| ROMI C 1100H | ROMI C 1290H | ROMI C 1300H | ROMI C 1300HBB
| ROMI C 1600H | ROMI C 1800H | ROMI C 2100H | ROMI C 2200H | ROMI C 2600H

HEAVY DUTY CNC LATHES

ROMI C SERIES

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

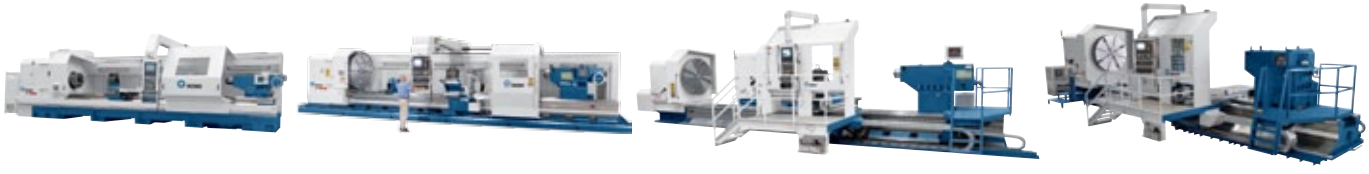
INNOVATION + QUALITY

ROMI: Since 1930 producing high technology.
Since its foundation, the company is recognized by its focus on creating products and innovative solutions which guarantees its technological leadership among big manufacturers of machine tools market. ROMI industrial complex is among the most modern and productive ones in the segments of machine tools, plastic processing machines and cast iron parts of high quality.

Continuous investments in Research & Development result in products with state-of-the-art technology.
The high 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 sales subsidiaries network fully prepared to support customers supplying an extensive range of services from marketing to after sales.
International market is covered by its subsidiaries located in United States, Mexico and Europe and also by its dealers network located in strategic logistic centers around the globe completely capable for serving customers in 5 continents.

ROMI C SERIES



ROMI C 1100H | ROMI C 1290H | ROMI C 1300H / C 1300HBB | ROMI C 1600H | ROMI C 1800H | ROMI C 2100H | ROMI C 2200H | ROMI C 2600H

Flexibility for several levels of application with assured productivity.

CNC lathes from ROMI C Series are machines with great flexibility for machining several types of parts, with great level of power, quick movements and machining accuracy.

They are targeted on oil & gas, suggar mill, naval, steel mills and energy segments of heavy industries.
They have robust structure with monoblock cast iron bed and outlets for chips and coolant fluid.

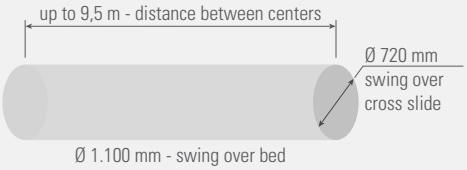
Robust machines for machining heavy duty parts with high efficiency and productivity.

- Headstock ASA A2-20"
- Spindle thru-hole: Ø 375 mm
- Swing over bed: 1.110 mm (ROMI C 1100H)
  1.330 mm (ROMI C 1290H)
- Main motor: 72 hp / 53 kW
- Tailstock with motorized displacement, manual driven quill with built-in live center and compensation by plate springs with monitoring system by load sensors of the thrust force and manual lubrication
- CNC Siemens 840D sl with high performance and reliability

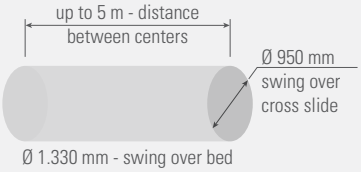
ROMI **C 1100H / C 1290H**

Capacities

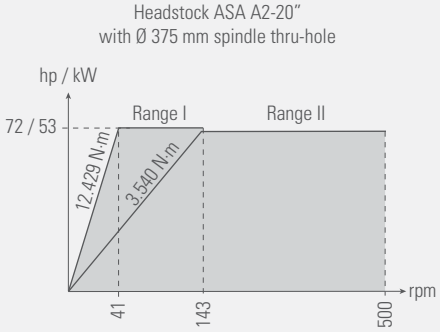
ROMI C 1100H



ROMI C 1290H



Power Graph

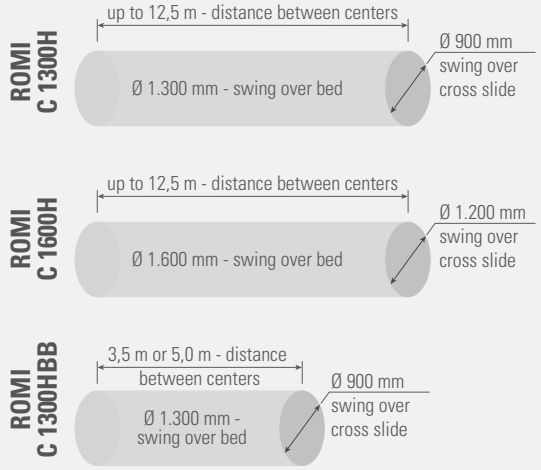


Technology, reliability and productivity for
manufacturing and repair of heavy duty parts.

