



RASCAMAT®

WORLDWIDE TAPPING ARM LEADER



www.roscamat.com

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Reach: 765mm
Height: 515mm

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Reach: 1.100mm
Height: 680mm



Better Efficiency and Productivity

- Reduce or Eliminate Tap Breakage: Using quick change torque control tap adapters, the clutch in the adapter ratchets when the tap hits the bottom of the hole, encounters an interference in the hole or when the tap dulls. This prevents tap breakage and allows for the tap to be quickly replaced if needed.
- Maximize Manpower: By placing a Roscamat®USA tapping arm next to your machining center, a significant improvement in productivity can be achieved. While the machining center is drilling holes in the next part the

Why?

ROSCAMAT®

Quality & Dependability

- Heavy duty cast aluminum construction
- More than 32 years experience designing, manufacturing and servicing tapping arms
- Adjustable balance for easy maneuverability
- Premium fit and finish

Light & Versatile

- Light weight and compact size allow for easy set up and relocation
- Reaming, countersinking, fastening, inserts & small diameter drilling

Practical & Simple

- Uses standard quick change tap adapters
- Utilize interchangeable speed modules to get the right torque and RPM for the job
- Wide range of models and options allow you to precisely choose the perfect arm for your application

Reliable & Safe

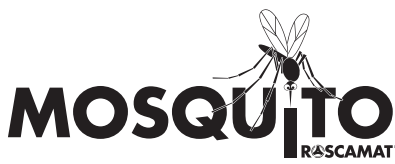
- One year warranty against defects in materials and workmanship
- Robust materials & construction exceed design standards providing a lifetime of use
Precisely Engineered Motors
- Roscamat® motors are designed, engineered, and built for tapping
- High frequency, low noise electric motor uses 8.5x less energy than pneumatic



operator can be tapping the holes in the previous part. Typically, tapping is the slowest and last operation on a machining center.

- Take the Guess Work Out of the Process: With Roscamat®USA tapping arms the operator can bring the tap to the work which is 3-4 times more efficient than bringing the work piece to a fixed spindle.
- More Efficient Tapping: By utilizing quick change modules and tap adapters the proper speed and torque can be achieved for different tap sizes to improve efficiency and productivity.

Electric Mach



(90 kg./mm²)
M16 (aluminium)



Orientable
Head V-H, 4x90°

TAP UP TO
M14 9/16"



Single Phase
220 VOLT
Available in 110 V



Model R·MOSQUITO

Reach 765 mm. - 30"
Height 515 mm. - 20"

- Single Phase 220/230 V. – Available at 110 V.
- Heavy duty cast aluminium construction
- Base elevator
- High frequency Electric Motor
- Speed control forward & reverse
- Tap adaptors of size 19/1 for quick change

OPTIONS AVAILABLE

- Vertical tapping
- Vertical & Horizontal tapping –VH- (4x90°)
- Tool lubrication with timer

| Description | Head orientation | Speed RPM | Capacity (Steel 90 kg./mm ²) | | Max Torque Nm |
|-------------------------------|---------------------|--------------|--|------------|------------------|
| | | | Metric | Inch | |
| Mosquito 1 Speed – 300 | Vertical | 300 | M2-M14 | #0 – 9/16" | 34 |
| Mosquito 1 Speed - 600 | Vertical | 600 | M2-M10 | #0 – 3/8" | 16 |
| Mosquito 1 Speed – 300 VH | Vertical/Horizontal | 300 | M2-M14 | #0 – 9/16" | 34 |
| Mosquito 1 Speed – 600 VH | Vertical/Horizontal | 600 | M2-M10 | #0 – 3/8" | 16 |
| Mosquito 2 Speed – 300/600 | Vertical | 300/600 | M2-M14 | #0 – 9/16" | 34 |
| Mosquito 2 Speed – 300/600 VH | Vertical/Horizontal | 300/600 | M2-M14 | #0 – 9/16" | 34 |



