of pieces: sprockets, pulleys, gears, bearings...

REQUEST QUOTATION

Please complete the following form. We'll contact you in less than 24 hours.
Business days

REQUEST ADJUSTED QUOTATION

VIDEO MACHINE OPERATION

Machine performance video
Hydraulic Broaching machine BM25 Nargesa has been fabricated in a welded and mechanized steel monoblock. BM25 has been thought for small medium productions. By medium production we mean less than 350 units.

### Versatility

It’s used for making small and big pieces. All kinds of broaching and different tolerances. 2 mm keyways from 2 up to 25 mm or 1” inch. It is also used like a press to unbolt oxidated parts, assembling and dismantling bearings...

### Reliability

Because of its use, the keyway is always made with the required tolerance and parallelism.

### Easy use

Anyone can make a keyway, there’s no need to be a skilful operative.

### Fast setting up

The preparation time of the machine before making a broaching operation is approximately 1 min.

### Effectiveness

The machine can be moved easily next to a lathe or machining center. While those machines work, the same operative can make the broaching operation.
Hydraulic Broaching machine BM25 is supplied as standard with the following components:

**Structure**
- Mechanized single-block bench
- Lower bench palletized to move the machine easily to the working site or storage.
- LED front lightning.
- Manual operation for a better broaching control.
- Low noise level which improves the working quality of the operator.
- Front polycarbonate protection that allows to see the broaching process.
- Front opening with safety hinges.
- Tooling supplied as standard for the positioning of the parts. This tool is adjusted and fixed to the work bench in the exact position so that the broaching piece is placed easily and quickly in its correct position. There is no need to hold the piece.
- Hydraulic oil CEPSA HYDRAULIC HM 68

**Broaches**
- The broaches we offer are one of the best trademarks in the market, internationally speaking.
- They are manufactured under strict quality controls, guaranteeing the higher liability and durability.
- Made in the USA.
- Some shims are provided with each broach, the ones used for accomplishing the required tolerance.
- Broaches in millimetres and inches.

**Control panel**
- The control panel is very intuitive and easy to use.
- It includes the conversion chart from pressure to tons.
- Broaching pressure regulator with pressure manometer.

**Safety**
- The Broaching machine BM25 incorporates all safety devices according to CE regulations.

*All our products are manufactured in our facilities in Spain. Hydraulic and electronic components are completely standard from the best European leading trademarks, with technical support all over the world: Rexroth, Bosch, Roquet, Schneider Electric, LG, Telemecanique, Pizzato...
Neck
The 300mm neck allows to broach pieces up to 600mm in diameter, without any problem.

Front polycarbonate guards
The two front doors incorporate polycarbonate windows so that the operator can control the broaching process at all times, in total safety.

Lighting on the broaching table
It is very important to count on a proper lighting inside the broaching cabin, so the operator can control the whole broaching process.

Drawer for chips collection
The machine has a drawer where all the chip that is generated during the broaching process is collected. This is a removable drawer which can be easily emptied.

Pressure regulator
By using the pressure regulator and the pressure manometer installed in the machine, we can adjust the working pressure so that it is the ideal one for each broaching operation.
The Broaching machine BM25 is not only capable of making slots for keyways (notches), but also polygonal shapes from cylindrical holes: squares, rectangles, hexagons...

It is also possible to make a given number of slots from the same hole and even getting to generate inner grooves.
DETAILED FEATURES

- **Motor power**: 2,2 Kw / 3 Hp.
- **3-phased tension**: 230/400 V.
- **Hydraulic power**: 10 Tn.
- **Max. broaching capacity**: 25 mm.
- **Working speed**: 24 mm/s.
- **Return speed**: 54 mm/s.
- **Pump Flow**: 7,5 liters
- **Capacity of Hydraulic Tank**: 25 liters
- **Shank displacement**: 600 mm.
- **Gooseneck**: 300 mm.
- **Max. piece diameter**: 600 mm
  *(For different sizes, please ask the manufacturer)*
- **Bench dimensions**: 420 mm x 420 mm.
CHARACTERISTICS OF THE PACKAGING

- Tariff Item Code: 84624990
- Packing with steel pallet and retractile film.
- Optional: Complete wooden packing NIMF15

### BM25

- **Width**: 750 mm
- **Length**: 1250 mm
- **Height**: 1900 mm
- **Volume**: 1.78 m³
- **Nett Weight**: 850 Kg
- **Gross weight**: 855 Kg
OPTIONAL TOOLING

Broaches made of treated and rectified steel of first level to optimize the perfect finish of the piece and the exact tolerance. Each set of broach is equipped with its required shims.

