




| ROMI ES-40 | ROMI ES-40A | ROMI ES-40B

ENGINE LATHES

# **ROMI ES** SERIES



**ROMI Industrial Complex, 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 offer 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.



Unidade fabril 16



## ROMI ES SERIES

| ROMI ES-40 | ROMI ES-40A | ROMI ES-40B

**Engine lathes for tool room production and maintenance**

ES Series engine lathes are versatile and accurate. They provide multiple speed and feed combinations, to meet the most diverse machining requirements.

Flexibility and productivity for several types of application, with capacity to machine parts up to Ø 640 mm (25.2").



#### ES-40

- Headstock: 18 speeds, max. 2,360 rpm
- Spindle nose ASA L1, Ø 65 mm (2.56") thru-hole
- Main motor: 15 hp / 11,2 kW

#### ES-40A

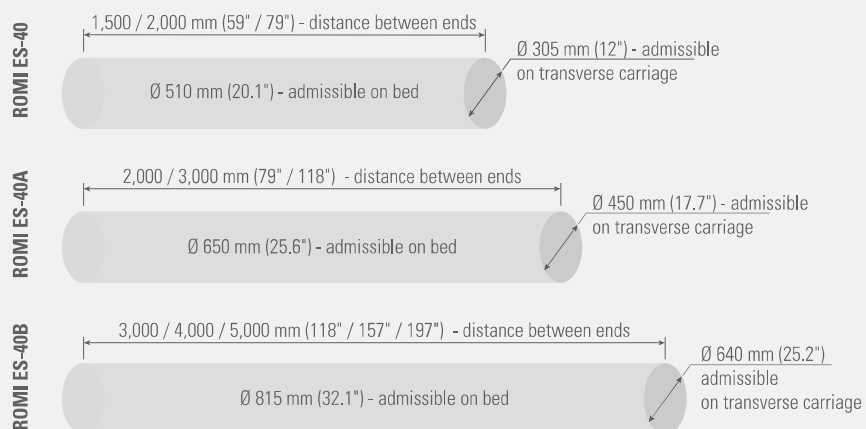
- Headstock: 18 speeds, max. 1,700 rpm
- Spindle nose ASA L1, Ø 65 mm (2.56") thru-hole
- Main motor: 15 hp / 11,2 kW