Orientable Head V-H, 4x90°



**TAP UP TO
M27 1"**

(90kg./mm2)
M30 (aluminium)



Model R-TIGER



Reach 1020 mm. -40"
Height 535 mm. -21"

- TAP UP TO M27 – 1"
- 220/230 V. Single Phase
- High frequency motor
- Speed control forward & reverse
- 1 Motor 7 speed capabilities
- 7 interchangeable speed modules
- Heavy duty cast aluminium construction

OPTIONS AVAILABLE

- Vertical tapping
- Vertical & Horizontal tapping -VH- {4x90°}
- Tool lubrication with timer
- Tapping depth control

| Description | Head Orientation | Speed RPM | Capacity (Steel 90 kg./mm ²) | |
|-------------------|-----------------------|-----------|--|---------|
| | | | Metric | Inch |
| ROSCAMAT TIGER | Vertical | 90 -1050 | M2-M27 | #0 – 1" |
| ROSCAMAT TIGER VH | Vertical & Horizontal | 90 -1050 | M2-M27 | #0 – 1" |

Modular System - Interchangeable Speed

| Module | Max. speed. (rpm) | Torque max. | | Adapter Size | Tapping Capacity - Steel <90kg | |
|--------|-------------------|-------------|-------|--------------|---|-------------|
| | | Nm | Ft•lb | | Metric | Inches |
| 90 | 90 | 150 | 66 | ø 31 | M16-M27 | 1/2" – 1" |
| 170 | 170 | 79 | 58 | ø 31 | M16-M20 | 1/2" – 3/4" |
| 300 | 300 | 44 | 32 | ø 19 | M2- M16 | #0 – 9/16" |
| 550 | 550 | 24 | 15 | ø 19 | M2-M12 | #0 – 1/2" |
| 750 | 750 | 17 | 13 | ø 19 | M2-M10 | #0 – 3/4" |
| 1050 | 1050 | 12,5 | 9 | ø 19 | M2-M8 | #0 – 5/16" |
| 2100 | 2100 | 6 | 4 | B-16 cone | Drills up to ø8 aluminium, Cast Iron, etc | |



Model R-SHARK



Reach 1215 mm. -48"
Height 636 mm. -32"

- TAP UP TO M36 – 1 3/8"
- TAP UP TO M27 – 1" in horizontal
- 220 V. Single Phase. Available 110 V.
- High frequency motor
- Electronic speed indicator
- Speed control forward & reverse
- 1 Motor 6 speed capabilities
- 6 interchangeable speed modules
- Tool lubrication with timer
- Tapping depth control
- Heavy duty cast aluminium construction



Orientable Head V-H Lex 90°

OPTIONS

- Vertical tapping
- Vertical & Horizontal tapping -VH- (4x90°)

(90kg./mm2)
M42 (aluminium)

TAP UP TO
M27 1"
in Horizontal

TAP UP TO
M36 1-3/8"



Single Phase
220 VOLT
Available in 110 V

| Description | Orientation | Speed RPM | Capacity | |
|-------------------|-----------------------|-----------|----------|-------------|
| | | | Metric | Inch |
| ROSCAMAT SHARK | Vertical | 40 - 900 | M2-M36 | #0 – 1 3/8" |
| ROSCAMAT SHARK VH | Vertical & Horizontal | 40 - 900 | M2-M36 | #0 – 1 3/8" |

Modular System - Interchangeable Speed



| Module | Max. speed. (rpm) | Torque max. | | Adapter Size | Tapping Capacity - Steel <90Kg | |
|--------|-------------------|-------------|-------|--------------|--------------------------------|---------------|
| | | Nm | Ft•lb | | Metric | Inches |
| 40 | 40 | 340 | 251 | ø 48/3 | M27-M36 | 1/2" – 1 3/8" |
| 75 | 75 | 185 | 136 | ø 31/2 | M18-M27 | 5/16" – 7/8" |
| 140 | 140 | 95 | 70 | ø 31/2 | M18- M22 | 5/16" – 3/4" |
| 320 | 320 | 44 | 32 | ø 19/1 | M2-M16 | #0 – 9/16" |
| 500 | 500 | 28 | 21 | ø 19/1 | M2-M12 | #0 – 7/16" |
| 900 | 900 | 15 | 11 | ø 19/1 | M2-M8 | #0 – 5/16" |

