




| ROMI C 420 | ROMI C 510 | ROMI C 620 | ROMI C 680 | ROMI C 830 | ROMI C 1000

CNC LATHES

ROMI C SERIES



ROMI Industrial Complex, in
Santa Bárbara d'Oeste - SP, Brazil

INNOVATION + QUALITY

ROMI: Producing high quality technology since 1930.

Since the beginning, Romi has been recognized for its focus on creating products and innovative solutions which has guaranteed its technological leadership among large manufacturers of machine tools. Romi's industrial complex is among the most modern and productive sites in the fields of machine tools, plastic processing machines, and high quality cast iron parts.

Continuous investments in Research & Development result in products with state-of-the-art technology.

The technology applied to Romi machines offers highly reliable products, with high accuracy, efficiency and great flexibility for several types of machining processes. Romi R&D is focused on increasing competitiveness for its customers.

Present throughout Brazil and in over 60 countries.

Romi covers all domestic territory through its sale subsidiaries network fully prepared to support customers by supplying an extensive range of services from marketing to after sales assistance.

The international market is covered by Romi's subsidiaries which are located in the United States, Mexico, Europe, and by its many dealers located in strategic logistic centers around the globe that are capable of serving customers in 5 continents.



Plant 16

ROMI C SERIES



ROMI C 420



ROMI C 510



ROMI C 620



ROMI C 680



ROMI C 830



ROMI C 1000

Flexibility and high productivity.

CNC Lathes from ROMI C Series are machines with great versatility for machining different types of parts, with great levels of power, quick movements and machining accuracy.

With robust structure, high rigidity and stability, it provides a great performance in the most varied conditions of machining.

Flexibility and productivity for several types of machining processes.

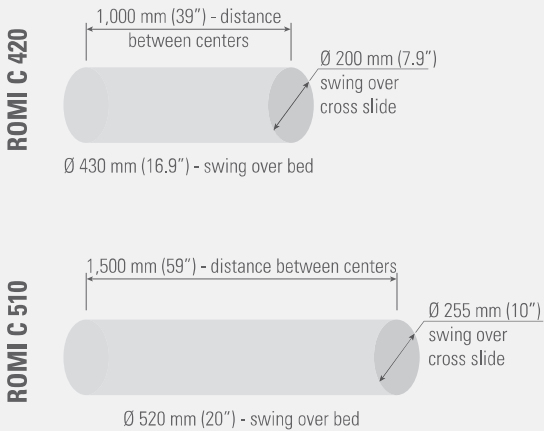


- Headstock ASA A2-5" - 4,000 rpm
- Main motor: 12.5 hp / 9.0 kW
- Manual positioning tailstock with manual drive quill
- CNC Siemens Sinumerik 828D with high performance and reliability

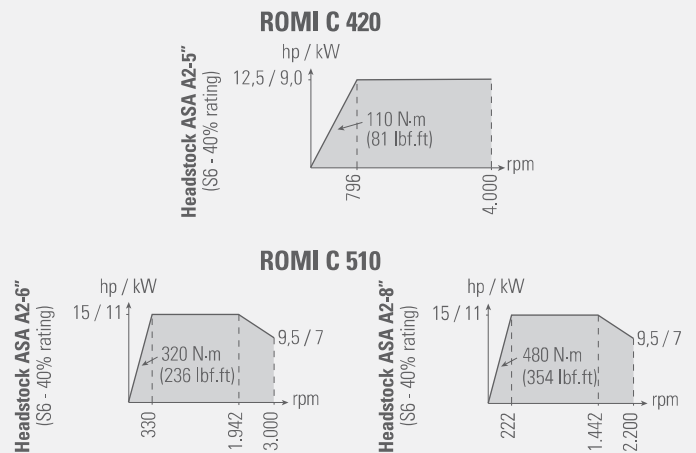
- Headstock ASA A2-6" - 3,000 rpm or
- Headstock ASA A2-8" - 2,200 rpm
- Main motor: 15 hp / 11 kW
- Manual positioning tailstock with manual drive quill
- CNC Siemens Sinumerik 828D with high performance and reliability

ROMI C 420 / C 510

Capacities



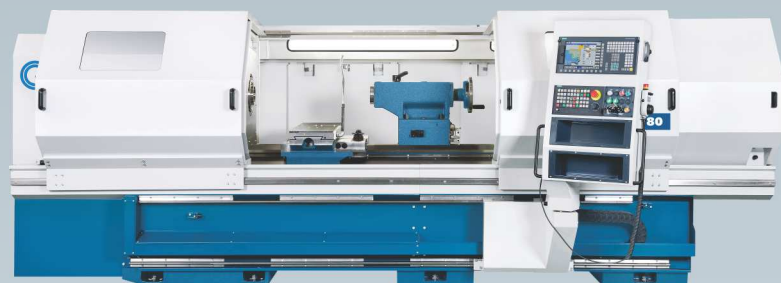
Power Graphs



Drawings are not in scale.