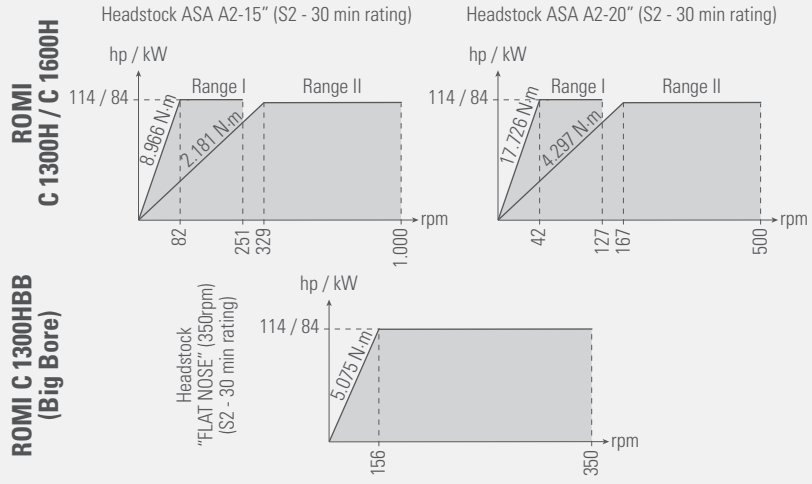
- Headstock ASA A2-15", Ø 175 mm thru-hole or
  Headstock ASA A2-20", Ø 305 mm thru-hole
- Headstock Flat Nose, Ø 575 mm thru-hole
  (ROMI C 1300HBB - Big Bore)
- Swing over bed: 1.300 mm (ROMI C 1300H / C 1300HBB)
  1.600 mm (ROMI C 1600H)
- Main motor (30 min. rating): 114 hp / 84 kW
- Tailstock with motorized displacement, manual driven quill with built-in live center and compensation by plate springs with monitoring system by load sensors of the thrust force
- CNC Siemens 840D sl with high performance and reliability

ROMI **C 1300H / C 1600H / C 1300HBB**

Capacities



Power Graphs



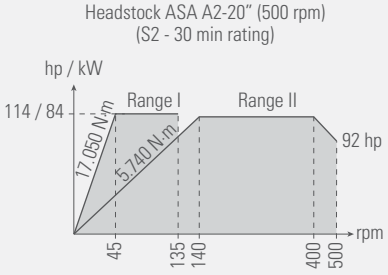
Machines of extremely robust structures for machining heavy duty parts with high efficiency and productivity.

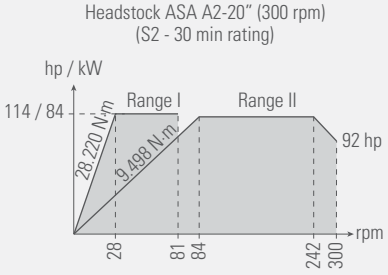
- Headstock ASA A2-20", Ø 305 mm thru-hole
- Swing over bed: 1.800 mm (ROMI C 1800H)
  2.150 mm (ROMI C 2100H)
- Main motor (30 min. rating): 114 hp / 84 kW
- Tailstock with motorized displacement, manual driven quill with built-in live center and compensation by plate springs with monitoring system by load sensors of the thrust force
- CNC Siemens 840D sl with high performance and reliability

ROMI **C 1800H / C 2100H**

Capacities

Power Graphs





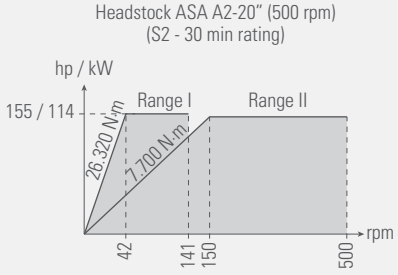
The quality of the project and manufacturing processes assure the reliability and operational effectiveness.

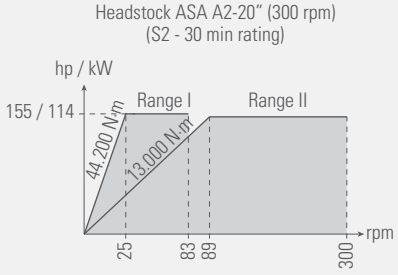
- Headstock ASA A2-20", Ø 305 mm thru-hole
- Swing over bed: 2.100 mm (ROMI C 2200H)
  2.580 mm (ROMI C 2600H)
- Main motor (30 min. rating): 155 hp / 114 kW
- Tailstock with motorized displacement, manual driven quill with built-in live center and compensation by plate springs with monitoring system by load sensors of the thrust force
- CNC Siemens 840D sl with high performance and reliability

ROMI **C 2200H / C 2600H**

Capacities

Power Graphs





ROMI C 1300H
bed.

BED

ROMI C 1300H Bed machining

Robust monoblock bed made of gray cast iron. Offers great rigidity, absorbing high machining efforts and vibration, assuring stability and accuracy at full power operation. The bed is a base for components supporting and it is fixed on the foundation by levelling and alignment elements.