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

- Tolerance: JS9 (-0,027 +0,013)
- Model: F
- Broach dimensions: 25,40 x 514,35mm
- Standard keys: 25 x 14mm
- Tooth pitch: 15,875mm
- Number of Teeth: 26
- Minimum cutting length: 25,4mm
- Maximum cutting length: 152,4mm
- Required pressure: 12.300Ibs
- Required pressure: 5.579,18Kg
- **Shims**
  - Required shims: 4 units
  - Number of passes: 5
  - Thickness: 1,422mm
- **Bushings**
  - Bushing diameter: 75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
  - Bushing length: 152,4mm
  - Weight: 3,5 Kg. Approx.

**Broaching time**
5:00 min.

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

- Tolerance: JS9 (-0,025 +0,015)
- Model: F
- Broach dimensions: 25,40 x 514,35mm
- Standard keys: 24 x 14mm
- Tooth pitch: 15,875mm
- Number of Teeth: 26
- Minimum cutting length: 25,4mm
- Maximum cutting length: 152,4mm
- Required pressure: 10.600Ibs
- Required pressure: 4.808,07Kg
- **Shims**
  - Required shims: 4 units
  - Number of passes: 5
  - Thickness: 1,587mm
- **Bushings**
  - Bushing diameter: 75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
  - Bushing length: 152,4mm
  - Weight: 3,5 Kg. Approx.

**Broaching time**
5:00 min.
**Keyway broaches 22mm**

REF: 125-09-01-BR-00015

- Tolerance: JS9 (-0,027 +0,014)
- Model: F
- Broach dimensions: 25,40 x 514,35mm
- Standard keys: 22 x 14mm
- Tooth pitch: 15,875mm
- Number of Teeth: 26
- Minimum cutting length: 25,4mm
- Maximum cutting length: 152,4mm
- Required pressure: 9.400lbs
- Required pressure: 4.263,76Kg

**Shims**
- Required shims: 4 units
- Number of passes: 5
- Thickness: 1,422mm

**Bushings**
- Bushing diameter: 75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
- Bushing length: 152,4mm

Weight: 3,5 Kg. Approx.

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**Keyway broaches 20mm**

REF: 125-09-01-BR-00014

- Tolerance: JS9 (-0,026 +0,015)
- Model: F
- Broach dimensions: 25,40 x 514,35mm
- Standard keys: 20 x 12mm
- Tooth pitch: 15,875mm
- Number of Teeth: 26
- Minimum cutting length: 25,4mm
- Maximum cutting length: 152,4mm
- Required pressure: 8.800lbs
- Required pressure: 3.991,61Kg

**Shims**
- Required shims: 3 units
- Number of passes: 4
- Thickness: 1,587mm

**Bushings**
- Bushing diameter: 75, 80, 85, 90, 95, 100, 105, 110, 115 and 120mm
- Bushing length: 152,4mm

Weight: 3,5 Kg. Approx.
**Keyway broaches 16mm**

REF: 125-09-01-BR-00012

Tolerance: JS9 (-0,024 +0,012)
Model: E
Broach dimensions: 19,05 x 393,7mm
Standard keys: 16 x 10mm
Tooth pitch: 15,875mm
Number of Teeth: 20
Minimum cutting length: 25,4mm
Maximum cutting length: 152,4mm
Required pressure: 9.400lbs
Required pressure: 4.263,76Kg

**Shims**
Required shims: 3 units
Number of passes: 4
Thickness: 1,422mm

**Bushings**
Bushings diameter: 52, 54, 55, 56, 58, 60, 62, 63, 64, 65, 66, 68, 70 and 72mm
Bushings length: 127 and 152,4mm

Weight: 1,5 Kg. Approx.