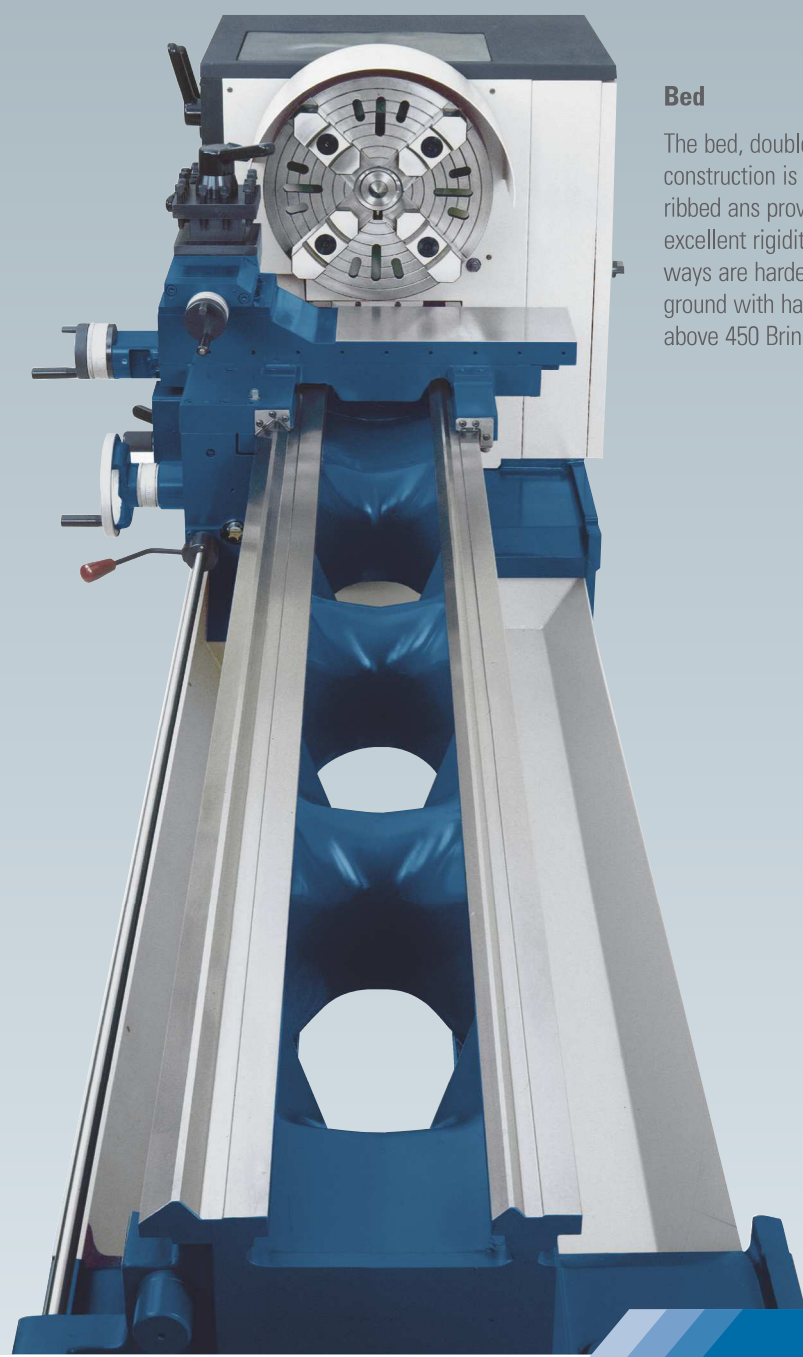
#### ES-40B

- Headstock: 18 speeds, max. 1,180 rpm
- Spindle nose ASA L1, Ø 65 mm (2.56") thru-hole
- Main motor: 15 hp / 11,2 kW

## ROMI ES-40 / ES-40A / ES-40B

### Capacities





### Bed

The bed, double wall, construction is internally ribbed and provides excellent rigidity. Guide ways are hardened and ground with hardness above 450 Brinell.



### Guide spindle protection system and feed shaft

It offers protection and safety, not allowing operator contact with the guide spindle and feed shaft, thus avoiding the possibility of accidents.

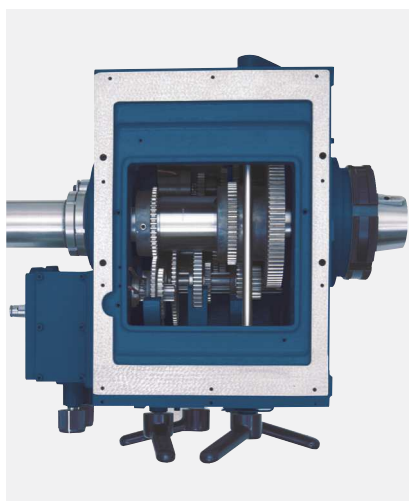


### Carriage

Structurally rigid, the cross slide covers the full length of saddle guide ways. It incorporates a system to eliminate backlash between nut and cross feed screw.

The top slide and tool post may be positioned at any angle for turning operations.

## HEADSTOCK AND BED

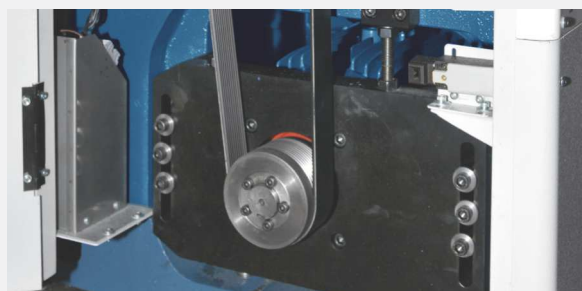


### Headstock

Hardened and ground gears and shafts, are dynamically balanced and run in an oil bath. The rigid cast housing together with the excellent transmission system ensure high performance and a long working life.

### Breaking system

Provides immediate spindle stop with low noise. It has an automatic safety system that activates the electromagnetic brake if a power failure occurs.