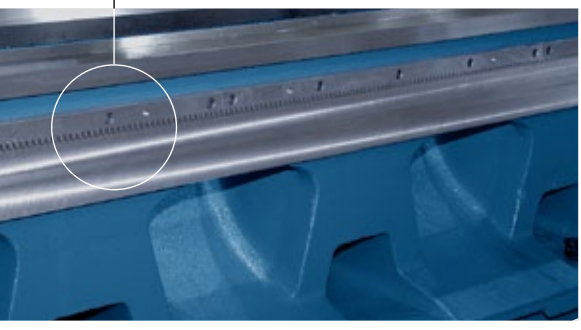
Guides

They constitute a self-adjusting system, assuring permanent contact of cross slide over the bed.

ROMI C 2200H bed.

Rack (Güdel) of the longitudinal saddle displacement system.

Rack of the tailstock displacement system



ROMI C 2200H Bed machining

Cast iron robust housing, internally ribbed to absorb high efforts of heavy machining operations.

Headstock ASA A2-20"
ROMI C 1300H / C 1600H

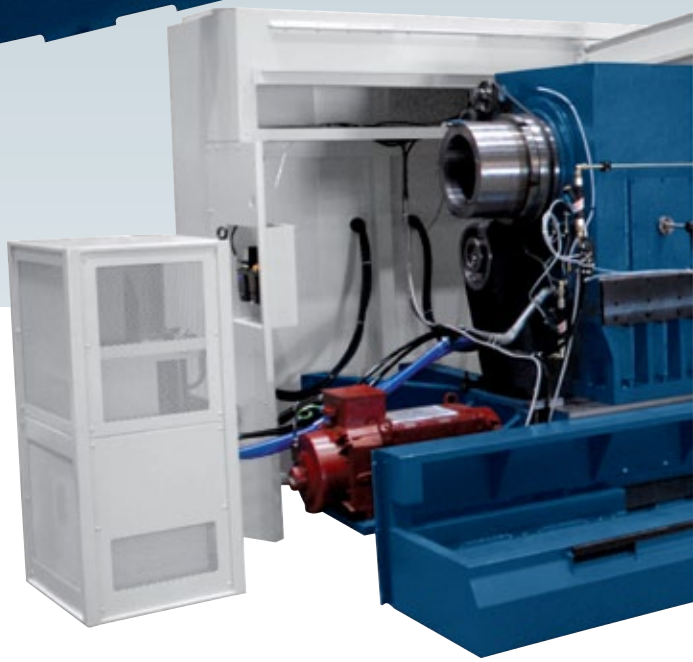
Gears from the headstock transmission system with hardened and ground teeth, designed to withstand the high efforts of the most severe working conditions.

HEADSTOCK

Cast iron robust housing, internally ribbed to absorb high efforts of heavy machining operations.

Spindle is held by Timken precision bearings. The high loading capacity of bearings provides rigidity and high vibration absorption under the most severe cutting conditions, obtaining parts with excellent geometric accuracy.

It is powered by AC motor by pulleys and poly-V belt, with high torque and continuously variable speeds.



Headstock lubrication system

Ensures that all components of the headstock are constantly lubricated with an ideal working temperature. The system has an air / oil heat exchanger with thermostat to ensure temperatures lower than 40 degrees. It has dosage system and digital flow sensors, beyond of magnetic elements and suction filter, in order to protect bearings and pump gears against the contamination with particles.

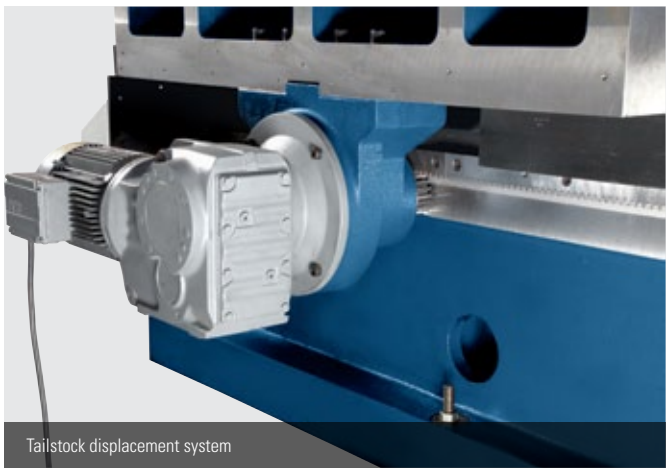
Offers high load capacity,
rigidity and vibration absorption.