**Keyway broaches 18mm**

REF: 125-09-01-BR-00013

Tolerance: JS9 (-0,022 +0,013)
Model: E
Broach dimensions: 19,05 x 393,7mm
Standard keys: 18 x 11mm
Tooth pitch: 15,875mm
Number of Teeth: 20
Minimum cutting length: 25,4mm
Maximum cutting length: 152,4mm
Required pressure: 10,600lbs
Required pressure: 4.808,07Kg

**Shims**
Required shims: 3 units
Number of passes: 4
Thickness: 1,422mm

**Bushings**
Bushings diameter: 52, 54, 55, 56, 58, 60, 62, 63, 64, 65, 66, 68, 70 and 72mm
Bushings length: 127 and 152,4mm

Weight: 1,5 Kg. Approx.
Keyway broaches 14mm
REF: 125-09-01-BR-00011

Tolerance: JS9 (-0,023 +0,013)
Model: D
Broach dimensions: 14,28 x 352,42mm
Standard keys: 14 x 9mm
Tooth pitch: 15,875mm
Number of Teeth: 17
Minimum cutting length: 25,4mm
Maximum cutting length: 152,4mm
Required pressure: 11.100lbs
Required pressure: 5.034,87Kg

Shims
Required shims: 2 units
Number of passes: 3
Thickness: 1,587mm

Bushings
Bushing diameter: 32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48,
50, 52, 54 and 56mm
Bushing length: 101,6 and 127mm

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 x 352,42mm
Standard keys: 12 x 8mm
Tooth pitch: 15,875mm
Number of Teeth: 17
Minimum cutting length: 25,4mm
Maximum cutting length: 152,4mm
Required pressure: 8.400lbs
Required pressure: 3.810,17Kg

Shims
Required shims: 2 units
Number of passes: 3
Thickness: 1,422mm

Bushings
Bushing diameter: 32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48,
50, 52, 54 and 56mm
Bushing length: 101,6 and 127mm

Weight: 1 Kg. Approx.
**Keyway broaches 8mm**

REF: 125-09-01-BR-00008

Tolerance: JS9 (-0.017 +0.013)
Model: C
Broach dimensions: 9,52 x 298,45mm
Standard keys: 8 x 7mm
Tooth pitch: 9,525mm
Number of Teeth: 22
Minimum cutting length: 9.921mm
Maximum cutting length: 63,5mm
Required pressure: 3.680lbs
Required pressure: 1.669,22Kg

**Shims**
Required shims: 2 units
Number of passes: 3
Thickess: 1,27mm

**Bushings**
Bushing diameter: 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34, 35 and 36mm
Bushing length: 63,5mm

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 x 352,42mm
Standard keys: 10 x 8mm
Tooth pitch: 15,875mm
Number of Teeth: 17
Minimum cutting length: 25,4mm
Maximum cutting length: 152,4mm
Required pressure: 6.500lbs
Required pressure: 2.948,35Kg

**Shims**
Required shims: 2 units
Number of passes: 3
Thickess: 1,422mm

**Bushings**
Bushing diameter: 32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48, 50, 52, 54 and 56mm
Bushing length: 101,6 and 127mm

Weight: 1 Kg. Approx.
**Keyway broaches 6mm**

REF: 125-09-01-BR-00006

Tolerance: JS9 (-0,016 +0,009)
Model: C
Broach dimensions: 9,52 x 298,45mm
Standard keys: 6 x 6mm
Tooth pitch: 9,525mm
Number of Teeth: 22
Minimum cutting length: 9,921mm
Maximum cutting length: 63,5mm
Required pressure: 2,100lbs
Required pressure: 952,54Kg

**Shims**
Required shims: 1 unit
Number of passes: 2
Thickness: 1,587mm

**Bushings**
Bushing diameter: 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34, 35 and 36mm
Bushing length: 63,5mm

Weight: 0,350 Kg. Approx.

