

CYLINDER BORING MACHINES

SIRIO CL

SIRIO - SIRIO S

MAX 2.0 - SPES 2.0

ORION S

OLIMPIA KS

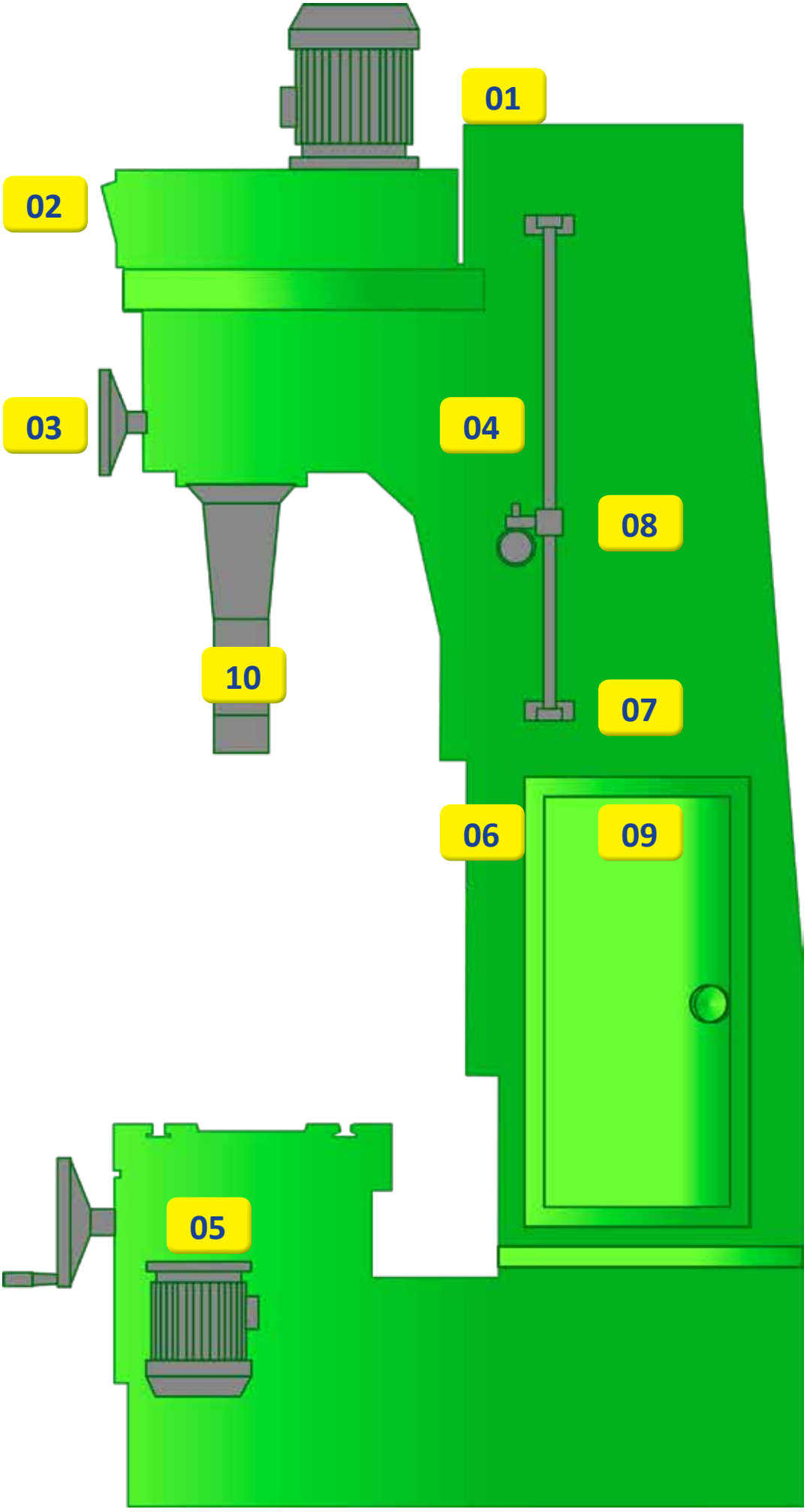
PRECISION SINCE 1936

ROBBI

MADE IN ITALY

Robbi Group srl
Via dell'Industria 7
37040 Veronella - VR
Italia
39 0442 47700
39 0442 47966
robbi@robbigroup.com
www.robbispa.com