Power and flexibility for parts machining with chuck and middle size shafts

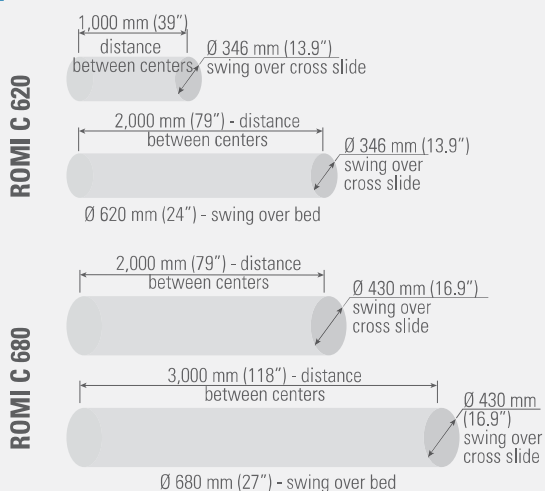


- Headstock ASA A2-8" - 1,800 rpm
- Main motor: 25 hp / 18.5 kW
- Tailstock positioning system by drag device with saddle and manual drive quill
- CNC Siemens Sinumerik 828D with high performance and reliability

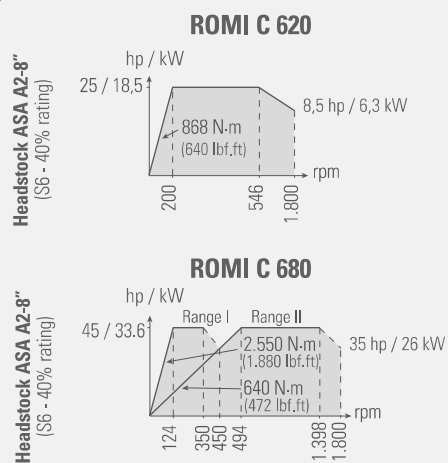
- Geared headstock with two speed ranges: 450 rpm (range 1) and 1,800 rpm (range 2) - ASA A2-8"
- Main motor: 45 hp / 33.6 kW
- Tailstock positioning system by drag device with saddle and manual drive quill
- CNC Siemens Sinumerik 828D with high performance and reliability

ROMI C 620 / ROMI C 680

Capacities



Power Graphs



Drawings are not in scale.

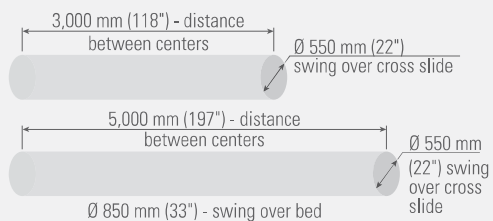
Robust and powerful heavy machining with efficiency and productivity.

- Geared headstock with two speed ranges: 250 rpm (range 1) and 1,000 rpm (range 2) - ASA A2-11"
- Geared headstock with two speed ranges: 200 rpm (range 1) and 550 rpm (range 2) - ASA A2-15"
- Main motor: 45 hp / 33.6 kW
- Tailstock positioning system by drag device with saddle and manual drive quill (built-in)
- CNC Siemens Sinumerik 828D with high performance and reliability

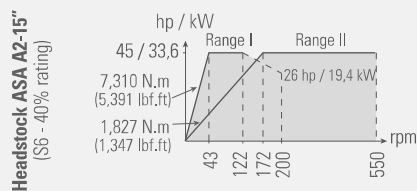
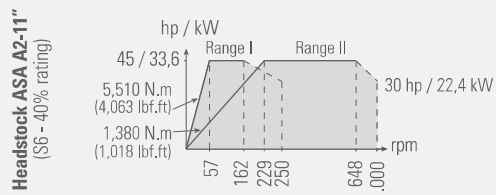


ROMI C 830

Capacities



Power Graphs



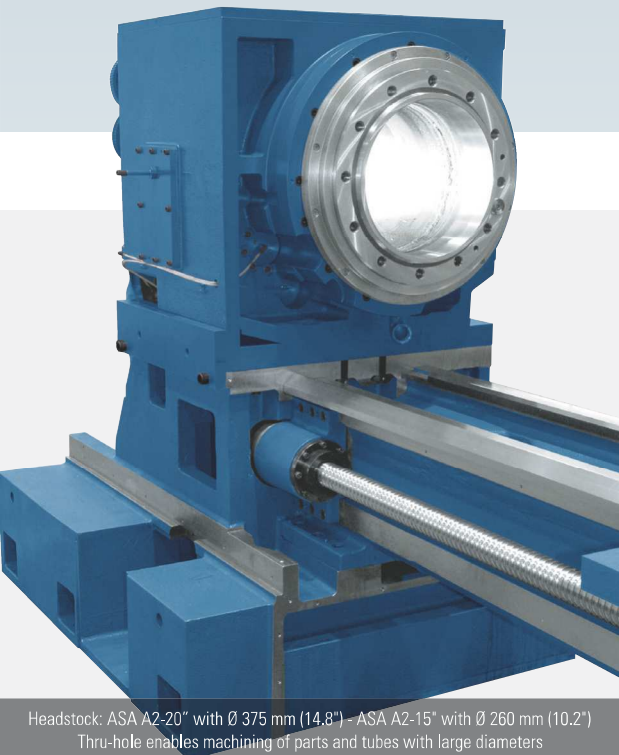
Drawings are not in scale.



High rigidity and stability for machining operations at full power.