ROMI C 1300H / C 1600H
Tailstock

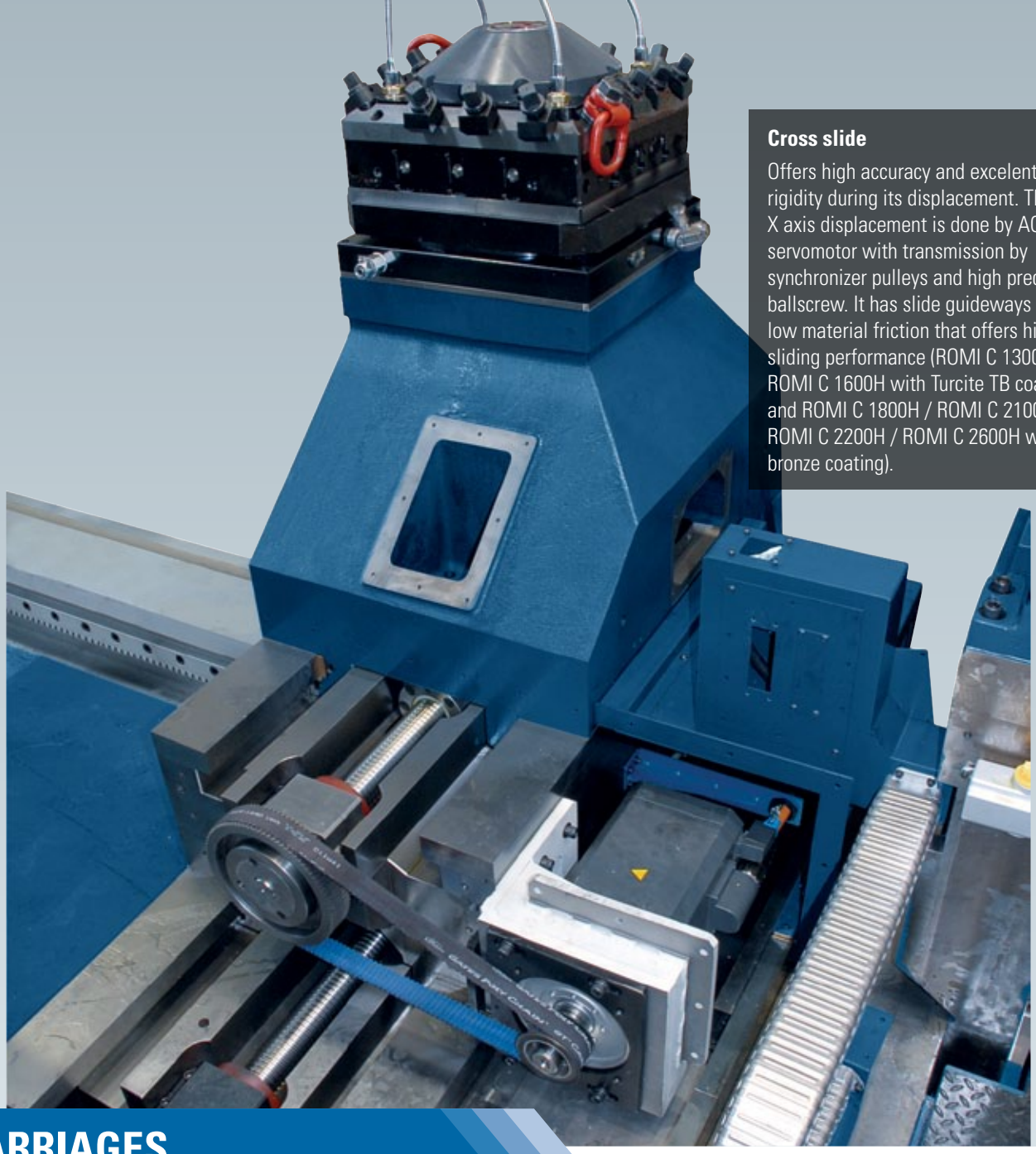
TAILSTOCK

The manually driven quill has a built-in live center with high precision bearings. It has a monitoring system by load sensors of the thrust force. Its displacement is driven by gearmotor and pinion /rack system.

Tailstock - ROMI C 2200H / C 2600H, with plataform for operator



Tailstock displacement system



Cross slide

Offers high accuracy and excelent rigidity during its displacement. The X axis displacement is done by AC servomotor with transmission by synchronizer pulleys and high precision ballscrew. It has slide guideways with low material friction that offers high sliding performance (ROMI C 1300H / ROMI C 1600H with Turcite TB coating and ROMI C 1800H / ROMI C 2100H / ROMI C 2200H / ROMI C 2600H with bronze coating).

