



## SP - SURFACE GRINDING AND MILLING MACHINES

AZ spa | MACHINE TOOLS

SP1300  
SP1600  
SP2000  
version M-Y-PLC

SP1300  
SP1600  
SP2000

## SURFACE GRINDING AND MILLING MACHINES



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- Variable speed
  - on the table movement
  - on the head movement
  - on the grinding wheel rotation

Automatic and programmable working cycle

Head movement with ball screw system

Table movement with ball screw system



### PLC VERSION

SP1300 PLC  
SP1600 PLC  
SP2000 PLC



SP 1600Y PLC

AZ SPA THIENE ITALY



### Y VERSION

SP1300 Y  
SP1600 Y  
SP2000 Y

### M VERSION

SP1300 M  
SP1600 M  
SP2000 M

### Y version HYDRAULIC VERSION

- Head movement with ball screw system
- Hydraulic movement

### M version MANUAL VERSION

- Ball screw system in the table and head movement
- Manual working cycle



SP1300  
SP1600  
SP2000

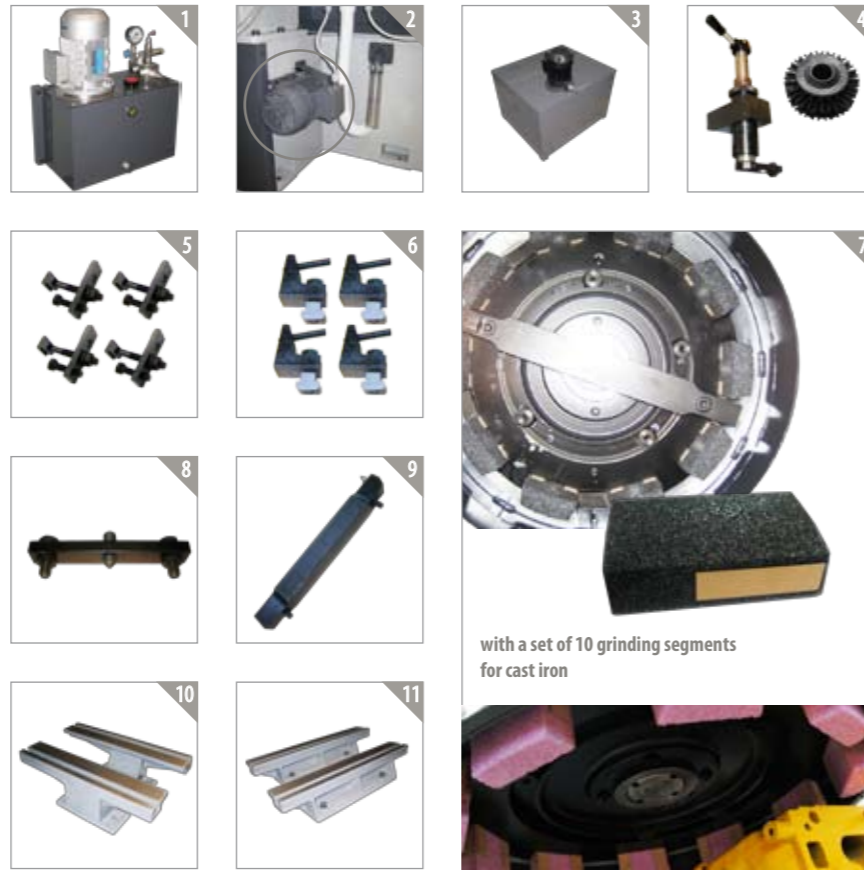
SURFACE GRINDING AND MILLING MACHINES



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STANDARD EQUIPMENT

- Low voltage electric controls (24V)
- Hydraulic system (**only Y version**) (1)
- Head movement with ball screw system (**Y version**)
- Quick up and down of grinding head (2)
- Coolant system (3)
- Grindwheel dresser (4)
- Edge clamp (4 pieces) (5)
- Toe clamp (4 pieces) (6)
- Grinding wheel (7)
  - 350 mm. dia. for SP1300
  - 420 mm. dia. for SP1600
  - 450 mm. dia. for SP2000
- with 10 grinding segments
- Grindwheel hub puller (8)
- Toolholder with carbide tool (9)
- Pair of parallel supports
  - 135x420 cm (SP1300-SP1600)(10)
  - 120x570 cm (SP2000)(11)
- Service tools
- Operating manual