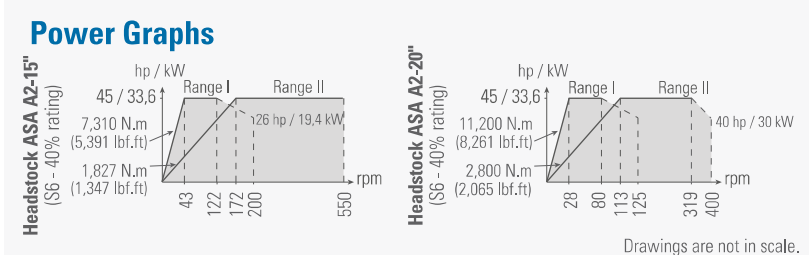
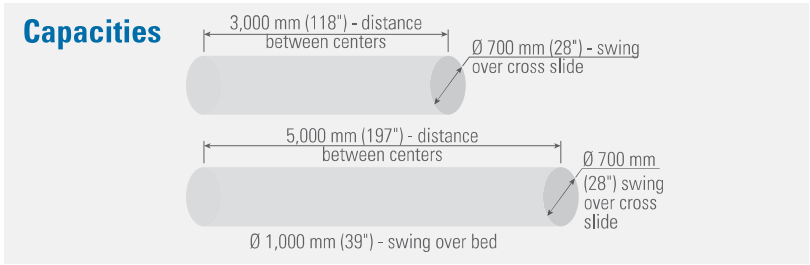


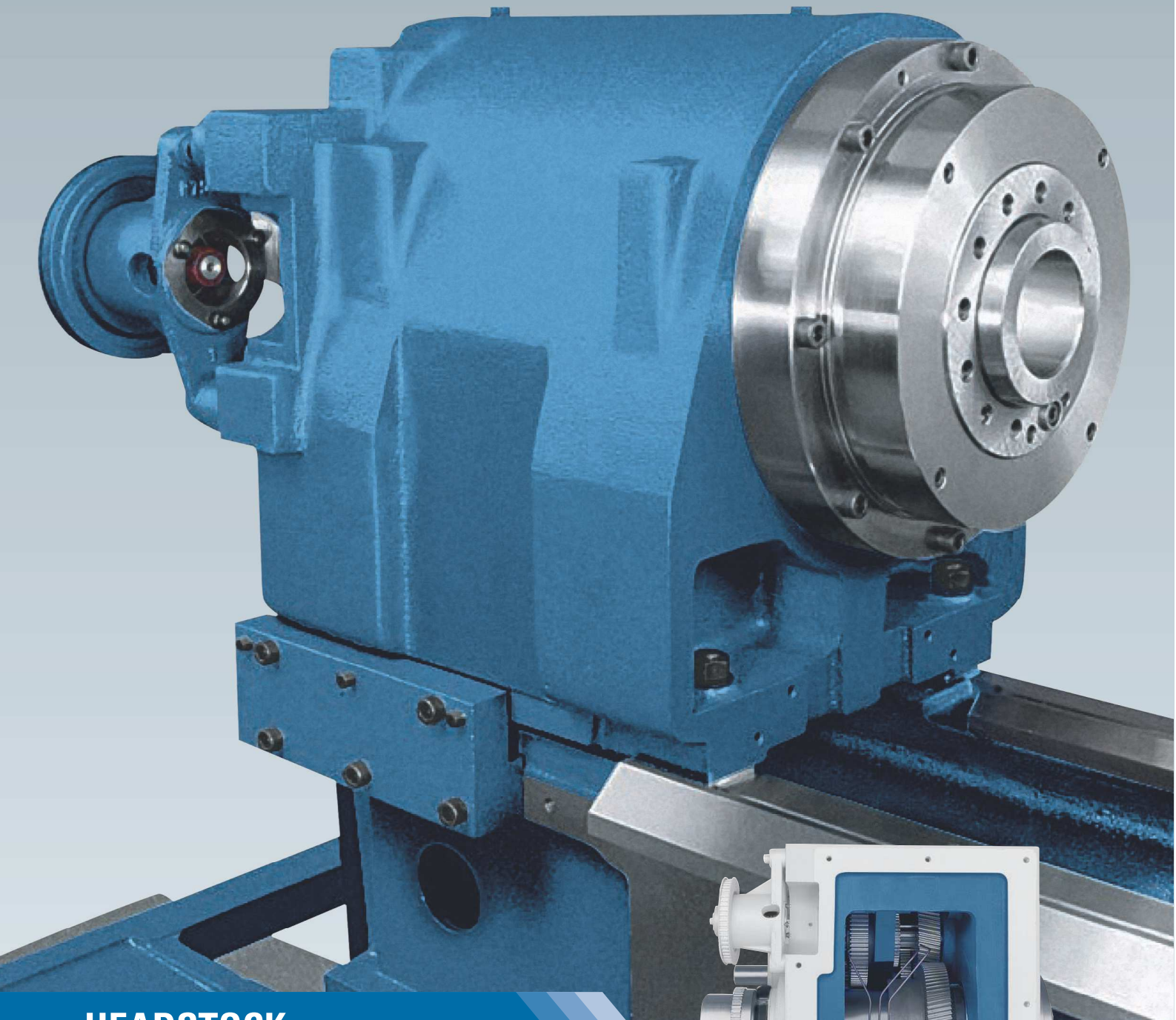
- Geared headstock with two speed ranges: 200 rpm (range 1) and 550 rpm (range 2) ASA A2-15"
- Geared headstock with two speed ranges: 125 rpm (range 1) and 400 rpm (range 2) ASA A2-20"
- Main motor: 45 hp / 33.6 kW
- Tailstock positioning system by drag device with saddle and manual drive quill (built-in)
- CNC Siemens Sinumerik 828D with high performance and reliability



Headstock: ASA A2-20" with \varnothing 375 mm (14.8") – ASA A2-15" with \varnothing 260 mm (10.2")
Thru-hole enables machining of parts and tubes with large diameters