MEMBER COMPANY UCIMU


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RING & SURFACE-GRINDING MECHINES

Cylinder Boring Machine	Cylinder Boring Surface-Grinding Machine		
SIRIO CL		Essential in its characteristics , simple and reliable, is the ideal for boring engine blocks of cars and light trucks . One work feed speed	Equipped with variable speed range of spindle rotation
SIRIO	**SIRIO S**	Suitable for engine blocks of cars and trucks medium	
MAX 2.0	**SPES 2.0**	Spindle rotation speed and m / revolution feeds continuously variable Vertical head movement: managed by an electronic handwheel with setting incements recirculating ball screws driving Work feeds at variable speed For the dimensions of the table, the capacity of reaming up to 320 mm and the distance between the head and the table , is suited to the machining of engine blocks of large size (though without exceeding in size , which would make it impractical in light of machining blocks) Ideal for heavy duty applications where heavy stock removal requests in a ' single pass	
	ORION-S	All table and head movements are servo-assisted Suitable to reaming operation and face milling of engine blocks with large possibility of boring up to 400 mm and maximum depth of 1000 mm	
	OLIMPIA-KS		

ROBBI GROUP CYLINDER BORING MACHINES COMMON FEATURES

01 Total shutdown in case of accidental impact of any part of the head or of the spindle , both during the boring process or the fast feed

02 Comparator centering in readily visible

03 On the SIRIO model, mechanical handwheel for manual advances in an accessible position (Electronic handwheel for all other models)

04 Long sliding guides of the head , that guarantee a better accuracy and long duration of operation given the low pressure on gibs

05 Worm gear oil bath and mechanical transmission for automatic table moving

06 Rectified and scraped column guides for better lubrication

07 Stabilized cast iron column (except ORION-S)

08 Dial gauge tool for depth control

09 Low Voltage Cabinet 24 V

10 Automatic tool positioning at the boring end; to eliminate the line left by the tool during ascent head (not available on the SIRIO CL model)

SIRIO CL



STANDARD EQUIPMENT

Complete electric equipment with control at low tension.
Spindle motor speed variable control
2 setting up supports 100 mm high with bolts
2 setting up supports 200 mm high with bolts
4 locking clamps with bolts
Boring infeed control system
Centering system
Set of spanners
Operating manual

EXTRA EQUIPMENT

Tool grinding device (electric motor included), abrasive wheel, diamond wheel, grinding jig
Boring spindle for ø 31 ÷ 160 mm, complete with tool setting micrometer, cutting tools with holders, centering device
Fixture for fat cylinder clamping
Universal fixture for V engine clamping
Universal fixture for cylinder liner clamping
Fixture for motorcycle cylinder clamping
Special milling and drilling spindle Morse taper N3
Micrometric devices for measuring cylinder bores - range 30÷200 mm

TECHNICAL SPECIFICATION

HEAD	Boring diameters with standard spindles	Min	31	mm
		Max	160	mm
	Boring depth	Max	460	mm
	Distance table to head	Max	1260	mm
		Min	430	mm
	Distance spindle centre to column guides		340	mm
	Vertical head stroke	Max	830	mm
	Spindle rotation speed		0 ÷ 500	r.p.m.
	Automatic head feeds (variable)		0,13	mm/rev.
TABLE	Useful dimensions - Lenght		1200	mm
	Useful dimensions - Width		400	mm
	Longitudinal table stroke		980	mm
	Traverse table stroke		80	mm
MOTORS	Spindle rotation		2	kW
	Fast head feed		0,75	kW
	Tool grinder		0,5	kW
DIMENSIONS	Lenght		1800	mm
	Width		1200	mm
	Height		2170	mm
WORKSPACE REQUIRED	Lenght		2780	mm
	Width		1250	mm
	Height		2570	mm
	Net weight		1600	kg

SIRIO - SIRIO S

STANDARD EQUIPMENT

Complete electric equipment with control at low tension.
2 setting up supports 100 mm high with bolts
2 setting up supports 220 mm high with bolts
4 locking clamps with bolts
Boring infeed control system
Centering system
Set of spanners
Operating manual
Tool automatic positioning at the end of boring
Spindle motor speed variable control

SIRIO-S

Surface-milling attachment complete with spindle, tool-plate with cutting tools (**Ts 320**)