Modules for Model R-SHARK

Model R-Dragon V / RHM / RHC



Radius 2.255 mm

Height 1.139 mm

- Tap up to M27
- Multiposition tapping headmember
- High frequency electric motor -220V or 110V single phase
- Forward&Reverse Speed control variator
- Size $\varnothing 31$ & $\varnothing 19$ tap adapters for quick change
- 7 interchangeable speed modules
- Heavy duty cast aluminium construction

OPTIONS AVAILABLE

- Vertical tapping
- RHM Multiposition, tap in any angle normally
- RHC, Multiposition tap in any angle keeping perpendicularity
- Tool lubrication system -E-



Dragon V



Dragon RHM

(90kg./mm²)
M30 (aluminium)



Dragon RHC

The RH series
can Tap at any angle!



| Description | Head Orientation | Tapping Capacity (Steel 90 kg./mm ²) | |
|----------------------|------------------------|---|---------|
| | | Metric | Inch |
| ROSCAMAT Dragon | Vertical | M2-M27 | #0 – 1" |
| ROSCAMAT 500 V –E- | Vertical | M2-M27 | #0 – 1" |
| ROSCAMAT 500 RHM | Multiposition Manual | M2-M27 | #0 – 1" |
| ROSCAMAT 500 RHM –E- | Multiposition Manual | M2-M27 | #0 – 1" |
| ROSCAMAT 500 RHC | Multiposition Constant | M2-M27 | #0 – 1" |
| ROSCAMAT 500 RHC E | Multiposition Constant | M2-M27 | #0 – 1" |

Pneumatic

SERIES:
200, 400 & 500



Model R-200

Reach 935 mm. – 37”
Height 660 mm. – 26”

- Tap up to M14 (M16 Al) - 9/16”
- Air motor engineered for tapping
- Heavy duty cast aluminium construction
- Base elevator
- Tap adaptors of Size 1 for quick change

OPTIONS

- Vertical tapping
- Vertical & Horizontal tapping –VH- (4x90°)
- 350 or 750 rpm single speed models

(90 kg./mm²)
M16 (aluminium)

TAP UP TO
M14-9/16”



Orientable head V-H

| Description | Head orientation | Speed RPM | Capacity (Steel 90 kg./mm ²) | |
|-----------------------|---------------------|-----------|--|------------|
| | | | Metric | Inch |
| Roscamat 200 – 350 | Vertical | 350 | M2-M14 | #0 – 9/16” |
| Roscamat 200 – 750 | Vertical | 750 | M2-M10 | #0 – 3/8” |
| Roscamat 200 VH – 350 | Vertical/Horizontal | 350 | M2-M14 | #0 – 9/16” |
| Roscamat 200 VH – 750 | Vertical/Horizontal | 750 | M2-M10 | #0 – 3/8” |

Model R-400

Reach 1100 mm. - 43"
Height 680 mm. - 27"

- TAP UP TO M24– 7/8"
- Speed Range [rpm] 90 - 2100
- Air motor engineered for tapping
- Heavy duty cast aluminum construction
- Utilizes size 19/1 & 31/2 tap adaptors for quick change
- 1 Motor 7 speed capabilities
- 7 interchangeable speed modules
- Drilling Module up to ø8 mm.
- 5/16" (soft materials)

OPTIONS AVAILABLE

- Vertical tapping
- Vertical & Horizontal tapping
-VH- (4x90°)
- Tool lubrication system -E-



