



SM - SURFACE GRINDING AND MILLING MACHINES

AZ spa | MACHINE TOOLS

SM10G-M
SM13



SM Surface Grinding and Milling machine



GREAT WORKING CAPABILITY PRECISION AND ACCURACY FAST AND EASY TO OPERATE

Heavily constructed cast iron machines for automotive and industry
Top quality & productivity
Very advanced construction technology
Practical use & safe operation

SM10

The SM 10 machines are accurate and versatile surfacers for milling and grinding purposes for all cylinder heads and medium size engine blocks.
The automatic table alternating movement is due to a precise ball-screw system, that assures constant speed at any table feed.
The up&down movement is operated by handwheel or by electric motor



STANDARD EQUIPMENT

SM10G Surface Grinding machine

Re-circulating ball screw drive on table
Motorized lifting and downfall of the head
Toolholder with tool included
Micrometric control of downfeed
Coolant unit
Grinding wheel extractor
Wheel dressing unit

Diamond dresser with diamond included

SM10M Surface Milling machine

Motorized raise and downfall of the head
Re-circulating ball screw drive on table
Holder to support dual CBN (complete with CBN inserts)

Micrometric control of downfeed wheelhead
Extractor for CBN toolholder

SM13

Quick up and down of grinding head
Coolant system
Grindwheel dresser with diamond included
Grinding wheel 350 mm. Dia.
Grindwheel hub puller
Set of No.8 grinding segments.
Toolholder with carbide tool

SM10G/M - SM13

Electric controls 24V
Pair of parallel supports 135x350 mm
Edge clamp (4 pieces) and Toe clamp (4 pieces)
Service tool and operating manual



Ball screw system



Electric control



Toolholder



Toe clamp



Edge clamp



Grinding wheel extractor



Wheel dressing unit



Motorized lifting and downfeed



Parallel support



Coolant system



Grinding wheel



Grinding segments



OPTIONAL EQUIPMENT

SM10G

- AZ235 System conforming to CE standard (SM10)
- AZ700 V-engine fixture
- AZ867 CBN milling head assembly (with 2 CBN inserts for fast milling included)



AZ235-244



AZ700



AZ867



AZ411

SM10M

- AZ244 System conforming to CE standard (SM10)
- AZ700 V-engine fixture



AZ244

SM13

- AZ411 Diamond and rest 0,40 kt
- AZ867 CBN milling head assembly (with 2 CBN inserts for fast milling included)
- AZ700 V-engine fixture
- AZ235 Safety guard kit including sliding doors conforming to CE standard
- AZ849 Variable speed of grinding wheel



RECOMMENDED EQUIPMENT

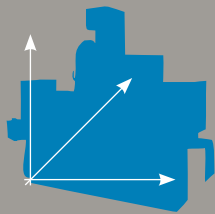
- AZ698 Universal support for heads
- AZ390 Grinding coolant (5 liters) for SM13



SM - SURFACE GRINDING AND MILLING MACHINES

	SM10G	SM10M	SM13
WORKING CAPACITY			
Max. automatic table traverse	1030 mm	1030 mm	1300 mm
Vertical wheelhead traverse	370 mm	370 mm	515 mm
Max. grinding width	340 mm	-	340 mm
Max. milling width with cutting tool	340 mm	340 mm	340 mm
GEOMETRIC FEATURES			
Useful table surface	850x340 mm	850x340 mm	1100x340 mm
Min. and max. height table to wheel	115-605 mm	-	105-620 mm
Min. and max. height table to tool or milling cutter	105-595 mm	110-610 mm	95-610 mm
Distance from column to table C/L	250 mm	250 mm	250 mm
Segmental wheel diameter	350 mm	-	350 mm
CBN milling head (optional)	350 mm	350 mm	350 mm
SPEEDS AND FEEDS			
Grinding wheel rotation speed	700-1400 RPM	700-1400 RPM	700-1400 RPM
Milling rotation speed (optional)	-	-	-
Rapid wheelhead feed speed, per minute	1000 mm/min	1000 mm/min	1000 mm/min
Min. and max. table traverse feed speed, per minute	0-1650 mm/min (elettromeccanica)	0-1650 mm/min (elettromeccanica)	0-1650 mm/min (elettromeccanica)
MOTOR POWER			
Grinding and single-point cutting tool spindle	3,75 KW	3,75 KW	3,75 KW
Milling cutter spindle	0,25 KW	0,25 KW	0,25 KW
Rapid vertical wheelhead traverse	0,18 KW	0,18 KW	0,18 KW
Hydraulic system	-	-	-
Electric coolant pump	0,12 KW	-	0,15 KW

SPECIFICATIONS >>>



	SM10G	SM10M	SM13
Dimensions without packing	2000x1190x2100 mm	2000x1190x2100 mm	2000x1300x2050 mm
Dimensions with packing	2100x1290x2200 mm	2100x1290x2200 mm	2100x1400x2150 mm
Weight	950 kg	950 kg	1130 kg
Weight with packing	1020 kg	1020 kg	1250 kg

DIMENSIONS AND WEIGHTS >>>



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