ROMI C 1000

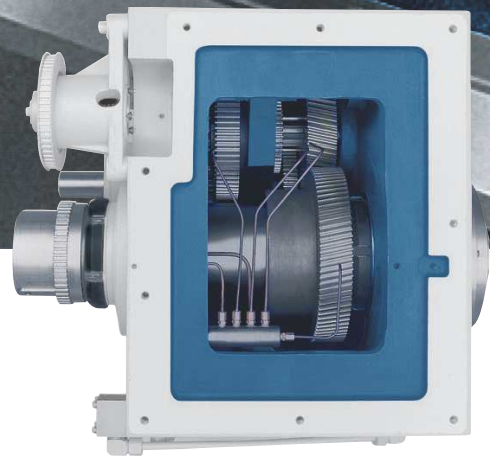




HEADSTOCK

Headstock **ROMI C 420, C 510 and C 620**

Robust framework that incorporates the cartridge. They have spindle supported by precision bearings with high load capacity offering rigidity and great vibration absorption under severe cutting conditions, allowing machining workpieces with excellent geometric accuracy. They are driven by AC motor through pulleys and micro-V belt, which delivers high torque and continuously variable speed.



Geared Headstock **ROMI C 680, C 830 and C 1000**

They have gears and shafts hardened, ground, dynamically balanced, designed to withstand high efforts of the most severe working conditions.

Headstock components are lubricated by oil recirculating system, which ensures constant and efficient lubrication for high performance and long durability.



Rear chuck (optional for ROMI C 830 and ROMI C 1000)
Accessory to hold long shafts and tubes

CHUCKS



Chucks

CNC lathes from ROMI C SERIES can be configured with several types of chuck (*):

- 3-jaw universal chuck
- 3-jaw hydraulic chuck
- 4-jaw independent chuck
- 4-jaw independent rear chuck (ROMI C 830 and C 1000)

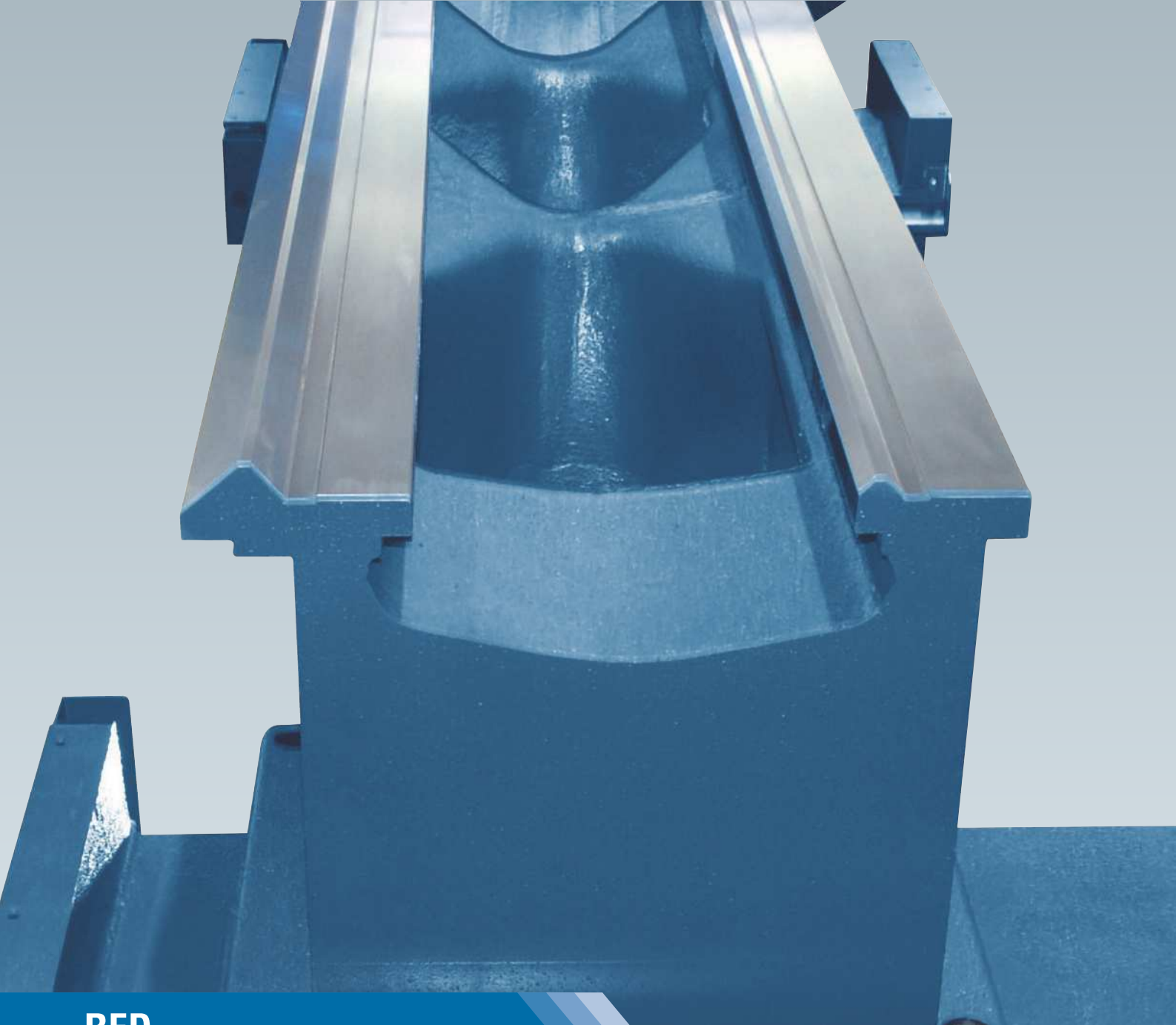
(*): mandatory choice optionals with availability according to machine model.