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**Keyway broaches 5mm**

REF: 125-09-01-BR-00005

Tolerance: JS9 (-0,014 +0,008)
Model: C
Broach dimensions: 9,52 x 298,45mm
Standard keys: 5 x 5mm
Tooth pitch: 9,525mm
Number of Teeth: 22
Minimum cutting length: 9,921mm
Maximum cutting length: 63,5mm
Required pressure: 1,470lbs
Required pressure: 666,78Kg

**Shims**
Required shims: 1 unit
Number of passes: 2
Thickness: 1,193mm

**Bushings**
Bushing diameter: 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 34, 35 and 36mm
Bushing length: 63,5mm

Weight: 0,350 Kg. Approx.
Keyway broaches 5mm
REF: 125-09-01-BR-00004

Tolerance: JS9 (-0,014 +0,008)
Model: B1
Broach dimensions: 6,35 x 171,45mm
Standard keys: 5 x 5mm
Tooth pitch: 7,143mm
Number of Teeth: 16
Minimum cutting length: 7,54mm
Maximum cutting length: 42,862mm
Required pressure: 1.860lbs
Required pressure: 843.68Kg

Shims
Required shims: 1 units
Number of passes: 2
Thickness: 1,27mm

Bushings
Bushing diameter: 12, 14, 15, 16, 17, 18 and 19mm
Bushing length: 42,862mm

Weight: 0,100 Kg. Approx.

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

Tolerance: JS9 (-0,015 +0,01)
Model: B1
Broach dimensions: 6,35 x 171,45mm
Standard keys: 4 x 4mm
Tooth pitch: 7,143mm
Number of Teeth: 16
Minimum cutting length: 7,54mm
Maximum cutting length: 42,862mm
Required pressure: 1.140Ibs
Required pressure: 517,09Kg

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,965mm

Bushings
Bushing diameter: 12, 14, 15, 16, 17, 18 and 19mm
Bushing length: 42,862mm

Weight: 0,100 Kg. Approx.
Keyway broaches 3mm
REF: 125-09-01-BR-00002

Tolerance: JS9 (-0,013 +0,009)
Model: A
Broach dimensions: 3,175 x 127mmm
Standard keys: 3 x 3mm
Tooth pitch: 4,762mm
Number of Teeth: 18
Minimum cutting length: 5,159mm
Maximum cutting length: 28,575mm
Required pressure: 650lbs
Required pressure: 294,83Kg

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,787mm

Bushings
Bushing diameter: 6, 8, 10, 12 and 15mm
Bushing length: 28,575mm
Weight: 0,020 Kg. Approx.

Broaching time
0:45 min.

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

Tolerance: JS9 (-0,014 +0,009)
Model: A
Broach dimensions: 3,175 x 127mm
Standard keys: 2 x 2mm
Tooth pitch: 4,762mm
Number of Teeth: 18
Minimum cutting length: 5,159mm
Maximum cutting length: 28,575mm
Required pressure: 720lbs
Required pressure: 326,58Kg

Shims
Required shims: 0 units
Number of passes: 1

Bushings
Bushing diameter: 6, 8, 10, 12 and 15mm
Bushing length: 28,575mm
Weight: 0,020 Kg. Approx.

Broaching time
0:30 min.
Keyway broaches of different shapes

Keyway broaches to make slots of different polygonal shapes: squares, rectangles, hexagons...

Keyway broaches with special coating

Keyway broaches with TiN and TiAlN coating are supplied with the most common American standard (1/16”- 1”) and metric sizes (2mm - 25mm). The coatings provide greater performance through high lubricity and hardness, which allows greater production in their most demanding materials. The keyway broaches are supplied with the necessary shims.
Keyway broaches 7/8 inch
REF: 125-09-01-BRP-00019

Tolerance: JS9 (0,8765 · 0,8775)
Model: F
Broach dimensions: 1 x 20 1/4 inches
Tooth pitch: 5/8 inch
Number of Teeth: 26
Minimum cutting length: 1 inch
Maximum cutting length: 6 inches
Required pressure: 9.800lbs

Shims
Required shims: 6 units
Number of passes: 7
Thickness: 0,0625 inches

Bushings
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
Bushing length: 6 inches

Weight: 3,5 Kg. Approx.

Broaching time 6:00 min.