Automatic longitudinal table feed variable



EXTRA EQUIPMENT

Tool grinding device (electric motor included), abrasive wheel, diamond wheel, grinding jig

Boring spindle for ø 31 ÷ 200 mm, complete with tool setting micrometer, cutting tools with holders, centering device

Fixture for fat cylinder clamping

Universal fixture for V engine clamping

Universal fixture for cylinder liner clamping

Fixture for motorcycle cylinder clamping

Special milling and drilling splindel morse taper N. 3

Micrometric devices for measuring cylinder bores - range 30÷200 mm

TECHNICAL SPECIFICATION

HEAD	Boring diameters with standard spindles	Min	31	mm	
		Max	180	mm	
	Boring depth	Max	460	mm	
	Distance table to head	Max	1260	mm	
		Min	430	mm	
	Distance spindle centre to column guides		340	mm	
	Vertical head stroke	Max	830	mm	
	Spindle rotation speed		0 ÷ 500	r.p.m.	
	Automatic head feeds (variable)		0,09 - 0,18	mm/rev.	
TABLE	Useful dimensions - Lenght		1200	mm	
	Useful dimensions - Width		400	mm	
	Longitudinal table stroke		980	mm	
	Traverse table stroke		80	mm	
	Automatic longitudinal table feed variable		0 ÷ 150	mm/min	**Sirio S**
MOTORS	Spindle rotation		2	kW	
	Fast head feed		0,75	kW	
	Automatic longitudinal table feed variable		0,75	kW	**Sirio S**
	Tool grinder		0,5	kW	
DIMENSIONS	Lenght		1800	mm	
	Width		1200	mm	
	Height		2170	mm	
WORKSPACE REQUIRED	Lenght		2780	mm	
	Width		1250	mm	
	Height		2570	mm	
	Net weight		1600	kg	

MAX 2.0 - SPES 2.0

STANDARD EQUIPMENT

Complete electric equipment with control at low tension.
Tool automatic positioning at the end of boring
Spindle motor speed variable control
2 setting up supports 100 mm high with bolts
2 setting up supports 220 mm high with bolts
4 locking clamps with bolts
Boring infeed control system
Centering system
Set of spanners
Operating manual

SPES 2.0

Surface-milling attachment complete with spindle, tool-plate with cutting tools (**Ts 380**)

Automatic longitudinal table feed variable



EXTRA EQUIPMENT

Tool grinding device (electric motor included), abrasive wheel, diamond wheel, grinding jig
Boring spindle for ø 31 ÷ 320 mm, complete with tool setting micrometer, cutting tools with holders, centering device
Fixture for fat cylinder clamping
Universal fixture for V engine clamping
Universal fixture for cylinder liner clamping
Fixture for motorcycle cylinder clamping
Special milling and drilling splindel morse taper N 3 - 4 - Iso 40 - Iso 50
Micrometric devices for measuring cylinder bores - range 30÷300 mm

TECHNICAL SPECIFICATION

HEAD	Boring diameters with standard spindles	Min	31	mm	
		Max	320	mm	
	Boring depth	Max	700	mm	
	Distance table to head	Max	1530	mm	
		Min	600	mm	
	Distance spindle centre to column guides		370	mm	
	Vertical head stroke	Max	930	mm	
	Spindle rotation speed		0 ÷ 500	r.p.m.	
	Automatic head feeds (variable)		0,05 ÷ 0,25	mm/rev.	
TABLE	Useful dimensions - Lenght		1550	mm	
	Useful dimensions - Width		500	mm	
	Longitudinal table stroke		1530	mm	
	Traverse table stroke		130	mm	
	Automatic longitudinal table feed variable		0 ÷ 150	mm/min	**Spes 2.0**
MOTORS	Spindle rotation		3	kW	
	Fast head feed		0,75	kW	
	Automatic longitudinal table feed variable		0,75	kW	**Spes 2.0**
	Tool grinder		0,5	kW	
DIMENSIONS	Lenght		2150	mm	
	Width		1350	mm	
	Height		2400	mm	
WORKSPACE REQUIRED	Lenght		3680	mm	
	Width		1480	mm	
	Net weight		2400	kg	