Orientable head V-H



(90 kg./mm²)
M27 (aluminium)

**TAP UP TO
M24-7/8"**

| Description | Head orientation | Capacity (Steel 90 kg./mm ²) | |
|---------------------|-----------------------|--|---------|
| | | Metric | Inch |
| ROSCAMAT 400 V | Vertical | M2-M24 | #0–7/8" |
| ROSCAMAT 400 V -E- | Vertical | M2-M24 | #0–7/8" |
| ROSCAMAT 400 VH | Vertical & Horizontal | M2-M24 | #0–7/8" |
| ROSCAMAT 400 VH -E- | Vertical & Horizontal | M2-M24 | #0–7/8" |

Modular System - Interchangeable Speed

| Module | Max. speed. [rpm] | Torque max. | | Adapter Size | Tapping Capacity - Steel <90Kg | |
|--------|----------------------|-------------|-------|-----------------|---|------------|
| | | Nm | Ft•lb | | Metric | Inches |
| 90 | 90 | 150 | 66 | ø 31/2 | M18-M27 | 5/16"–3/8" |
| 170 | 170 | 79 | 58 | ø 31/2 | M18-M22 | 5/16"–5/8" |
| 300 | 300 | 44 | 32 | ø 19/1 | M2-M16 | #0–9/16" |
| 550 | 550 | 24 | 18 | ø 19/1 | M2-M12 | #0–1/2" |
| 750 | 750 | 17 | 13 | ø 19/1 | M2-M8 | #0–3/8" |
| 1.050 | 1.050 | 12,5 | 9 | ø 19/1 | M2-M6 | #0–5/16" |
| 2.100 | 2.100 | 6 | 4 | B16 | Drill up to ø 8 - 5/16" Aluminum, Cast Iron | |



Modules for Pneumatic models ROSCAMAT R400, R500

Model R-500 V/ R-500 RHM / R-500 RHC

Reach 2255 mm. - 88"
Height 1140 mm. - 44"

- TAP UP TO M24- 7/8"
- Speed Range [rpm] 90 - 2100
- Air motor engineered for tapping
- Heavy duty cast aluminum construction
- Utilizes size 19/1 & 31/2 tap adaptors for quick change
- 1 Motor 7 speed capabilities
- 7 interchangeable speed modules
- Drilling Module up to ø8 mm. - 5/16 " [soft materials]

OPTIONS AVAILABLE

- Vertical tapping
- RHM Multiposition, tap in any angle normally
- RHC, Multiposition tap in any angle keeping perpendicularity
- Tool lubrication system -E-

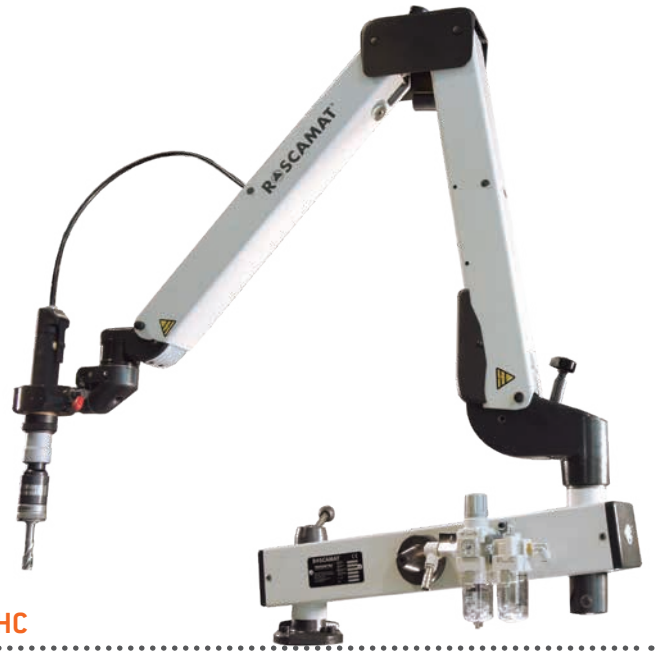
(90 kg./mm²)
M27 (aluminium)

TAP UP TO
M24-7/8"

The **RH series**
can Tap at any angle!