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Keyway broaches 1 inch
REF: 125-09-01-BRP-00020

Tolerance: JS9 (1,0015 · 1,0025)
Model: F
Broach dimensions: 1 x 20 1/4 inches
Tooth pitch: 5/8 inch
Number of Teeth: 26
Minimum cutting length: 1 inch
Maximum cutting length: 6 inches
Required pressure: 11.100lbs

Shims
Required shims: 7 units
Number of passes: 8
Thickness: 0,0625 inches

Bushings
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
Bushing length: 6 inches

Weight: 3,5 Kg. Approx.

Broaching time 8:00 min.
### Keyway broaches 5/8 inch

**REF:** 125-09-01-BRP-00017

- **Tolerance:** JS9 (0.6260 · 0.6270)
- **Model:** E
- **Broach dimensions:** 3/4 x 15 1/2 inches
- **Tooth pitch:** 5/8 inch
- **Number of Teeth:** 20
- **Minimum cutting length:** 1 inch
- **Maximum cutting length:** 6 inches
- **Required pressure:** 11.900Ibs

**Shims**
- **Required shims:** 4 units
- **Number of passes:** 5
- **Thickness:** 0,0625 inches

**Bushings**
- **Bushing diameter:** 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16, 3, 3 1/16, 3 1/4, 3 5/16, 3 3/8, 3 7/16, 3 1/2, 3 9/16, 3 5/8, 3 11/16, 3 3/4, 3 13/16, 3 7/8, 3 15/16 and 4 inches
- **Bushing length:** 6 inches
- **Weight:** 1,5 Kg. Approx.

**Broaching time**

- **4:00 min.**
Keyway broaches 9/16 inch
REF: 125-09-01-BRP-00016

Tolerance: JS9 (0,5631 · 0,5641)
Model: D
Broach dimensions: 9/16 x 13 7/8 inches
Tooth pitch: 5/8 inch
Number of Teeth: 17
Minimum cutting length: 1 inch
Maximum cutting length: 6 inches
Required pressure: 8.900Ibs

Shims
Required shims: 4 units
Number of passes: 5
Thickness: 0,0560 inches

Bushings
Bushing diameter: 1 7/16, 1 1/2, 1 9/16, 1 5/8,
1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8,
2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8,
2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
Bushing length: 4, 5 and 6 inches

Weight: 1,00 Kg. Approx.

Broaching time
3:40 min.

Keyway broaches 1/2 inch
REF: 125-09-01-BRP-00015

Tolerance: JS9 (0,5006 · 0,5016)
Model: D
Broach dimensions: 9/16 x 13 7/8 inches
Tooth pitch: 5/8 inches
Number of Teeth: 17
Minimum cutting length: 1 inch
Maximum cutting length: 6 inches
Required pressure: 9.800Ibs

Shims
Required shims: 3 units
Number of passes: 4
Thickness: 0,0625 inches

Bushings
Bushing diameter: 1 7/16, 1 1/2, 1 9/16, 1 5/8,
1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8,
2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8,
2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
Bushing length: 4, 5 and 6 inches

Weight: 1,00 Kg. Approx.

Broaching time
3:00 min.
Keyway broaches 7/16 inch
REF: 125-09-01-BRP-00014

Tolerance: JS9 (0.4380 · 0.4390)
Model: D
Broach dimensions: 9/16 x 13 7/8 inches
Tooth pitch: 5/8 inch
Number of Teeth: 17
Minimum cutting length: 1 inch
Maximum cutting length: 6 inches
Required pressure: 9.400Ibs

Shims
Required shims: 3 units
Number of passes: 4
Thickness: 0.0560 inches

Bushings
Bushing diameter: 1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
Bushing length: 4, 5 and 6 inches

Weight: 1.00 Kg. Approx.

Broaching time
3:00 min.

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

Tolerance: JS9 (0.3755 · 0.3765)
Model: D
Broach dimensions: 9/16 x 13 7/8 inches
Tooth pitch: 5/8 inch
Number of Teeth: 17
Minimum cutting length: 1 inch
Maximum cutting length: 6 inches
Required pressure: 7.000Ibs

Shims
Required shims: 2 units
Number of passes: 3
Thickness: 0.0625 inches

Bushings
Bushing diameter: 1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
Bushing length: 4, 5 and 6 inches

Weight: 1.00 Kg. Approx.