ORION S

STANDARD EQUIPMENT

Complete electric equipment with control at low tension.
Tool automatic positioning at the end of boring
Spindle motor speed variable control
2 setting up supports 100 mm high with bolts
2 setting up supports 220 mm high with bolts
2 setting up supports 300 mm high with bolts
4 locking clamps with bolts
Boring infeed control system
Centering system
Surface-milling attachment complete with spindle, tool-plate with cutting tools (**Ts420**)
Automatic longitudinal table feed variable
Set of spanners
Operating manual



EXTRA EQUIPMENT

Tool grinding device (electric motor included), abrasive wheel, diamond wheel, grinding jig
Boring spindle for ø 31 ÷ 320 mm, complete with tool setting micrometer, cutting tools with holders, centering device
Fixture for fat cylinder clamping
Universal fixture for V engine clamping
Universal fixture for cylinder liner clamping
Fixture for motorcycle cylinder clamping
Special milling and drilling splindel morse taper N 3 - 4 - Iso 40 - Iso 50
Micrometric devices for measuring cylinder bores - range 30÷300 mm

TECHNICAL SPECIFICATION

HEAD	Boring diameters with standard spindles	Min	31	mm
		Max	320	mm
	Boring depth	Max	700	mm
	Distance table to head	Max	1830	mm
		Min	600	mm
	Distance spindle centre to column guides		410	mm
	Surface milling width		420	mm
	Vertical head stroke	Max	930	mm
	Spindle rotation speed		0 ÷ 500	r.p.m.
TABLE	Useful dimensions - Lenght		1800	mm
	Useful dimensions - Width		600	mm
	Longitudinal table stroke		1780	mm
	Traverse table stroke		130	mm
	Automatic table feed (variable)		0 ÷ 150	mm/min.
MOTORS	Spindle rotation		3	kW
	Fast head feed		0,75	kW
	Automatic table feed (variable)		0,75	kW
	Tool grinder		0,5	kW
DIMENSIONS	Lenght		3200	mm
	Width		1550	mm
	Height		2700	mm
WORKSPACE REQUIRED	Lenght		4980	mm
	Width		1680	mm
	Net weight		3200	kg

OLYMPIA KS



Olympia KS

Standard Equipment

Complete electric equipment with control at low tension.
Tool automatic positioning at the end of boring
Spindle motor speed variable control
2 setting up supports 100 mm high with bolts
2 setting up supports 200 mm high with bolts
2 setting up supports 300 mm high with bolts
4 locking clamps with bolts
Boring infeed control system
Centering system
Surface-milling attachment complete with spindle, tool-plate with cutting tools (**Ts480**)
Automatic longitudinal table feed variable
Set of spanners
Operating manual

Extra Equipment

Tool grinding device (electric motor included), abrasive wheel, diamond wheel, grinding jig
Boring spindle for ø 31 ÷ 500 mm, complete with tool setting micrometer, cutting tools with holders, centering device
Fixture for fat cylinder clamping
Universal fixture for V engine clamping
Universal fixture for cylinder liner clamping
Fixture for motorcycle cylinder clamping
Special milling and drilling splindel morse taper N 3 - 4 - Iso 40 - Iso 50
Tool holder ø 490 mm (cap ø 475 mm) 1 CBN tool for cast iron and 1 PCD tool holder for aluminum
Universal device for blocking caterpillar V engines with 3 reference squares at 30° and 45°
Micrometric devices for measuring cylinder bores - range 30÷300 mm

Technical Specification

Head	Boring diameters with standard spindles	Min	31	mm
		Max	500	mm
	Boring depth	Max	1000	mm
	Distance table to head	Max	2160	mm
		Min	600	mm
	Distance spindle centre to column guides		550	mm
	Surface milling width		480	mm
	Surface milling lenght		2950	mm
	Vertical head stroke	Max	1230	mm
	Spindle rotation speed		0 ÷ 500	r.p.m.
	Automatic head feeds (variable)		0,05 ÷ 0,25	mm/rev.
	Fast hoisting speed		850	mm/min.
Table	Useful dimensions - Lenght		3000	mm
	Useful dimensions - Width		700	mm
	Longitudinal table stroke		3200	mm
	Traverse table stroke		200	mm
	Automatic table feed (variable)		0-1500	mm/min.
Motors	Spindle rotation		5,5	kW
	Fast head feed		0,75	kW
	Tool grinder		0,5	kW
	Automatic table feed		1,5	kW
	Traverse table stroke		0,37	kW
Dimensions	Lenght		5500	mm
	Width		2380	mm
	Height		4000	mm
Workspace required	Lenght		6500	mm
	Width		2380	mm
	Net weight		9200	kg

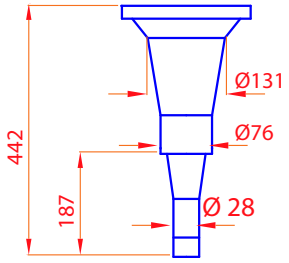
Spindles Reamers

Particular care surface to have a perfect quadrature with the plane of the tool.
Spindle body in special cast iron with internal ribs that give great insensitivity to variations.