CARRIAGES

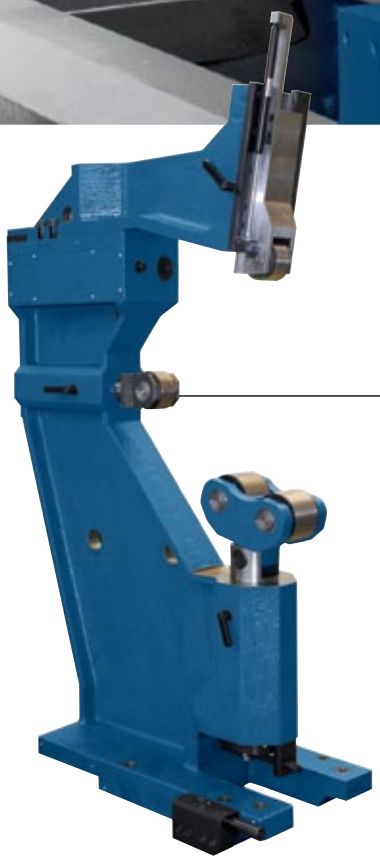
Longitudinal saddle

Driven by servo motor through a pre-loaded double pinion system (Redex) that operates on the bed precision racks (Güdel), with positioning reading through linear scale (Heidenhain) (ROMI C 1800H / ROMI C 2100H / ROMI C 2200H / ROMI C 2600H / and ROMI C 1300H / ROMI C 1600H from 6,5 to 12,5 m between centers). Driven by servo motor through precision recirculating ball screw (ROMI C 1300H / ROMI C 1600H with 3,5 and 5 m between centers). It has guideways with low friction coefficient material that offers high sliding performance (ROMI C 1100H / C 1290H / C 1300H / C 1600H / C 1300HBB with turcite TB coating; and ROMI C 1800H / C 2100H / C 2200H / C 2600H with bronze coating).

Pre-loaded Double pinion system (Redex)

Steady rest U type (optional)
It has 5 cartridges with rollers for diameter adjustment.
The steady rest body displacement is done by the longitudinal saddle.

RESTS



Steady rest C type (optional)
Table rest (optional)

Equipped with rollers and manual diameter adjustment.

It has a drag system via longitudinal saddle for its positioning.

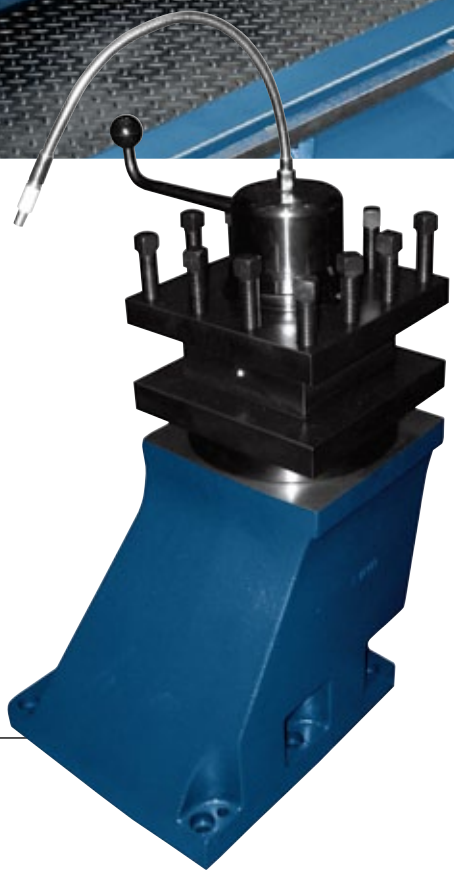
Electrical turret for driven tools with Y axis (optional)
12 station tool disk VDI-60 for driven tools, 10 hp (7,5 kW) 2.500 rpm (max.).

TURRETS

4 - station square vertical turret, electrically driven

Turrets (optionals)

The heavy duty CNC lathes ROMI C Series are equipped with different robust turrets for several types of applications.



4 - station square manual turret

BORING BAR

Milling Headstock with Y axis (optional)
Spindle taper ISO-50, 16 hp / 12 kW, 2.500 rpm (max.)

Milling Headstock (optional)
Spindle taper ISO-50, 10 hp / 7,5 kW, 2.500 rpm (max.)

Boring bar holder

System with double support for the bar. Its robust structure offers high rigidity and vibration absorption during machining operations at full power.

Platform

CNC lathes ROMI C 1800H / ROMI C 2100H / ROMI C 2200H and ROMI C 2600H have a platform for the operator, providing easy access to the operator's panel, turret workpiece and also for other machine setup operations.
In order to guarantee operator safety, the platform is equipped with front cover, door viewer protection and electric locks.

PLATFORM

C axis (optional)

Mechanical system with independent servomotor, which is coupled to the machine spindle. Allows positioning the spindle at any angle, as well as perform interpolation operations in machining processes.

CNC

Technology, high performance and reliability

CNC horizontal lathes from ROMI C Series are equipped with CNC Siemens Sinumerik 840D sl which, offers the user very ease programming system.

CNC Siemens Sinumerik 840D sl offers 10.4" LCD color monitor, USB port and Ethernet interface for factory network, bringing a great flexibility for loading programs and parameters.

Conversational programming offered is the programGUIDE

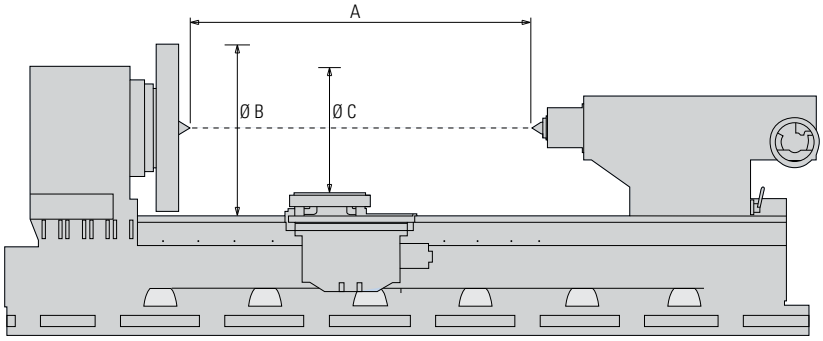
CNC Siemens Sinumerik 840D sl programGUIDE facilitates program creation thru the input of data in user-friendly screens and animated elements which helps in unequivocal data input. Programming is simplified thru cycles of drilling, boring, tapping and milling cycles and free-shape profile cuts.