Broaching time
2:30 min.
Keyway broaches 5/16 inch
REF: 125-09-01-BRP-00012

Tolerance: JS9 (0.3127 · 0.3137)
Model: D
Broach dimensions: 9/16 x 13 7/8 inches
Tooth pitch: 5/8 inch
Number of Teeth: 17
Minimum cutting length: 1 inch
Maximum cutting length: 6 inches
Required pressure: 8.000lbs

Shims
Required shims: 2 units
Number of passes: 3
Thickness: 0.0560 inches

Bushings
Bushing diameter: 1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16 and 3 inches
Bushing length: 4, 5 and 6 inches

Weight: 1.00 Kg. Approx.

Broaching time
2:30 min.

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

Tolerance: JS9 (0.3755 · 0.3765)
Model: C
Broach dimensions: 3/8 x 11 3/4 inches
Tooth pitch: 3/8 inch
Number of Teeth: 22
Minimum cutting length: 25/64 inch
Maximum cutting length: 2 1/2 inches
Required pressure: 4.340lbs

Shims
Required shims: 2 units
Number of passes: 3
Thickness: 0.0625 inches

Bushings
Bushing diameter: 3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
Bushing length: 2 1/2 inches

Weight: 0.350 Kg. Approx.

Broaching time
2:30 min.
Keyway broaches 5/16 inch
REF: 125-09-01-BRP-00010

Tolerance: JS9 (0,3127 · 0,3137)
Model: C
Broach dimensions: 3/8 x 11 3/4 inches
Tooth pitch: 3/8 inch
Number of Teeth: 22
Minimum cutting length: 25/64 inch
Maximum cutting length: 2 1/2 inches
Required pressure: 3.960Ibs

Shims
Required shims: 2 units
Number of passes: 3
Thickness: 0,0550 inches

Bushings
Bushing diameter: 3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
Bushing length: 2 1/2 inches

Weight: 0,350 Kg. Approx.

Broaching time
2:30 min.

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

Tolerance: JS9 (0,2502 · 0,2512)
Model: C
Broach dimensions: 3/8 x 11 3/4 inches
Tooth pitch: 3/8 inch
Number of Teeth: 22
Minimum cutting length: 25/64 inch
Maximum cutting length: 2 1/2 inches
Required pressure: 2.520Ibs

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,0625 inches

Bushings
Bushing diameter: 3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
Bushing length: 2 1/2 inches

Weight: 0,350 Kg. Approx.

Broaching time
1:20 min.
Keyway broaches 3/16 inch
REF: 125-09-01-BRP-00008

Tolerance: JS9 (0,1877 · 0,1887)
Model: C
Broach dimensions: 3/8 x 11 3/4 inches
Tooth pitch: 3/8 inch
Number of Teeth: 22
Minimum cutting length: 25/64 inch
Maximum cutting length: 2 1/2 inches
Required pressure: 1.540lbs

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,0500 inches

Bushings
Bushing diameter: 3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2 and 1 9/16 inches
Bushing length: 2 1/2 inches

Weight: 0,350 Kg. Approx.

Broaching time
1:20 min.

Keyway broaches 3/16 inch
REF: 125-09-01-BRP-00007

Tolerance: JS9 (0,1877 · 0,1887)
Model: B
Broach dimensions: 3/16 x 6 3/4 inches
Tooth pitch: 9/32 inch
Number of Teeth: 16
Minimum cutting length: 19/64 inch
Maximum cutting length: 1 11/16 inches
Required pressure: 1.860lbs

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,0500 inches

Bushings
Bushing diameter: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inch
Bushing length: 1 11/16 inches

Weight: 0,100 Kg. Approx.

Broaching time
1:00 min.
Keyway broaches 5/32 inch
REF: 125-09-01-BRP-00006

Tolerance: JS9 (0,1564 · 0,1574)
Model: B
Broach dimensions: 3/16 x 6 3/4 inches
Tooth pitch: 9/32 inch
Number of Teeth: 16
Minimum cutting length: 19/64 inch
Maximum cutting length: 1 11/16 inches
Required pressure: 1.320lbs

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,0420 inches

Bushings
Bushings diameter: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inch
Bushings length: 1 11/16 inch

Weight: 0,100 Kg. Approx.

Broaching time
1:00 min.