R-500 RHM



R-500 RHC



R-500 V

| Description | Head Orientation | Tapping Capacity (Steel 90 kg./mm ²) | |
|----------------------|------------------------|---|-----------|
| | | Metric | Inch |
| ROSCAMAT 500 V | Vertical | M2-M24 | #0 - 7/8" |
| ROSCAMAT 500 V -E- | Vertical | M2-M24 | #0 - 7/8" |
| ROSCAMAT 500 RHM | Multiposition Manual | M2-M24 | #0 - 7/8" |
| ROSCAMAT 500 RHM -E- | Vertical & Horizontal | M2-M24 | #0 - 7/8" |
| ROSCAMAT 500 RHC | Multiposition Constant | M2-M24 | #0 - 7/8" |
| ROSCAMAT 500 RHC E | Multiposition Constant | M2-M24 | #0 - 7/8" |

Toolholders applications



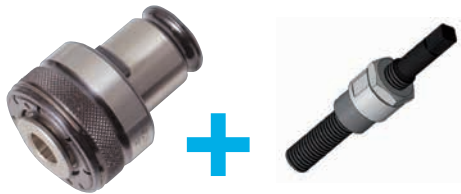
Torque Control Tapholders

With Clutch limited torque Setting avoiding breaking the TAP



Rigid Tapholders

Rigid tapholders are best suited for getting tools like chamfers, drills, reamers or screwing devices.



Helicoil fittings

use these special items according to size for helicoil inserts.
Available in Metric, UNC & UNF



Ensat inserts



Coupling Size 19/1 Length = 80 mm.

Tool extension to reach difficult deep points

| Metric | Coupl. ø | Tap Fitting DIN ø x | Norm |
|--------|-------------|------------------------|---------|
| M2 | 19/1 | 2,8x2,1 | DIN 371 |
| M3 | 19/1 | 3,5 x 2,7 | DIN 371 |
| M4 | 19/1 | 4,5 x 3,4 | DIN 371 |
| M5 | 19/1 | 6 x 4,9 | DIN 371 |
| M6 | 19/1 | 6 x 4,9 | DIN 376 |
| M7 | 19/1 | 7 x 5,5 | DIN 376 |
| M8 | 19/1 | 8 x 6,2 | DIN 376 |
| M10 | 19/1 | 10 x 8 | DIN 376 |
| M12 | 19/1 | 9 x 7 | DIN 376 |
| M14 | 19/1 & 31/2 | 11 x 9 | DIN376 |
| M16 | 19/1 & 31/2 | 12 x 9 | DIN 376 |
| M18 | 31/2 | 18 x 14,5 | DIN 376 |
| M20 | 31/2 | 16 x 12 | DIN 376 |
| M22 | 31/2 | 18 x 14,5 | DIN 376 |
| M24 | 31/2 & 48/3 | 18 x 14,5 | DIN 376 |
| M27 | 31/2 & 48/3 | 20 x 16 | DIN 376 |
| M30 | 31/2 & 48/3 | 22 x 18 | DIN 376 |
| M33 | 48/3 | 25 x 20 | DIN 376 |
| M36 | 48/3 | 28 x 22 | DIN 376 |
| M39 | 48/3 | 32 x 24 | DIN 376 |
| M42 | 48/3 | 32 x 24 | DIN 376 |

Die thread holder

Different sizes according the diameter of the die or Metric size



Drill Chuck

Single solution for drilling soft materials without big drilling effort



Reduction Cup

Used to adapt different tapholders coupling dimensions.