Technical specifications		ROMI C 1100H	ROMI C 1290H	ROMI C 1300H	ROMI C 1600H	ROMI C 1300HBB	ROMI C 1800H	ROMI C 2100H	ROMI C 2200H	ROMI C 2600H
Capacity										
Centers height	mm	560	675	670	820	670	900	1.100	1.060	1.310
Distance between centers	m	2,0 / 3,5 / 5,0 / 6,5 / 8,0 / 9,5	3,5 / 5,0	3,5 / 5 / 6,5 / 8 / 9,5 / 11 / 12,5		3,5 / 5	4 / 5,5 / 7 / 8,5 / 10		4 / 6 / 8 / 10 / 12	
Swing over bed	mm	1.110	1.330	1.300	1.600	1.300	1.800	2.150	2.100	2.580
Swing over saddle wings		1.055	1.280	900	1.200	900	1.200	1.600	1.500	2.030
Swing in front of cross slide (short carriage)	mm	-		-		-	1.600	1.800	1.600	2.030
Swing over cross slide	mm	720	950	900	1.200	900	1.200	1.600	1.500	2.030
Cross travel (X axis)	mm	600		820		820	940	940	1.120	1.120
Cross travel - short (X axis)	mm	-		-		-	-		500	500
Longitudinal travel (Z axis)	mm	2.140 / 3.665 5.190 / 6.715 8.240 / 9.765	3.665 5.190	3.605 / 5.105 6.605 / 8.105 9.605		3.605 5.105	4.210 / 5.710 7.210 / .710 10.210		4.110 / 6.110 8.110 / 10.110 12.110	
Max. weight between centers at 50 rpm - ASA A2-15" (*)	kg	-		15.000		22.000	-		-	
Max. weight between centers at 50 rpm - ASA A2-20" (*)	kg	15.000		22.000		-	30.000		50.000	
Bed										
Width	mm	600		800		800	1.400		1.840	
Height	mm	490		720		720	760		800	
Headstock										
Spindle nose	ASA	A2-20"		A2-15"	A2-20"	Flat Nose	A2-20"	A2-20"	A2-20"	A2-20"
Spindle thru-hole diameter	mm	375		175	305	575	305	305	305	305
Speed ranges (*)	rpm	1 to 500		1 to 1.000	1 to 500	1 to 350	1 to 500	1 to 300	1 to 500	1 to 300
Range I	rpm	1 to 142		1 to 250	1 to 125	-	1 to 168	1 to 100	1 to 150	1 to 89
Range II	rpm	1 to 500		1 to 1.000	1 to 500	-	1 to 500	1 to 300	1 to 500	1 to 300
Max. torque allowed	N.m	12.429		8.966	17.726	5.075	17.050	28.220	26.320	44.200
Front bearing inner diameter	mm	431,8		249,25	431,8	660	431,8	431,8	431,8	431,8
Feeds										
Rapid traverse (Z axis)	m/min	8 (2,0 to 3,5 m between centers lathe)		10 (6,5 to 9,5 m between centers lathe)		5 (3,5 to 5 m between centers lathe)	8		8	
		5 (5 m between centers lathe)		5 (3,5 to 5 m between centers lathe)						
		10 (6,5 to 9,5 m between centers lathe)								
Rapid traverse (X axis)	m/min	8		8		8	8		8	
Tailstock										
Body positioning		Drag by saddle		Servo driven		Servo driven	Servo driven		Servo driven	
Quill drive		Manual (standard) Hydraulic (optional)		Manual (standard) Hydraulic (optional)		Manual (standard) Hydraulic (optional)	Manual (standard) Hydraulic (optional)		Manual (standard) Hydraulic (optional)	
Quill travel	mm	300		300		300	300		450	
Quill diameter	mm	200		290		290	290		330	
Live center (built-in)	metric	-		80 x 60°		80 x 60°	85 x 60°		100 x 60°	
Installed power										
Main motor AC (S2 - 30 min. rating)	hp/kW	72 / 53		114 / 84 (82 / 60)		114 / 84 (82 / 60)	114 / 84 (82 / 60)		155 / 114 (96 / 70)	
Total power installed	kVA	60		95		95	100		150	
Dimensions and weight (approx.) (**)		2,0 m between centers lathe		3,5 m between centers lathe		3,5 m between centers lathe	4,0 m between centers lathe		6,0 m between centers lathe	
Floor space (front x side)	m	6.870 x 4.870		8,78 x 4,5		8,78 x 4,5	9,0 x 3,6		11,8 x 4,5	
Net weight (approx.)	Kg	18.000		28.420	29.200	28.420 29.200	44.000	45.000	60.000	61.000