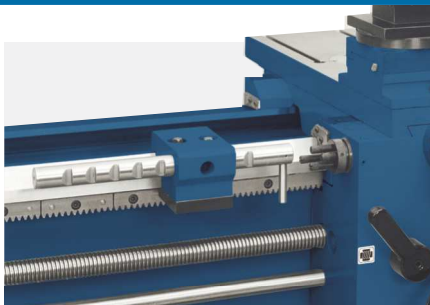




### End gearing

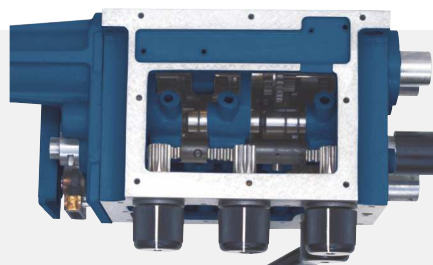
All gears all made of steel. There is no gear change required for conversion from Metric to Inch threads or from Module to Diametral Pitch threads. Gear change is required only for conversion from Metric and Inch threads to Module and Diametral Pitch threads.

## END GEARING



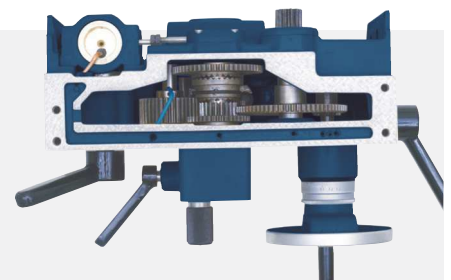
### Automatic disengagement

Enables accurate repeatability of up to 4 linear measurements, decreasing cycle times for the production of multiple parts. ES-40 / ES-40A models also incorporate an adjustable single-position cross automatic disengagement.



### Thread and feed gearbox

Provides multiple feed and thread pitch combinations. Gears and shafts are hardened, run in precision bearings all in an oil bath for optimum lubrication. Provides excellent performance and a long working life.



### Apron

Utilizes hardened gears and shafts running in oil bath. It features smooth engagement of cross and longitudinal feed levers. During thread cutting the half-nut is engaged and receives additional lubrication automatically.



Technical Specifications		ROMI ES-40	ROMI ES-40A	ROMI ES-40B
<b>Capacity</b>				
Centers height	mm (in)	250 (9.8)	325 (13)	420 (17)
Distance between centers	m (in)	1.5 / 2.0 (59 / 79)	2.0 / 3.0 (79 / 118)	3.0 / 4.0 / 5.0 (118 / 157 / 197)
Swing over bed	mm (in)	510 (20)	650 (26)	815 (32)
Swing over saddle wings	mm (in)	480 (19)	600 (24)	750 (30)
Swing over cross slide	mm (in)	305 (12)	450 (18)	640 (25)
Swing through gap	mm (in)	-	-	1,080 (43)
Length of gap in front of chuck	mm (in)	-	-	260 (10)
Cross slide travel	mm (in)	280 (11)	360 (14)	450 (18)
Tool post carriage travel	mm (in)	150 (5.9)	150 (5.9)	190 (7.5)
Tool section	mm (in)	32 x 32 (1.3 x 1.3)	32 x 32 (1.3 x 1.3)	32 x 32 (1.3 x 1.3)
<b>Bed</b>				
Width	mm (in)	380 (15)	380 (15)	380 (15)
Height	mm (in)	380 (15)	380 (15)	380 (15)
<b>Headstock</b>				
Spindle nose	ASA	L1	L1	L1
Spindle hole diameter	mm (in)	65 (2.6) (A)	65 (2.6) (A)	65 (2.6)
Spindle taper hole degrees	degrees	1° 26'	1° 26'	1° 26'
Reduction sleeve taper hole	MT	5	5	5
Spindle diameter at front bearing	mm (in)	110 (4.3) (A)	110 (4.3) (A)	110 (4.3)
Number of speeds		18	18	18
Speed ranges	rpm	32 a 2,360 (A)	23 a 1,700(A)	16 a 1,180
<b>Tailstock</b>				
Quill travel	mm (in)	200 (7.9)	200 (7.9)	200 (7.9)
Quill diameter	mm (in)	88 (3.5)	88 (3.5)	88 (3.5)
Quill taper	MT	5	5	5
<b>Gearbox threads and feeds</b>				
Longitudinal feeds	mm/rot	192 / 0.046 to 8.224	192 / 0.046 to 8.224	192 / 0.046 to 8.224
Cross feeds	mm/rot	192 / 0.022 to 3.984	192 / 0.022 to 3.984	192 / 0.022 to 3.984
Inch threads	fpp	97 / 42 to 0.5	97 / 42 to 0.5	97 / 42 to 0.5
Metric threads	mm	96 / 0.4 to 56	96 / 0.4 to 56	96 / 0.4 to 56
Module threads	Mod	96 / 0.1 to 14	96 / 0.1 to 14	96 / 0.1 to 14
Diametral Pitch threads	DP	96 / 168 to 2	96 / 168 to 2	96 / 168 to 2
Leadscrew	fpp	4	4	4
<b>Power</b>				
Main motor	hp	15	15	15
Clutch lubricating pump (B)	hp	0.125	0.125	0.125
<b>Dimension and weight (approximate)</b>				
Floor space required	mm (in)	(B.C. 1.5*) 2,760 x 1,600 (109 x 63)	(B.C. 2.0*) 3,260 x 1,600 (128 x 63)	(B.C. 3.0*) 4,260 x 1,600 (168 x 63)
		(B.C. 2.0*) 3,260 x 1,600 (128 x 63)	(B.C. 3.0*) 4,260 x 1,600 (168 x 63)	(B.C. 4.0*) 5,260 x 1,600 (207 x 63)
				(B.C. 5.0*) 6,260 x 1,600 (246 x 63)
Net weight	kg (lb)	(B.C. 1.5*) 3,300 (7,275)	(B.C. 2.0*) 4,000 (8,818)	(B.C. 3.0*) 5,200 (11,464)
		(B.C. 2.0*) 3,800 (8,377)	(B.C. 3.0*) 5,000 (11,023)	(B.C. 4.0*) 6,200 (13,668)
				(B.C. 5.0*) 7,200 (15,873)