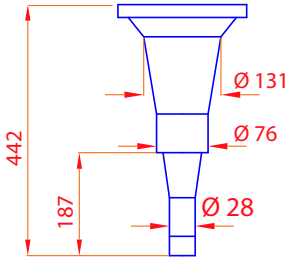
- Tapered bearings
- Preloading spring of tapered bearings
- Tool holder with automatic hooking system
- Centering rod

Spindles	Ø	Length	Tool Holder		Bevel	Tools		
			Code	Ø		for Boring	Blind holes	Dimensions
	mm	mm		mm				mm
MAC-170	31-55	397	PU-25	31-42	415	429	429/C	7x22
			PU-30	41-55				
MAC-180	38-65	442	PU-35	38-52	415	413	413/C	7x22
			PU-40	50-65				7x26
MAC-290	55-100	351	PU-50	55-75	416 ·	418	418/C	10x40
			PU-55	70-90		419	419/C	10x50
			PU-55	70-100				
MAC-300	62-100	351	PU-55	62-78	416	418	418/C	10x40
			PU-60	75-100		419	419/C	10x50
MAC-300S	66-100	351	PU-55	66-78	416	418	418/C	10x40
			PU-60	75-100		419	419/C	10x50
MAC-460	85-160	501	PU-80	88-127	417	420	420/C	10x65
			PU-95	121-160				
MAC-480	85-180	501	PU-80	88-127	417	420	420/C	10x65
			PU-95	121-160				
			PU-110	150-180				
MAC-500	160-260	531	PU-100	160-215	471	472	472/C	14x90
			PU-120	205-260				
MAC-700	160-260	717	PU-100	160-215	471	472	472/C	14x90
			PU-120	205-260				
MAC 032	260-321		PU-150	260-320				

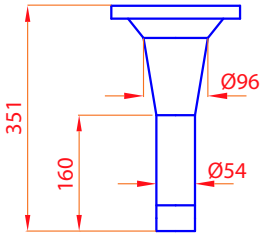
MAC 170



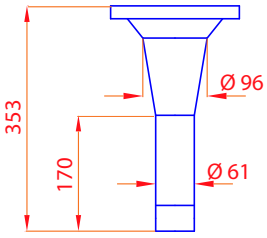
MAC 180



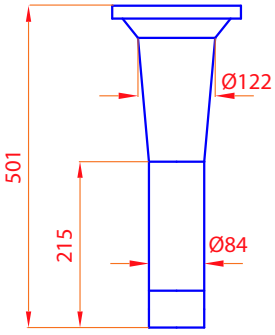
MAC 290



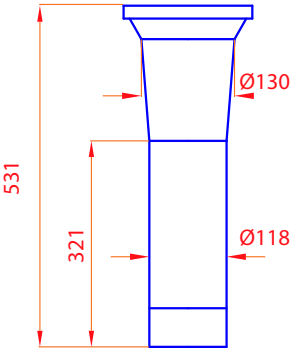
MAC 300



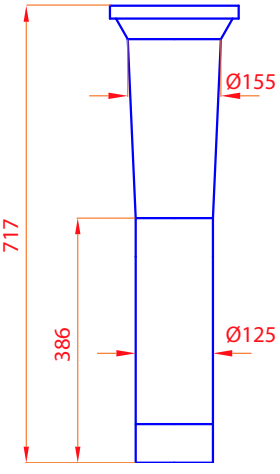
MAC 460



MAC 500



MAC 700



Model	Surface Grinding Devices			
	Cutter for Hard Metal Tools		CBN / PCD tool cutter	
	Cod	Ø mm	Cod	Ø mm
SIRIO-S	TS-320	320	265R/1	355
SPES	TS-380	380	265R/2	405
ORION-S	TS-420	420	265R/2	405
OLYMPIA	TS-480	480	265R/3	475

