



# RASCAMAT®

WORLDWIDE TAPPING ARM LEADER



[www.rosamat.com](http://www.rosamat.com)

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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 Roscomat® 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 37 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./mm<sup>2</sup>) M16 (aluminium)

**TAP UP TO  
M14 9/16"**

Single Phase  
**220 VOLT**  
Available in 110 V



Orientable  
Head V-H

**MOSQUITO**  
ROSCAMAT®

**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
- Thread counter

**OPTIONS AVAILABLE**

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

Description	Head orientation	Speed RPM	Capacity (Steel 90 kg./mm <sup>2</sup> )		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

# achines

## SERIES: MOSQUITO, TIGER, SHARK & DRAGON



(90 kg./mm<sup>2</sup>) M30 (aluminium)

TAP UP TO  
**M27 1"**



Single Phase  
**220 VOLT**  
Available in 110 V



Orientable  
Head V-H

**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
- Thread counter

### 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 <sup>2</sup> )	
			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	

### Modules for Model R-TIGER & R-DRAGON



**TAP UP TO  
M36 1-3/8"**

(90kg./mm2)  
M42 (aluminium)

**TAP UP TO  
M27 1"  
in Horizontal**

**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
- Thread counter

**OPTIONS**

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



Orientable Head V-H

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**

# DRAGON ROSCAMAT®

(90kg./mm2) M30 (aluminium)

**TAP UP TO  
M27 1"**

**Radius 2.255 mm**

**Height 1.139 mm**

Single Phase  
**220 VOLT**  
Available in 110 V

- 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
- Thread counter

**OPTIONS AVAILABLE**

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



**Dragon V**

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



**Dragon RHM**



**Dragon RHC**



Description	Head Orientation	Tapping Capacity [Steel 90 kg./mm2]	
		Metric	Inch
ROSCAMAT Dragon	Vertical	M2-M27	#0 – 1"
ROSCAMAT 500 RHM	Multiposition Manual	M2-M27	#0 – 1"
ROSCAMAT 500 RHC	Multiposition Constant	M2-M27	#0 – 1"

# Pneumatic

SERIES:  
200, 400 & 500



## ROSCAMAT 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./mm<sup>2</sup>) M16 (aluminium)

**TAP UP TO  
M14 9/16”**



Orientable head V-H

Description	Head orientation	Speed RPM	Capacity (Steel 90 kg./mm <sup>2</sup> )	
			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”



# ROSCAMAT 400

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

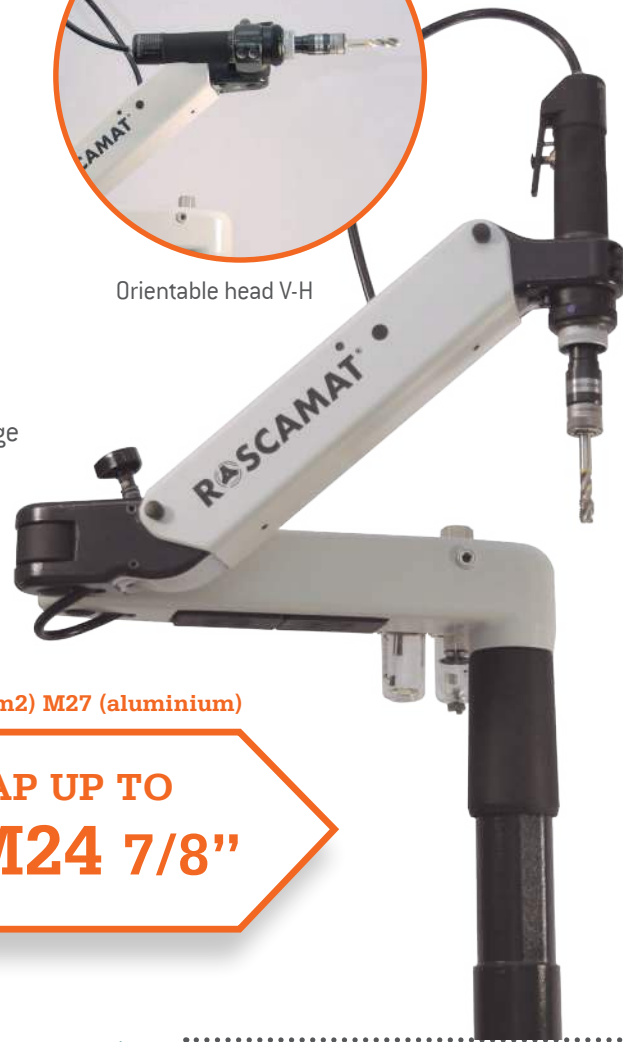
- TAP UP TO M24- 7/8"
- Speed Range (rpm) 90 - 2100
- Air motor engineered for tapping
- Heavy duty cast aluminum construction
- Utilizes size 19/1 & 31/2 tap adaptors for quick change
- 1 Motor 7 speed capabilities
- 7 interchangeable speed modules
- Drilling Module up to ø8 mm. - 5/16" (soft materials)