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

Tolerance: JS9 (0,1252 · 0,1262)
Model: B
Broach dimensions: 3/16 x 6 3/4 inches
Tooth pitch: 9/32 inch
Number of Teeth: 16
Minimum cutting length: 19/64 inch
Maximum cutting length: 1 11/16 inch
Required pressure: 720lbs

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,0310 inches

Bushings
Bushings diameter: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inch
Bushings length: 1 11/16 inch

Weight: 0,100 Kg. Approx.

Broaching time
1:00 min.
Keyway broaches 3/32 inch
REF: 125-09-01-BRP-00004

Tolerance: JS9 (0,0938 · 0,0948)
Model: B
Broach dimensions: 3/16 x 6 3/4 inches
Tooth pitch: 9/32 inch
Number of Teeth: 16
Minimum cutting length: 19/64 inch
Maximum cutting length: 1 11/16 inch
Required pressure: 930lbs

Shims
Required shims: 0 units
Number of passes: 1

Bushings
Bushing diameter: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16 and 7/8 inch
Bushing length: 1 11/16 inch

Weight: 0,100 Kg. Approx.

Broaching time
0:40 min.

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

Tolerance: JS9 (0,1252 · 0,1262)
Model: A
Broach dimensions: 1/8 x 5 inches
Tooth pitch: 3/16 inches
Number of Teeth: 18
Minimum cutting length: 13/64 inch
Maximum cutting length: 1 1/8 inch
Required pressure: 650lbs

Shims
Required shims: 1 unit
Number of passes: 2
Thickness: 0,0310 inches

Bushings
Bushing diameter: 1/4, 5/16, 3/8, 7/16 and 1/2 inch
Bushing length: 1 1/8 inch

Weight: 0,020 Kg. Approx.

Broaching time
0:45 min.
Keyway broaches 3/32 inch
REF: 125-09-01-BRP-00002

Tolerance: JS9 (0.0938 · 0.0948)
Model: A
Broach dimensions: 1/8 x 5 inches
Tooth pitch: 3/16 inches
Number of Teeth: 18
Minimum cutting length: 13/64 inch
Maximum cutting length: 1 1/8 inches
Required pressure: 780lbs

Shims
Required shims: 0 units
Number of passes: 1

Bushings
Bushing diameter: 1/4, 5/16, 3/8, 7/16 and 1/2 inch
Bushing length: 1 1/8 inches

Weight: 0.020 Kg. Approx.

Broaching time
0:30 min.

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

Tolerance: JS9 (0.0625 · 0.0635)
Model: A
Broach dimensions: 1/8 x 5 inches
Tooth pitch: 3/16 inches
Number of Teeth: 18
Minimum cutting length: 13/64 inch
Maximum cutting length: 1 1/8 inches
Required pressure: 390lbs

Shims
Required shims: 0 units
Number of passes: 1

Bushings
Bushing diameter: 1/4, 5/16, 3/8, 7/16 and 1/2 inch
Bushing length: 1 1/8 inches

Weight: 0.020 Kg. Approx.

Broaching time
0:30 min.
OUR RANGE OF MACHINERY

- **IRON WORKERS**
- **SECTION BENDING MACHINES**
- **NON-MANDREL PIPE BENDER**
- **HORIZONTAL PRESS BRAKES**
- **TWISTING/SCROLL BENDING MACHINES**
- **HYDRAULIC PRESS BRAKES**
- **HYDRAULIC SHEAR MACHINES**
- **GAS FORGES**
- **IRON EMBOSsing MACHINES**
- **END WROUGHT IRON MACHINES**
- **BROACHING MACHINES**
- **POWER HAMMERS**
- **PRESSES FOR LOCKS**
Nargesa machines have 3 years warranty provided that the customer registers it in our website. Otherwise it would be only one year warranty. This one encloses any manufacturing default all along these 3 years for components. Any misuse is excluded from this condition. Labor, back and forth shipping and any eventual repair, are not included in this warranty.

Partner companies

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

All our customers have access to technical support quickly and efficiently. 90% of incidences are solved out on the phone, mail, Skype or videoconferencing in less than 24 hours. In case of needing presencial technical assistance, we may as well send a technician to the customer’s facilities.