(*) Other characteristics like distance between centers, maximum admissible weight beetween centers, power and rotation can be offered under request

(**) Weight increase for each 1.500 mm bed segment = 2.500 kg (ROMI C 1100H / C 1290H)
Weight increase for each 1.500 mm bed segment = 2.500 kg (ROMI C 1300H / C 1600H)
Weight increase for each 1.500 mm bed segment = 4.000 kg (ROMI C 1800H / C 2100H)
Weight increase for each 2.000 mm bed segment = 6.000 kg (ROMI C 2200H / C 2600H)

Working layout



	A (m)	Ø B (m)	Ø C (m)
Romi C 1100H	2,0 / 3,5 / 5,0 / 6,5 / 8,0 / 9,5	1.100	720
Romi C 1290H	3,5 / 5,0	1.330	950
Romi C 1300H	3,5 / 5,0 / 6,5 / 8,0 / 9,5 / 11,0 / 12,5	1.300	900
Romi C 1600H	3,5 / 5,0 / 6,5 / 8,0 / 9,5 / 11,0 / 12,5	1.600	1.200
ROMI C 1300HBB	3,5 / 5,0	1.300	900
ROMI C 1800H	4,0 / 5,5 / 7,0 / 8,5 / 10,0	1.800	1.200 (long carriage) / 1.600 (short carriage)
ROMI C 2100H	4 / 5,5 / 7 / 8,5 / 10	2.150	1.600 (long carriage) / 1.800 (short carriage)
ROMI C 2200H	4 / 6 / 8 / 10 / 12	2.100	1.500 (long carriage) / 1.600 (short carriage)
ROMI C 2600H	4 / 6 / 8 / 10 / 12	2.580	2.030 (long carriage) / 2.030 (short carriage)

Standard equipment

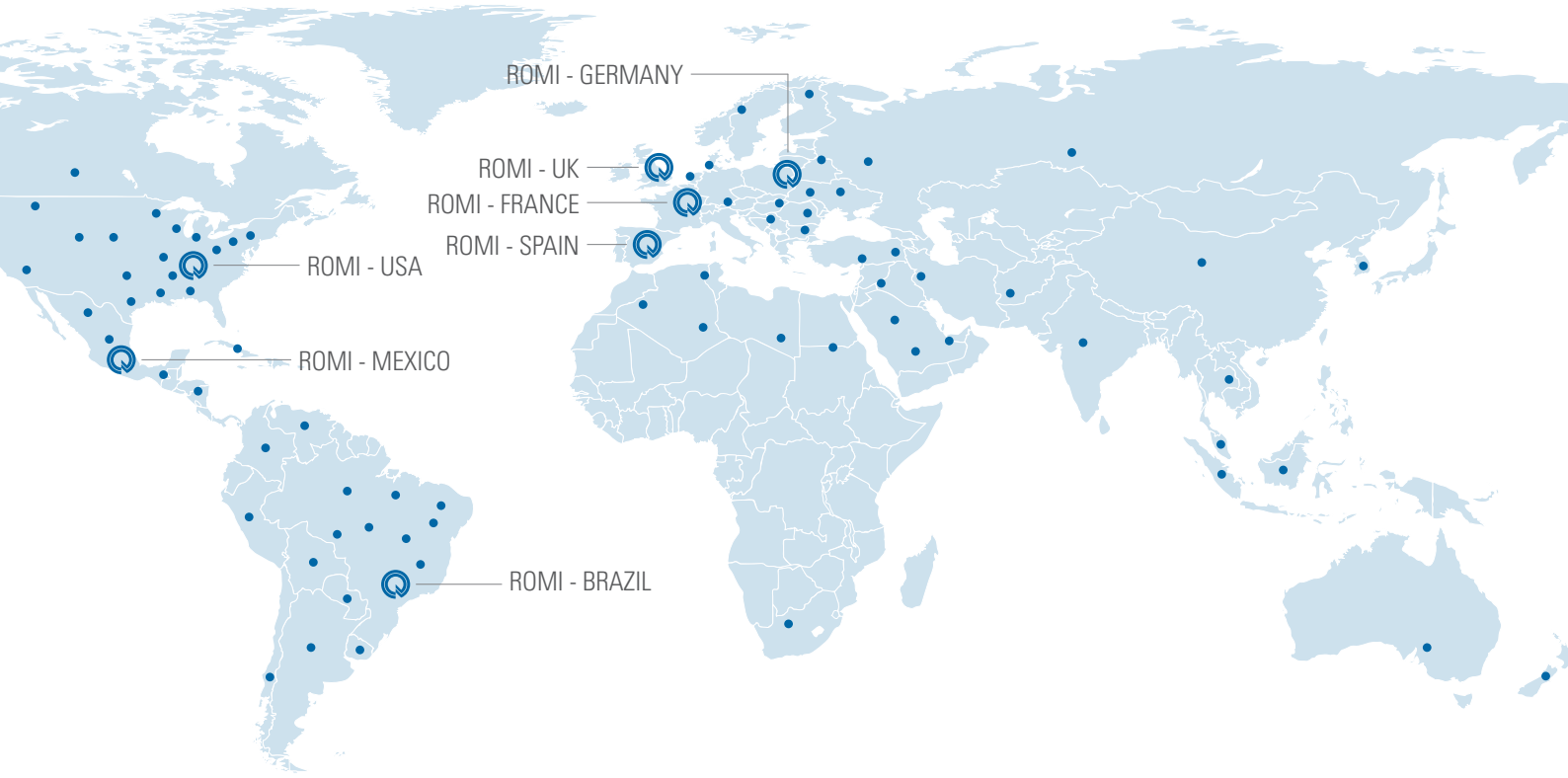
- Geared headstock, with two speed ranges and continuos speed variation
- Tailstock with motorized displacement, manual driven quill with built-in live center and compensation by plate springs with monitoring system by load sensors of the thrust force and manual lubrication
- Siemens 840D sl CNC with LCD 10,4"color monitor
- Electrical installation for 380 V, 50 / 60 Hz (ROMI C 1300H / C 1600H)
- Electrical installation for 380 V, or 440 V, 50 / 60 Hz (ROMI C 1800H / C 2100H / C 2200H / C 2600H)
- Chip conveyor interface
- Set of wrenches for machine operation
- Set of anchor, screws and nuts for levelling and alignment
- Set of instruction manuals
- Fluorescent worklight
- Articulated and sliding operation panel
- Pendant type MPG and jog function control
- Electrical panel with air conditioning
- Standard colors: Textured epoxy enamel munsell blue 10B-3/4 and textured epoxy gray RAL 7035
- Splash guard with sliding doors
- Centralized lubrication system with line filter oil and level sensor (PDI)
- Coolant system with motorpump 10 l/min, 2 bar, 0,75 hp / 0,56 kW
- Headstock coolant and lubrication system equipped with heat exchanger, sensors for temperature, pressure, flow and filter.