Rear chuck (optional)

ROMI C 830 and C 1000 can be equipped with 4-jaw independent rear chuck:

- Ø 550 mm (22") (ASA A2-11")
- Ø 700 mm (28") (ASA A2-11")
- Ø 600 mm (24") (ASA A2-15")
- Ø 720 mm (28") (ASA A2-20")

It is an important accessory for holding long shafts and tubes. Machines have an access door for jaws opening and closing.



BED

CNC lathes from ROMI C SERIES have bed with robust structure supported by cast iron columns, internally ribbed to absorb vibrations during several types of machining conditions.

Flat and prismatic guides are hardened and ground to ensure high wear resistance. They constitute a self-adjusting system assuring permanent contact of cross slide over the bed.

These features offers high rigidity, stability and precision in machining operations at full power.

Saddle and cross slide

Guides are hardened and ground.

Guideways are covered with a low friction coefficient material, to enable excellent performance in displacements and accelerations.





4-position electrical turret - vertical

TOOL HOLDERS

Tool holders and turrets (optionals)

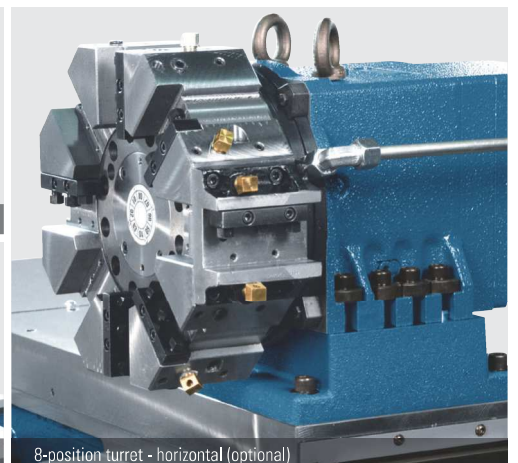
- Quick change tool holder
- Rear tool holder
- Gang tools
- 8-position square turret - indexing
- 4-position square turret - manual
- 4-position turret - vertical
- 8-position turret - horizontal
- 8-position turret - horizontal for driven tool



Quick change tool holder (optional)



Gang tools (optional)



8-position turret - horizontal (optional)

U-type steady rest.
(ROMI C 620 / C 680 / C 830 / C 1000)



STEADY RESTS



Steady rest - open
(ROMI C 420 / C 510)



Steady rest - closed
(ROMI C 420 / C 510 / C 620 / C 680)

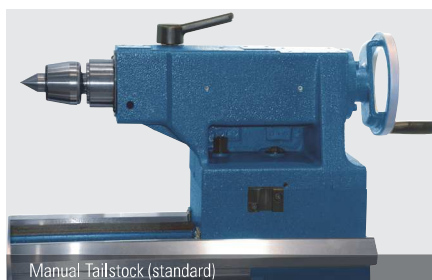


Follow rest
(ROMI C 420 / C 510)

In order to hold long parts (such as shafts, tubes) the CNC lathes from ROMI C SERIES can be equipped with different types of rests (optionals) offering a perfect support for workpieces.



TAILSTOCK



Manual Tailstock (standard)

ROMI C SERIES lathes are equipped with tailstock with manual drive quill (standard).

ROMI C 830 and C 1000 are equipped with manual drive quill tailstock built-in (incorporated bearings) MT-5 live center, offering high load capacity, high rigidity and vibration absorption.

Tailstock positioning system by drag device with saddle.



Pneumatic Tailstock (optional ROMI C 420)



Hydraulic Tailstock (optional)



CNC

Technology, performance and reliability

CNC Siemens Sinumerik 828D

10.4" LCD color monitor with softkeys for functions selection and activation, Portuguese language screen, communication interfaces: USB port, drive for Compact Flash card and Ethernet interface (optional), providing the user the flexibility for loading programs and parameters.

It offers excellent resources for creating and editing machining programs, such as canned cycles for turning and drilling, linear and circular interpolation functions, thread opening

functions, reference functions, coordinate systems, 256 pairs of tool wear offsets, tool life cycle manager, 3 Mbytes of memory, background editing and excellent resources for simulation of 2D machining. Besides, the conversation system Program Guide is also available which that allows creation of machining programs in an easy and quick manner, through graphical resources, without the need of ISO codes.



Carriage with electronic handwheels which enables the movement of X and Z axis for machining parts as in an engine lathe. (ROMI C 420 / C 510 / C 620)



RMMP



Control panel with electronic handwheels. (ROMI C 680 / C 830 / C 1000)

It enables machine operation in manual mode thru electronic handwheels and also in auto mode (joystick and cycle start).

Operator can machine parts like in an engine lathe with electronic handwheels and control panel joystick.

He can also fill the fields in CNC screen, informing speed, feeds, cut depth, coordinates and angles, and execute the machining by pressing the cycle start key.