(A) As an option and at extra cost may be provided with: Spindle with Ø 104 mm hole, CAMLOCK D1-11 nose, spindle diameter at front bearing 140 mm and 18 speeds from 22.4 to 1,180 rpm. (ROMI ES-40 / ROMI ES-40A)

(B) Optional at extra cost.  
(\* ) B.C. = between centers (m)

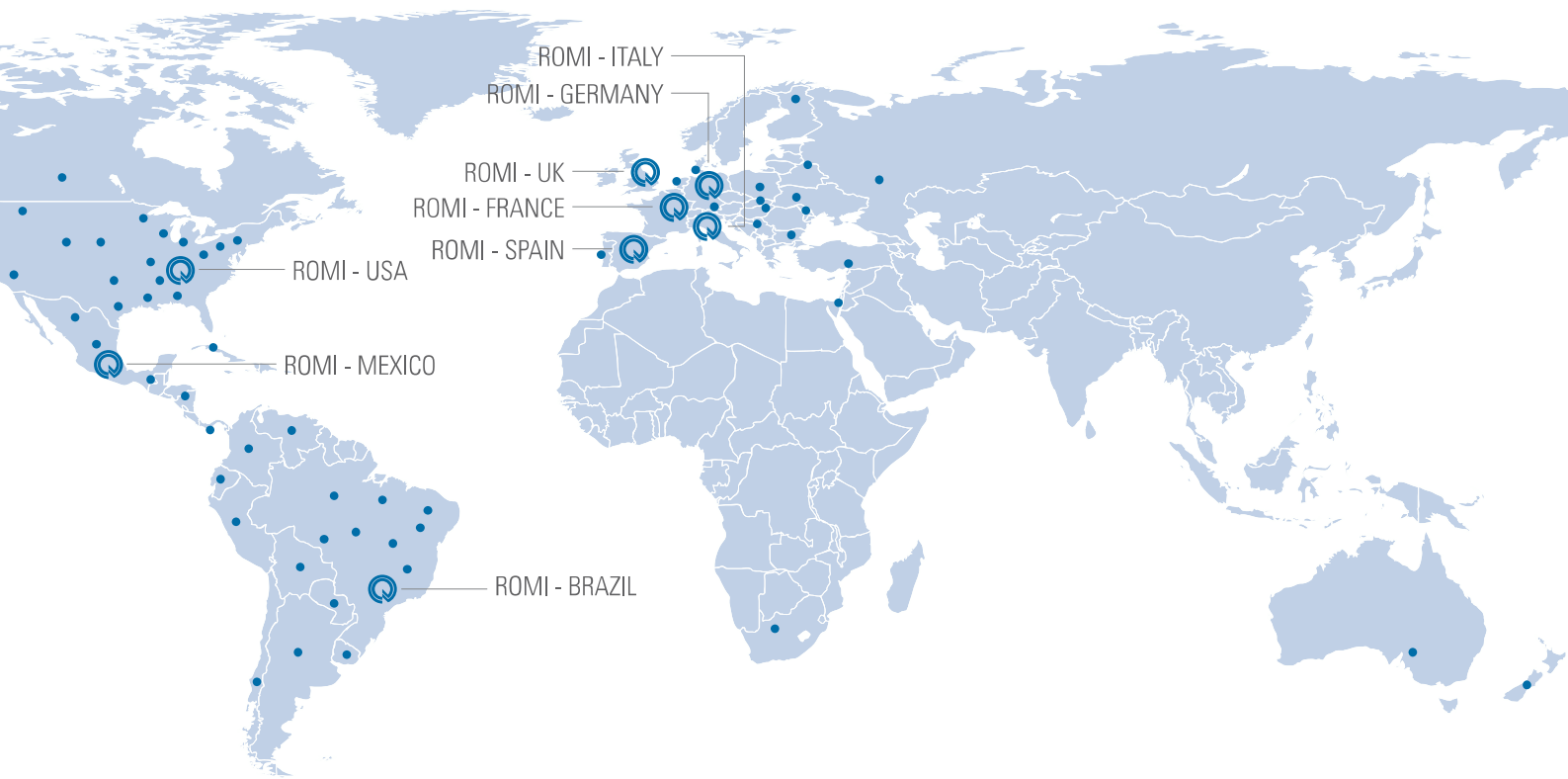
## Standard equipment

- Apron equipped with command lever with safety lock
- Removable chip box
- Reduction sleeve MT-5 for spindle
- Bed with gap (ROMI ES-40B - 3 m, 4 m and 5 m)
- Tailstock with manual body positioning manually operated quill, graduated in mm and inch
- Spindle nose ASA L1, Ø 65 mm (2.56") thru-hole
- Complete documentation for ROMI product
- Electrical installation available for the following voltage/frequencies: 400VAC 60Hz
- Set of wrenches for machine operation
- Set of levelling screws and nuts
- Standard colors: Texturized Epoxy enamel Munsell Blue 10B-3/4 and Texturized Epoxy Gray RAL 7035
- Ponta CM-5 x 60° para o cabeçote móvel
- 8-position square tool holder (ROMI ES-40B)
- 4-position square tool holder Prismatic with base
- CE safety regulation compliance
- Rear guard
- Mobile operator's guard with micro switches and 2 channel safety interlock and a fixing (attachement / locking) system that cannot be bypassed
- Chuck guard with safety interlock through micros with 2 canals and anti-fraud
- Wide range threading system, incorporated to headstock
- End gearing that allows threading with only two assembling settings
- Enclosed lead screw and feed rod set