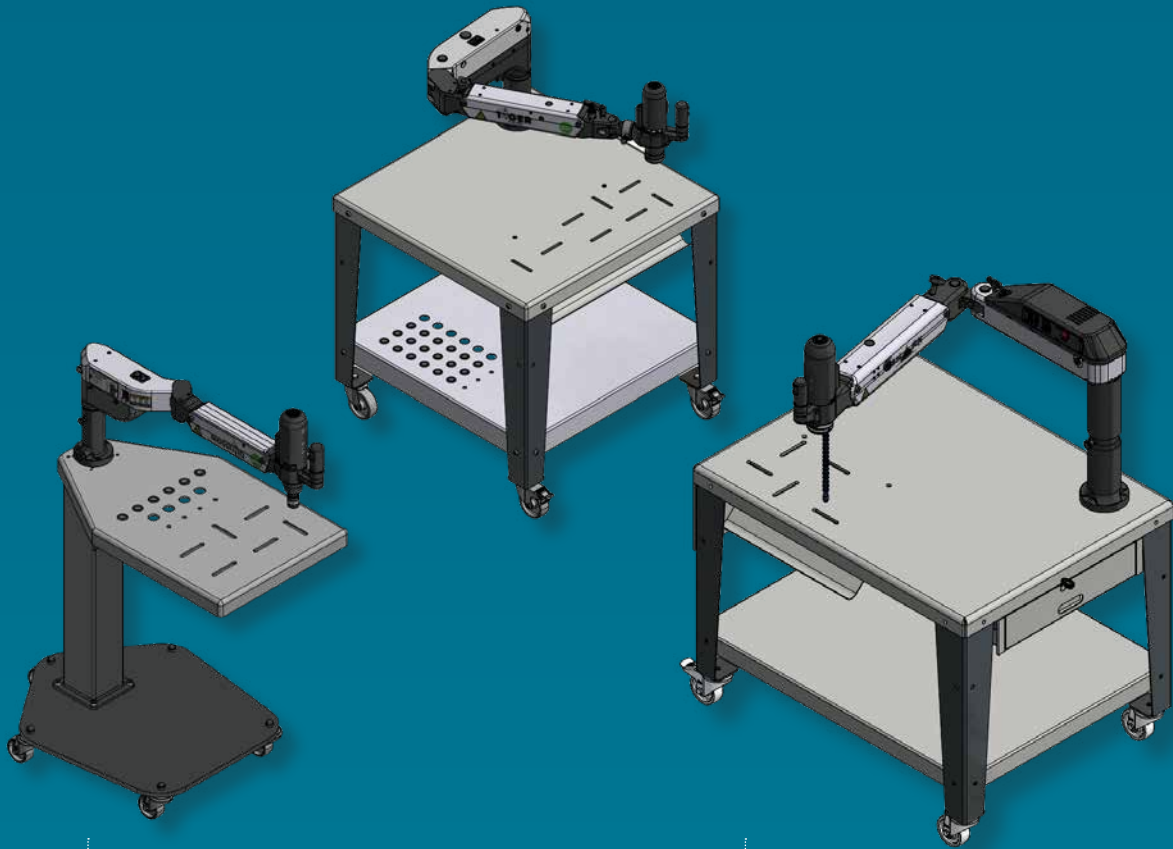
4 types:

- Reductor 48/31
- Reductor 31/19
- Reductor 48/19
- Reductor 19/13

Coupl. ø Tapping depth

| | | |
|---------|--------|---------|
| MS | 19/1 | 100 mm. |
| M5-M6 | ø19/1 | 100 mm. |
| M8 | ø 19/1 | 100 mm. |
| M10 | ø 19/1 | 120 mm. |
| M12-M14 | ø 19/1 | 150 mm. |
| M16-M20 | ø 31/2 | 150 mm |