### OPTIONS AVAILABLE

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



Orientable head V-H



(90 kg./mm<sup>2</sup>) M27 (aluminium)

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

Description	Head orientation	Capacity (Steel 90 kg./mm <sup>2</sup> )	
		Metric	Inch
ROSCAMAT 400 V	Vertical	M2-M24	#0 - 7/8"
ROSCAMAT 400 VH	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	M16-M24	5/16"-3/8"
170	170	79	58	ø 31/2	M16-M18	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 400 ROSCAMAT 500**

# ROSCAMAT 500

**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  $\varnothing 8$  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./mm<sup>2</sup>) M27 (aluminium)

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



**R-500 V**



**R-500 RHM**

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



**R-500 RHC**

Description	Head Orientation	Tapping Capacity (Steel 90 kg./mm <sup>2</sup> )	
		Metric	Inch
ROSCAMAT 500 V	Vertical	M2-M24	#0 – 7/8"
ROSCAMAT 500 RHM	Multiposition Manual	M2-M24	#0 – 7/8"
ROSCAMAT 500 RHC	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 through holes



## 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

### TAPHOLDERS SIZES

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 371
M7	19/1	7 x 5,5	DIN 371
M8	19/1	8 x 6,2	DIN 371
M10	19/1	10 x 8	DIN 371
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	14 x 11	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



## Drill Chuck

Drill chucks for drilling reaming and countersinking



## Reduction Cup

Used to adapt different tapholders coupling dimensions.

4 types:

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

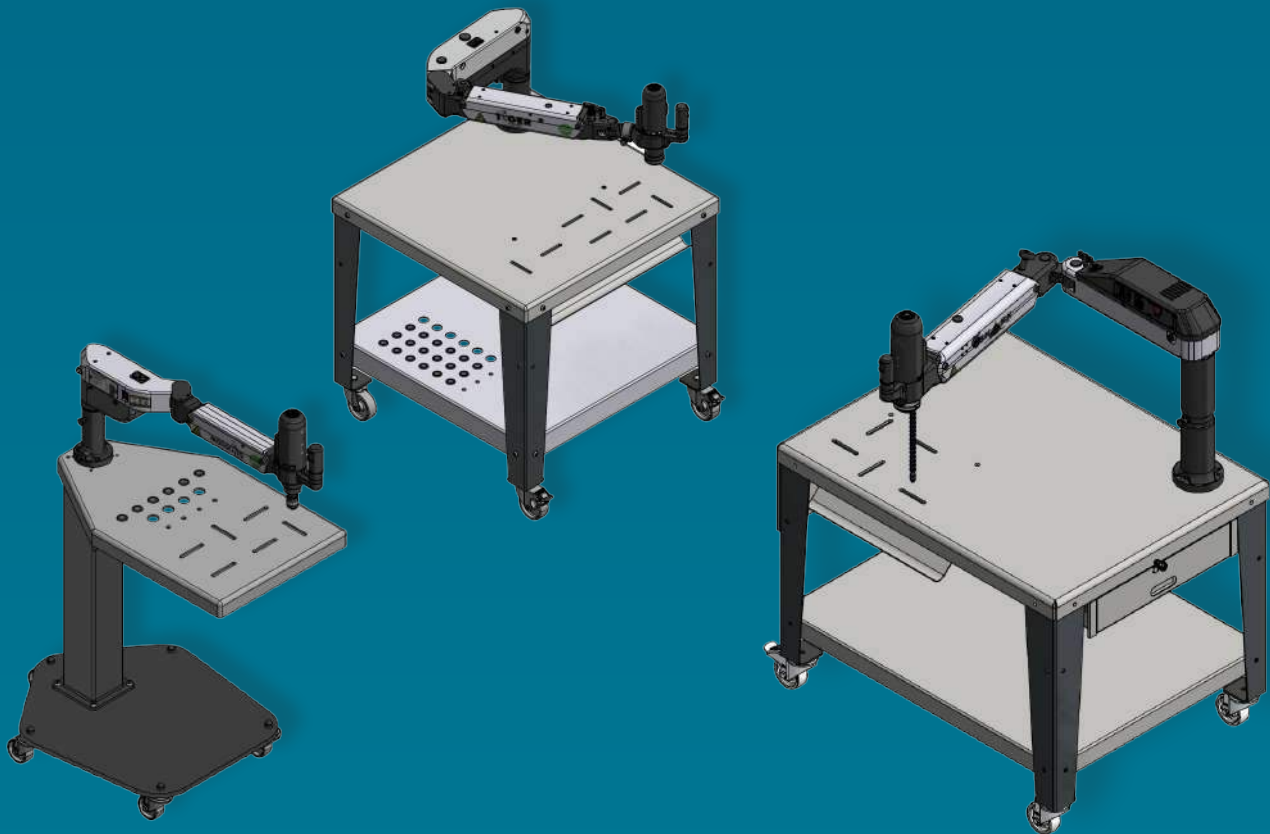
## Die thread holder

Different sizes according the diameter of the die or Metric size



	Coupl. ø	Tapping depth
MS	ø 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	120 mm