Technical specifications		ROMI C 420	ROMI C 510		ROMI C 620	ROMI C 680
Capacity						
Centers height	mm (in)	215 (8.5)	260 (10.2)		310 (12.2)	352 (13.9)
Distance between centers	m (in)	1.0 (39)	1.5 (59)		1.0 / 2.0 (39 / 79)	2.0 / 3.0 (79 / 118)
Swing over bed	mm (in)	430 (16.9)	520 (20)		620 (24)	680 (27)
Swing over cross slide	mm (in)	200 (7.9)	255 (10)		346 (13.6)	430 (16.9)
Swing over saddle wings	mm (in)	400 (15.7)	450 (17.7)		540 (21)	620 (24)
Cross slide travel (X axis)	mm (in)	220 (8.7)	280 (11)		360 (14.2)	360 (14.2)
Longitudinal carriage travel (Z axis)	mm (in)	1,065 (42)	1,555 (61)		1,025 / 2,025 (40 / 80)	2,025 / 3,025 (80 / 119)
Bed						
Width	mm (in)	305 (12)	340 (13.4)		380 (15)	380 (15)
Height	mm (in)	350 (13.8)	336 (13.2)		400 (15.7)	400 (15.7)
Headstock						
Spindle nose	ASA	A2-5"	A2-6"	A2-8"	A2-8"	A2-8"
Spindle hole diameter	mm (in)	53 (2.1)	65 (2.6)	80 (3.1)	104 (4.1)	104 (4.1)
Transmission system		Direct drive	Direct drive		Direct drive	Geared
Speed ranges	rpm	4 to 4,000	3 to 3,000	2 to 2,200	1 to 1,800	1 to 1,800
	Range I					1 to 452
	Range II					1 to 1,800
Feeds						
Rapid traverse (Z axis)	m/min (in/min)	10 (394)	10 (394)		8 (315)	8 (315)
Rapid traverse (X axis)	m/min (in/min)	10 (394)	10 (394)		8 (315)	8 (315)
Manual Tailstock						
Body positioning		Manual	Manual (std) / Drag through the table (opt)		Manual (std) / Drag through the table (opt)	Drag trough the table
Quill drive		Manual (std) / Pneumatic or Hydraulic (opt)	Manual (std) / Pneumatic or Hydraulic (opt)		Manual (std) / Hydraulic (opt)	Manual (std) / Hydraulic (opt)
Maximum quill stroke	mm (in)	120 (4.7)	130 (5.1)		180 (7.1)	180 (7.1)
Quill diameter	mm (in)	60 (2.4)	80 (3.1)		100 (3.9)	130 (5.1)
Quill taper hole	CM	4	4		5	5
Installed power						
AC Main motor (S6 - 40% rating)	hp / kW	12.5 / 9	15 / 11		25 / 18.5	45 / 33.6
AC Main motor (continuous rating)	kVA	15	20		25	50
Dimensions and weight (*)						
Floor space required - 1.0 m between centers	m (in)	3.10 x 1.24 (122 x 49)	-		3.85 x 2.08 (152 x 82)	-
Floor space required - 1.5 m between centers	m (in)	-	3.75 x 1.68 (148 x 66)		-	-
Floor space required - 2.0 m between centers	m (in)	-	-		4.85 x 2.08 (191 x 82)	6.65 x 2.43 (262 x 96)
Floor space required - 3.0 m between centers	m (in)	-	-		-	7.70 x 2.43 (303 x 96)
Floor space required - 5.0 m between centers	m (in)	-	-		-	-
Approx. net weight - 1.0 m between centers	kg (lbs)	2,500 (5,500)	-		5,000 (11,000)	-
Approx. net weight - 1.5 m between centers	kg (lbs)	-	3,750 (8,200)		-	-
Approx. net weight - 2.0 m between centers	kg (lbs)	-	-		5,550 (12,200)	6,300 (13,900)
Approx. net weight - 3.0 m between centers	kg (lbs)	-	-		-	7,000 (15,400)
Approx. net weight - 5.0 m between centers	kg (lbs)	-	-		-	-

(*) Without chip conveyor



Technical specifications		ROMI C 830		ROMI C 1000	
Capacity					
Centers height	mm (in)	435 (17.1)		510 (20)	
Distance between centers	m (in)	3.0 / 5.0 (118 / 197)		3.0 / 5.0 (118 / 197)	
Swing over bed	mm (in)	850 (33)		1,000 (39)	
Swing over cross slide	mm (in)	550 (22)		700 (28)	
Cross slide travel (X axis)	mm (in)	520 (20)		520 (20)	
Longitudinal carriage travel (Z axis)	mm (in)	3,020 / 5,020 (119 / 198)		3,020 / 5,020 (119 / 198)	
Bed					
Width	mm (in)	460 (18.1)		460 (18.1)	
Height	mm (in)	420 (16.5)		420 (16.5)	
Headstock					
Spindle nose	ASA	A2-11"	A2-15"	A2-15"	A2-20"
Spindle hole diameter	mm (in)	160 (6.3)	260 (10.2)	260 (10.2)	320 (12.6)
Transmission system		Geared		Geared	
Speed ranges	rpm	1 to 1,000	1 to 550	1 to 550	1 to 500
	Range I	1 to 250	1 to 200	1 to 200	1 to 125
	Range II	1 to 1,000	1 to 550	1 to 500	1 to 400
Feeds					
Rapid traverse (Z axis)	m/min (in/min)	8 (315) (*) / 5 (197) (**)		8 (315) (*) / 5 (197) (**)	
Rapid traverse (X axis)	m/min (in/min)	8 (315)		8 (315)	
Manual Tailstock					
Body positioning		Drag trough the table		Drag trough the table	
Quill drive		Manual (std) / Hydraulic (opt)		Manual (std) / Hydraulic (opt)	
Maximum quill stroke	mm (in)	200 (7.9)		200 (7.9)	
Quill diameter	mm (in)	130 (5.1)		130 (5.1)	
Quill taper hole	CM	5		5	
Installed power					
AC Main motor (S6 - 40% rating)	hp / kW	45 / 33.6		45 / 33.6	
Total installed power	kVA	40		40	
Dimensions and weight (***)					
Floor space required - 1.0 m between centers	m (in)	-		-	
Floor space required - 1.5 m between centers	m (in)	-		-	
Floor space required - 2.0 m between centers	m (in)	-		-	
Floor space required - 3.0 m between centers	m (in)	7.52 x 3.20 (296 x 126)		7.52 x 3.20 (296 x 126)	
Floor space required - 5.0 m between centers	m (in)	9.52 x 3.20 (375 x 126)		9.52 x 3.20 (375 x 126)	
Approx. net weight - 1.0 m between centers	kg (lbs)	-		-	
Approx. net weight - 1.5 m between centers	kg (lbs)	-		-	
Approx. net weight - 2.0 m between centers	kg (lbs)	-		-	
Approx. net weight - 3.0 m between centers	kg (lbs)	11,460 (25,265)		11,460 (25,265)	
Approx. net weight - 5.0 m between centers	kg (lbs)	14,960 (32,980)		14,960 (32,980) -	