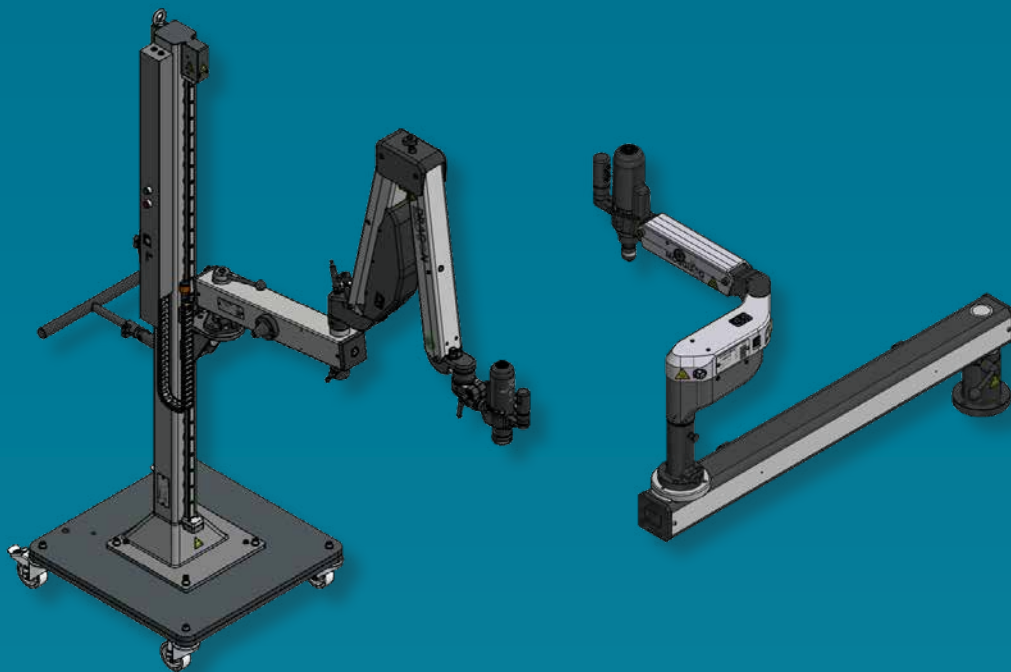
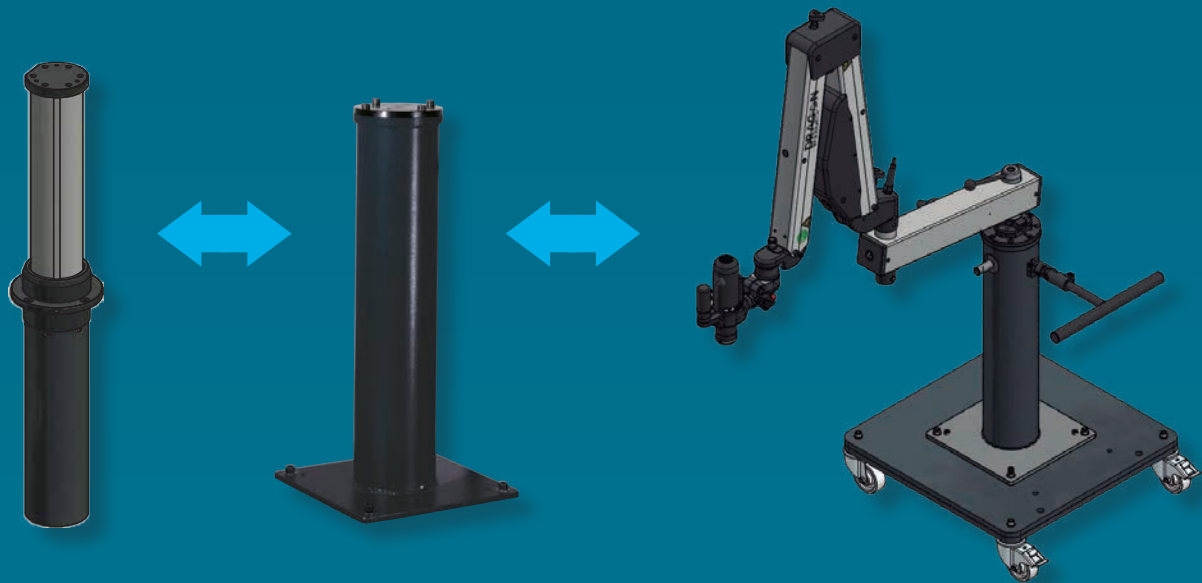
Accessories