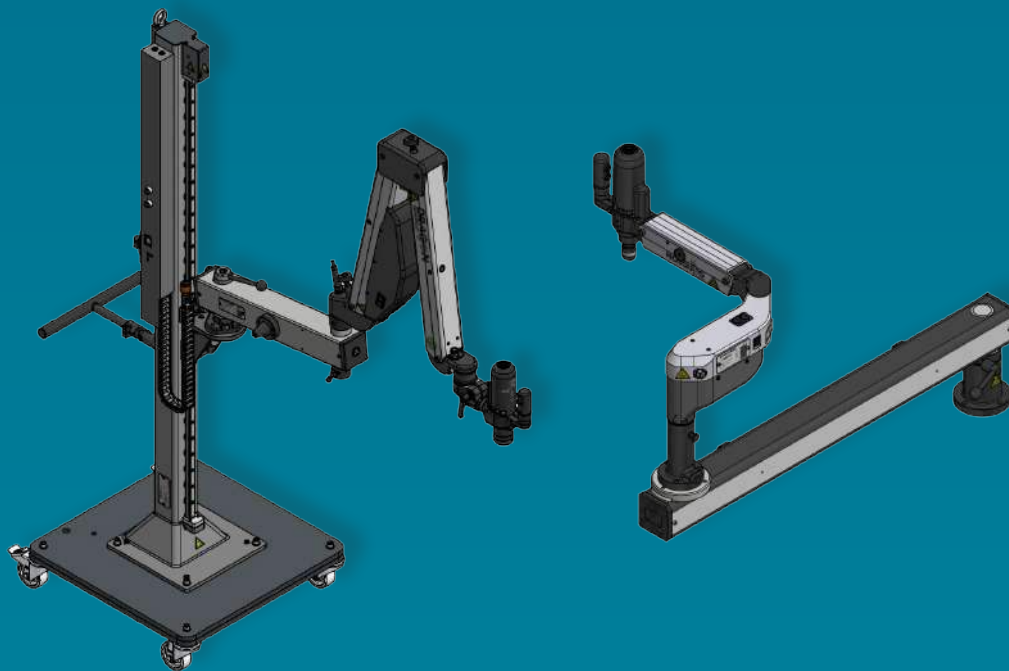
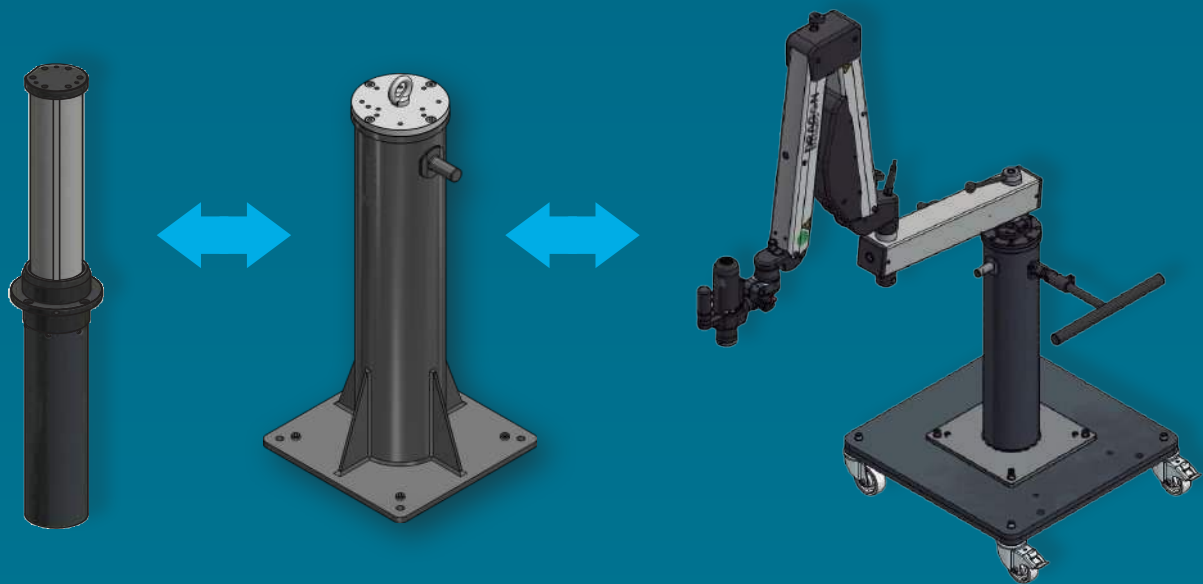
# Accessories



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	5'9 x 5'9	•						
Magnetic support	ø200	ø7'81		•		•			
Magnetic support	ø250	ø9'84		•	•		•		•



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	700 x 700	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.

Manufacturing tapping arms since 1987, and covering the five continents we are present in more than 85 countries, we are proud to be the reference in the market having more than 30.000 pieces of equipment working successfully.

## TECNOSP/RO MACHINE TOOL SLU

**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**

**TECNOSPIRO MACHINE TOOL, S.L.U**

**Tecnospiro Machine Tool S.L**

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