(*) for 3.0 m between centers

(**) for 5.0 m between centers

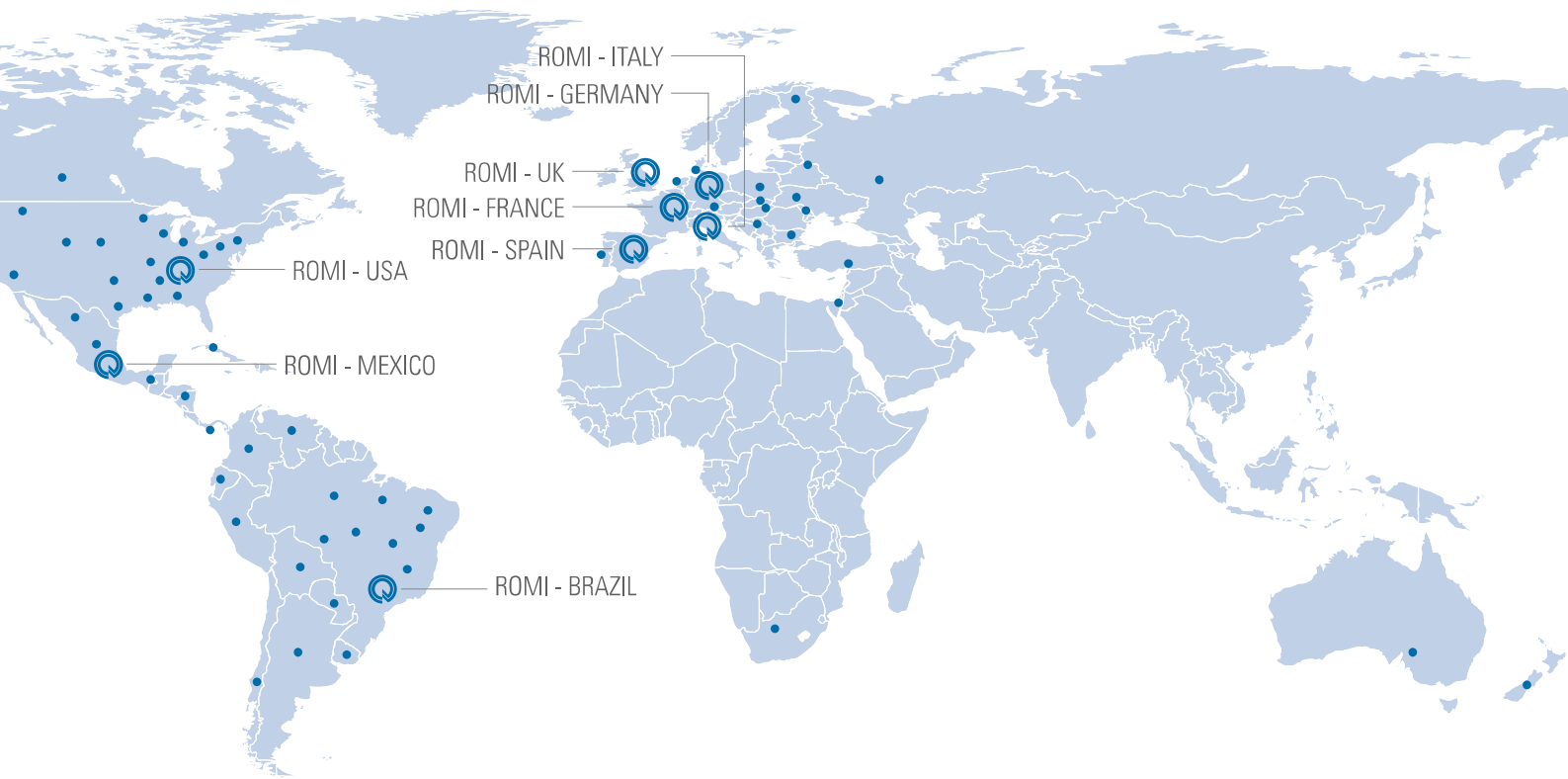
(***) Without chip conveyor

Technical specifications Tool holders and turrets			ROMI C 420	ROMI C 510	ROMI C 620	ROMI C 680
Quick change tool holder (opt)						
Holders			2 or 3	3	3	3
Tool holder size	Square	mm (in)	20 x 20 (0.79 x 0.79)	25 x 25 (0.98 x 0.98)	32 x 32 (1.26 x 1.26)	32 x 32 (1.26 x 1.26)
	Round	mm (in)	Ø 25 (0.98)	Ø 25 (0.98)	Ø 32 (1.26)	Ø 32 (1.26)
Rear tool holder (opt)						
Tool holder size	Square	mm (in)	20 x 20 (0.79 x 0.79)	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)
	Round	mm (in)	Ø 25 (0.98)	Ø 32 (1.26)	Ø 40 (1.57)	Ø 40 (1.57)
Gang tools (opt)						
Tool holder size	Square	mm (in)	20 x 20 (0.79 x 0.79)	-	-	-
	Round	mm (in)	Ø 25 (0.98)	-	-	-
WTO tool holder (opt)						
VDI-50 tool holder/ DIN 69880-50 (opt)						
Tool holder size	Square	mm (in)	-	32 x 32 (1.26 x 1.26)	-	-
	Round	mm (in)	-	Ø 40 (1.57)	-	-
Axial driven tool holder		DIN 6499	-	ER-40 (Ø 4 to Ø 26 mm)	-	-
Radial driven tool holder		DIN 6499	-	ER-40 (Ø 4 to Ø 26 mm)	-	-
Driven tool speed range		rpm	-	1 to 1,500 rpm	-	-
8-station manual square turret (opt)						
Tool holder size	Square	mm (in)	25 x 25 (0.98 x 0.98)	-	-	-
	Round	mm (in)	Ø 25 (0.98)	-	-	-
4-station square manual tool holder (opt)						
Number of stations / tools			-	-	-	-
Section of external tool holder		mm (in)	-	-	-	-
Section of internal tool holder		mm (in)	-	-	-	-
4-station vertical automatic turret (opt)						
Number of stations / tools		un	-	-	4	4
Tool holder size	Square	mm (in)	-	-	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)
	Round	mm (in)	-	-	Ø 40 (1.57)	Ø 40 (1.57)
8-station horizontal automatic turret (opt)						
Tool holder fixing type			Romi	Romi	Romi or VDI - 40	Romi or VDI - 40
Number of stations / tools		un	8	8	8	8
Tool holder size	Square	mm (in)	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)
	Round	mm (in)	Ø 25 (0.98)	Ø 32 (1.26)	Ø 40 (1.57)	Ø 40 (1.57)
8-station horizontal automatic turret for driven tools (opt)						
Tool holder fixing type			-	-	VDI - 40	VDI - 40
Number of stations / tools		un	-	-	8	8