| Description | Dimensions | | Series | | | | | | |
|--------------|---------------------|----------------------------------|--------|-----|-----|----------|-------|-------|--------|
| | mm | Inch | 200 | 400 | 500 | Mosquito | Tiger | Shark | Dragon |
| Small table | 500 x 500 x 900 mm | 19 11/16" x 19 11/16" x 35 7/16" | • | • | | • | | | |
| Medium table | 850 x 850 x 850 mm | 33 7/16" x 33 7/16" x 33 7/16" | | • | • | • | • | • | • |
| Large table | 1100 x 850 x 850 mm | 43 5/16" x 33 7/16" x 33 7/16" | | • | • | • | • | • | • |



| Description | Dimensions | | Series | | | | | | |
|------------------|------------|-------|--------|-----|-----|----------|-------|-------|--------|
| | mm. | Inch. | 200 | 400 | 500 | Mosquito | Tiger | Shark | Dragon |
| Small Clamp | N/A | N/A | • | • | | • | • | | |
| Large Clamp | N/A | N/A | • | • | • | • | • | • | • |
| Magnetic support | 150x150 | | • | | | | | | |
| Magnetic support | Ø200 | | | • | | • | | | |
| Magnetic support | Ø250 | | | • | • | | • | | • |



| Description | Dimensions | | Series | | | | | | |
|---------------------------|------------|----------------------------------|--------|-----|-----|----------|-------|-------|--------|
| | mm | inch | 200 | 400 | 500 | Mosquito | Tiger | Shark | Dragon |
| Pneumatic Lifter 550 mm | 550 | 21 5/8" | • | • | • | • | • | • | • |
| Column | 740 | 13 3/4" x 13 3/4" x 29 1/2" | • | • | • | • | • | • | • |
| Trolley | 40 | 27 9/16" x 27 9/16" x 9/16" | • | • | • | • | • | • | • |
| Lifter 2000 mm.-Pneumatic | 2000 | 13 25/32" x 13 25/32" x 76 5/32" | • | • | • | • | • | • | • |
| Radial Extension | 1000 | 39 3/8" x 10 7/8" | • | • | • | • | • | • | • |



Sold in 5 continents and 85 countries





ROSCAMAT®

is a division of the Tecnospiro Machine Tool Company located in Sant Joan de Vilatorrada a small village about 40 miles west of Barcelona.

The company is family owned and has been in bussiness since 1947. Utilizing a state of the art manufacturing facility and a dynamic engineering staff that has been very innovative in design and inventing new products.

After 32 years in the market and covering the five continents and more than 85 countries, we are proud to be the reference in the market having more than 25.000 pieces of equipment working successfully.

TECNOSP/RO MACHINE TOOL SL

SAFETY WARNING ROSCAMAT products are engineered and manufactured with safety in mind. The heat treat specifications exceed or meet all standards. All of the products manufactured by ROSCAMAT are designed to perform without any undue safety issues when caution, common sense and proper safety practices are followed. The use of cutting tools and toolholders is safe when proper application and protection guidelines are observed. Even when these proper precautions are taken, it is possible that fragments of a cutting tool, cutting material, or holding device may be thrown at a very high rate of speed and have potential to cause severe bodily harm. It is imperative that general safety precautions and safety glasses be used at all times.

SINCE 1987

SIGNS OF OUR DUTY:

We Design / We Manufacture / We Service

**PASSION FOR
QUALITY
PRODUCTS**

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