- Asynchronous AC motor for headstock driven, with electromagnetic safety brake

## Optional equipment

- Graduated handwheel (mm) for apron
- Graduated to handwheel of tailstock
- Tapering attachment with telescoping
- Electrical installation 390VAC/60Hz
- Air operated tailstock quill (in place of standard) (ROMI ES-40A)
- Complete coolant system
- Flange chuck adaption Ø 210 mm Ø 250 mm, Ø 315 mm e Ø 400 mm
- Sealed worklight
- Follow rest with bronze tips Ø 12 to Ø 105 mm
- Steady rest with bronze tips Ø 12 to 150 mm
- Steady rest with rollers Ø 12 to Ø 150 mm
- Steady rest with rollers, Ø 150 to Ø 300 mm
- Drive plate Ø 250 mm
- Open rear tool post with fixed base
- Open sided rear tool post with fixed base
- 4 jaws independents chuck Ø 400 mm (ROMI ES-40), Ø 500 mm (ROMI ES-40A) e Ø 600 mm (ROMI ES-40B)
- Universal chucks
  - Ø 250 mm - 3 jaws universal chuck (Cast Iron), solid jaws
  - Ø 315 mm or Ø 400 mm - 3 jaws universal chuck (Steel), solid jaws
  - Ø 250 mm, Ø 315 mm or Ø 400 mm 3 jaws universal chuck (Steel), reversible jaws
- Live center MT-5
- 8 position square toll post (in place of prismatic 4 position) (ROMI ES-40 / ROMI ES-40A)
- Swivel base for 8 positions square tool post (ROMI ES-40 / ROMI ES-40A)

# WORLDWIDE PRESENCE



Brazil



United States



Germany



England



France



Spain



Italy



Germany - B+W



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Check availability and technical characteristics of the products to your country.