Optional equipment

- Ar conditioning for electrical panel (recommended for environments with temperature higher than 38°C)
- Autotransformer for 220 to 250 VCA or 360 to 480 VCA, 100 KVA, 50/60 Hz
- Chip pan and coolant tank
- Coolant pump - 2 or 7 bar
- Tailstock with hydraulically driven quill, built-in live center and displacement through carriage in place of standard
- C axis driven by independent servomotor and hydraulic brake
- Generic interface with miscellaneous functions (4 M codes)
- Table rest
- Steady rest U type with Ø 230 to Ø 550 mm capacity (ROMI C 1100H)
- Steady rest U type with rollers and Ø 200 to Ø 635 mm capacity (ROMI C 1290H)
- Manual auxiliary operation panel with handwheel and JOG functions for axes
- Special painting according to Munsell or RAL Standards
- 3-jaw universal chuck Ø 630 mm, ASA A2-20", Ø 252 mm thru-hole, (max. 500 rpm) (ROMI C 1100H / ROMI C 1290H)
- Adapter for 3-jaw universal chuck Ø 630 mm, ASA A2-20" (ROMI C 1100H / ROMI C 1290H)
- 3-jaw universal chuck Ø 800 mm, ASA A2-20", Ø 320 mm thru-hole, (max. 300 rpm) (ROMI C 1100H / ROMI C 1290H)
- Adapter for 3-jaw universal chuck Ø 800 mm, ASA A2-20" (ROMI C 1100H / ROMI C 1290H)
- 4-jaw independent chuck Ø 700 mm, A2-20", steel body with 60° center (max. 873 rpm) (ROMI C 1100H / ROMI C 1290H)
- 4-jaw independent chuck Ø 800 mm, A2-20", steel body with 60° center (max. 764 rpm) (ROMI C 1100H / ROMI C 1290H)
- 4-jaw independent chuck Ø 900 mm, A2-20", steel body with 60° center (max. 679 rpm) (ROMI C 1100H / ROMI C 1290H)
- 4-jaw independent chuck Ø 1,000 mm, A2-20", steel body with 60° center (max. 611 rpm) (ROMI C 1100H / ROMI C 1290H)
- 4-jaw independent chuck Ø 1,100 mm, A2-20", steel body with 60° center (max. 509 rpm) (ROMI C 1290H)
- 4-station square manual turret
- 4-station vertical electrical turret (tool holders and reduction sleeves not included)
- Oil Skimmer
- Boring bar holder Ø 160 mm (bar not included)
- 8-station horizontal electrical turret, VDI-50 (DIN 69880) (tool holders and reduction sleeves not included)
- 8-station horizontal electrical turret for driven tools, VDI-50 (DIN 69880) (tool holders and reduction sleeves not included)
- 8-station horizontal electrical turret for driven tools and Y axis, VDI-50 (DIN 69880) (tool holders and reduction sleeves not included) (ROMI C 1100H / ROMI C 1290H)
- Chip conveyor hinged belt longitudinal (TCE)

Note: Other optional equipments under request.

WORLDWIDE PRESENCE




Brazil


United States


Germany


France


England


Spain


Germany - B+W

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