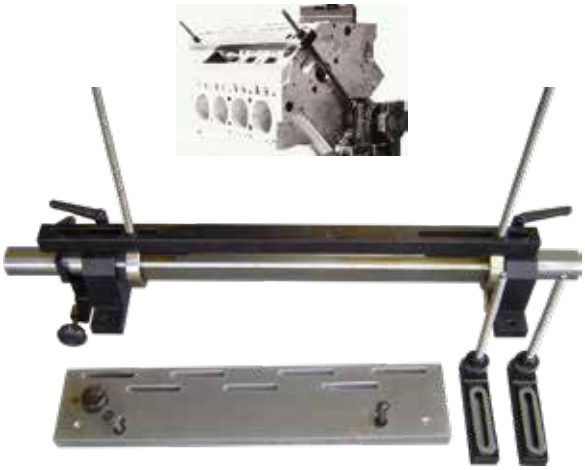
Surface Grinding Tools		Cod	mm
Cast iron	Hard metal tools	432	10x40
	CBN Tools	522D	9,5
	CBN Tools Holder	520D	
Aluminum	Hard metal tools	433/1	10x60
	PCB Tools	523D	9,5
	PCB Tools Holder	521D	



01	Spindle support device
02	3 axis dimension display
03	Rapid centering device
04	Cross table movement on sliding blocks and linear guides



Tools for boring and facing



Universal device for Engine Blocks fixing



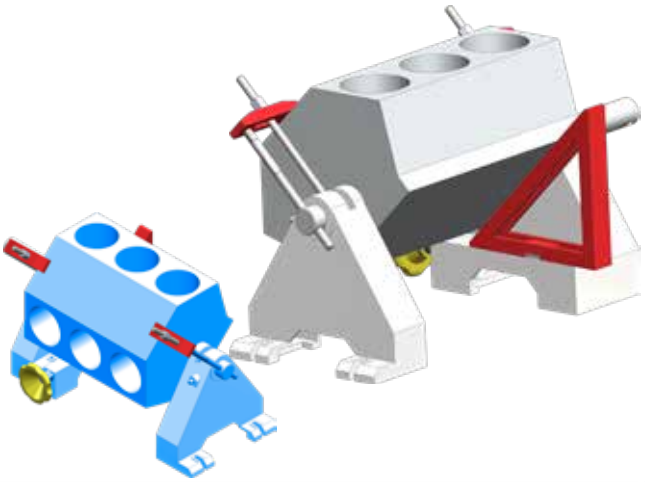
TF3 - Facing device
with radial automatic feed



153 B - Universal Truck
Locking Device



057 RT -Sharpening tool with template for
sharpening the 3 edges of the sheet



Universal device
for blocking caterpillar V engines with
3 reference squares at 30° and 45°

At Your Service Since 1936

Robbi has operated in the machine tool market since 1936 and specialise in the manufacture of machines tailored to meet the more demanding needs of the customer's complexed and more specialised demands.

Whilst maintaining competitive prices, Robbi have ensured their machines have stability and precision.

Robbi grinding machines, use the best technology and the most robust and reliable components available on the market in their build programme.

Robbi have a commitment to assist and help, proactively, its customers to ensure they maximise the efficiency of the machine.

Robbi, in fact, offers various service solutions, including the:

- *development of manufacturing processes;*
- *replacement parts spare part programme,*
- *making parts available for older models,*
- *tailored operational training programs*
- *and maintenance training to maximise the features of grinding machines and maintain the Robbi Grinders longevity.*

Understanding the needs of our customers we are offer the best solutions and services that increase their return on productivity thus improving our customers return on his investment.

Ideas that may improve our business are always appreciated from customers.

If there's anything we can do to improve your experience with Robbi, please let us know.

Robbi have a commitment to ensure all customers are completely satisfied.

Choose Robbi precision for increased productivity and a faster return on your investment.

Call us today,we've have a solution for your grinding application.



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PRECISION SINCE 1936
ROBBI
MADE IN ITALY

Robbi Group srl
Via dell'Industria 7
37040 Veronella - VR
Italia
39 0442 47700
39 0442 47966
robbi@robbigroup.com
https://rettificatrici-robbi.com

MEMBER COMPANY
UCIMU