Tool holder size	Square	mm (in)	-	-	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)
	Round	mm (in)	-	-	Ø 40 (1.57)	Ø 40 (1.57)
Axial driven tool holder		DIN 6499	-	-	ER - 32 (Ø 3 to Ø 20 mm)	ER - 32 (Ø 3 to Ø 20 mm)
Driven tool speed range		rpm	-	-	4 to 4,000	4 to 4,000



Technical specifications			ROMI C 830	ROMI C 1000
Tool holders and turrets				
Quick change tool holder (opt)				
Holders			3	3
Tool holder size	Square	mm (in)	40 x 40 (1.57 x 1.57)	40 x 40 (1.57 x 1.57)
	Round	mm (in)	Ø 50 (2) or Ø 60 (2.4)	Ø 50 (2) or Ø 60 (2.4)
Rear tool holder (opt)				
Tool holder size	Square	mm (in)	-	-
	Round	mm (in)	-	-
Gang tools (opt)				
Tool holder size	Square	mm (in)	-	-
	Round	mm (in)	-	-
WTO tool holder (opt)				
VDI-50 tool holder/ DIN 69880-50 (opt)				
Tool holder size	Square	mm (in)	-	-
	Round	mm (in)	-	-
Axial driven tool holder		DIN 6499	-	-
Radial driven tool holder		DIN 6499	-	-
Driven tool speed range		rpm	-	-
8-station manual square turret (opt)				
Tool holder size	Square	mm (in)	-	-
	Round	mm (in)	-	-
4-station square manual tool holder (opt)				
Number of stations / tools			4	4
Section of external tool holder		mm (in)	40 x 40 (1.57 x 1.57)	40 x 40 (1.57 x 1.57)
Section of internal tool holder		mm (in)	Ø 60 (2.4)	Ø 60 (2.4)
4-station vertical automatic turret (opt)				
Number of stations / tools		un	4	4
Tool holder size	Square	mm (in)	32 x 32 (1.26 x 1.26)	32 x 32 (1.26 x 1.26)
	Round	mm (in)	Ø 50 / Ø 60 / Ø 80 (2.0 / 2.4 / 3.1)	Ø 50 / Ø 60 / Ø 80 (2.0 / 2.4 / 3.1)
8-station horizontal automatic turret (opt)				
Tool holder fixing type			-	-
Number of stations / tools		un	-	-
Tool holder size	Square	mm (in)	-	-
	Round	mm (in)	-	-
8-station horizontal automatic turret for driven tools (opt)				
Tool holder fixing type			VDI - 50	VDI - 50
Number of stations / tools		un	8	8
Tool holder size	Square	mm (in)	32 x 32 (1.26 x 1.26)	32 x 32 (1.26 x 1.26)
	Round	mm (in)	Ø 40 (1.57)	Ø 40 (1.57)
Axial driven tool holder		DIN 6499	-	-
Driven tool speed range		rpm	-	-

WORLDWIDE PRESENCE



Brazil



United States



Germany



England



France



Spain



Italy



Germany - B+W



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