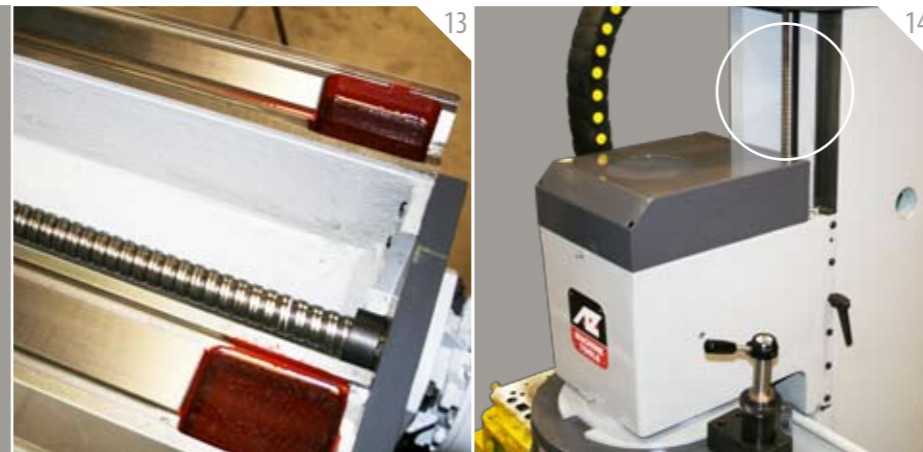


with a set of 10 grinding segments for cast iron



PLC version

- Variable speeds, works and automatic cycles controlled by PLC (12)
- Variable speed on the table movement, on the head movement, on the grinding wheel rotation
- Table and head movement with ball screw system (13-14)
- Automatic down feed with PLC



OPTIONAL EQUIPMENT

- Safety guard kit including sliding doors conforming to CE standard:
  - AZ230 (SP1300)
  - AZ231 (SP1600)
  - AZ236 (SP2000)
- Variable speed of grinding wheel:(**Y version**)
  - AZ849 (SP1400-SP1600)
  - AZ848 (SP2000)
- AZ411 Diamond and rest 0,40 kt
- CBN milling head assembly (with 2 CBN inserts for fast milling included) :
  - AZ867 (SP1300)
  - AZ871 (SP1600)
  - AZ874 (SP2000)
- AZ851 Automatic down feed (**Y version**)  
(in PLC version is controlled by PLC)
- AZ232 Plc Automatic working-cycle, including present of numbers of working travel, spark out, return to start position. (**Y version**)
- AZ852 Flywheel grinding device with flaring cup grindwheel
- AZ853 Motor-driven rotary table dia. 390 mm
- AZ857 Device for speed 200 and 400 RPM of grinding wheel
- V-engine fixture:
  - AZ700 (SP1300-SP1600)
  - AZ601 (SP2000)
  - AZ850 Magnetic cleaner

RECOMMENDED EQUIPMENT

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



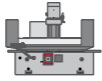
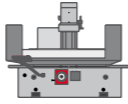
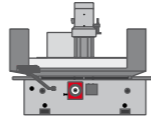
SP1300  
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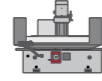
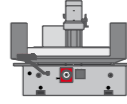
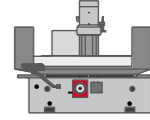
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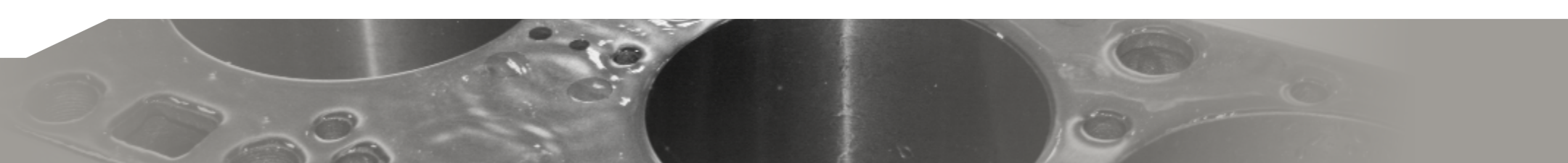
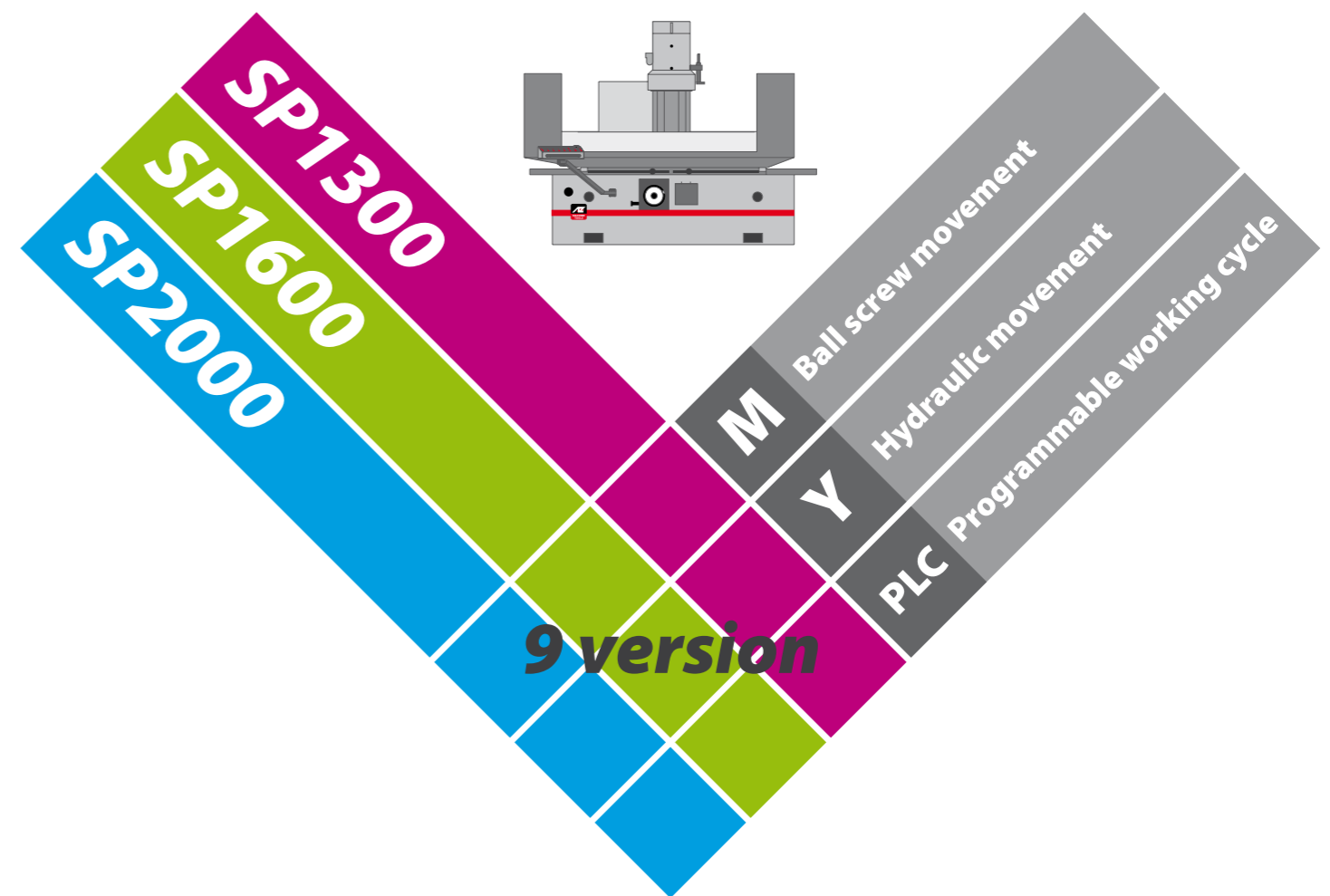
SPECIFICATIONS

	SP1300	SP1600	SP2000Y
<b>WORKING CAPACITY</b>			
Max. automatic table traverse	1300 mm	1600 mm	2000 mm
Max. grinding width	340 mm	410 mm	440 mm
<b>GEOMETRIC FEATURES</b>			
Useful table surface	1100x340 mm	1400x410 mm	1800x440 mm
Min. and max. height table to wheel	0-740 mm	0-850 mm	0-850 mm
Distance from column to table C/L	260 mm	260 mm	395 mm
Segmental wheel diameter	350 mm	420 mm	450 mm
CBN milling head (optional)	350 mm	420 mm	450 mm
<b>SPEEDS AND FEEDS</b>			
Grinding wheel rotation speed	700-1400 RPM	700-1400 RPM	175-350-1400 RPM
Version with variable grinding wheel rotation speed	-	-	200-1200 mm
Milling rotation speed (optional)	200-400 RPM	200-400 RPM	100 – 400 mm
Rapid wheelhead feed speed, per minute	1000 mm/min	1000 mm/min	1000 mm/min
Y VERSION Min. and max. table traverse feed speed, per minute	0-4650 mm/min	0-4650 mm/min	0-8000 mm/min
PLC VERSION Min. and max. table traverse feed speed, per minute	0-2400mm/min	0-2400mm/min	0-2400mm/min
<b>MOTOR POWER</b>			
Grinding and single-point cutting tool spindle	3,75 KW	3,75 KW	7,5 KW
Milling cutter spindle	0,75 KW	0,75 KW	0,6 – 1,1 KW
Y VERSION Rapid vertical wheelhead traverse	0.5 KW	0.5 KW	0.55 KW
Hydraulic system	0.4 KW	0.4 KW	1 KW
PLC VERSION Table movement	0,25KW	0,25KW	0,25KW
Head movement	3.4 Nm	3.4 Nm	3.4 Nm
Electric coolant pump	0.12 KW	0.12 KW	0.16 KW

Other construction on request

DIMENSIONS

	SP1300	SP1600	SP2000Y
<b>DIMENSIONS</b>			
Dimensions	2450x1100x1850 mm	2820x1350x2250 mm	3300x1530x2400 mm
Weights with packing	1800 kg	2100 kg	3900 kg
Weights without packing	1650 kg	1800 kg	3200 kg





AZ spa | MACHINE TOOLS



## SP - SURFACE GRINDING AND MILLING MACHINES

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Subject to change, as of APRIL 2011