



## VB - VERTICAL BORING AND MILLING MACHINES

AZ spa | MACHINE TOOLS

**VB400M**  
**VB500M**





#### CONTROL PANEL

All the electronic functions of the VB control panel are at the operator's fingertips. The control panel is placed on a pivoted arm, fixed on the base of the machine, as per the latest safety norms.

The three LED readouts indicate the variation of:

- spindle RPM
- powerhead downfeed rate
- table traverse rate

#### SPINDLE STORING & LOADING FIXTURE

The AZ801 fixture allows the operator to store the spindles when not in use, and attach them to the power head without removing the workpiece.

Easy and fast. Minimal manual effort involved.

Change from boring to milling and back on set-up only.



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VB400-VB500 >>>





### ADVANTAGES OF CBN MILLING

When required to remove a specific amount of material from a workpiece, CBN milling is much more precise and it is extremely fast and accurate.

For example, you can mill at 500/600 mm/min. feed speed, or remove up to 1 mm with one pass.

### CBN TOOLBIT

The toolbit is a circular solid CBN structure having multiple cutting angle.

It has excellent wear characteristics with high thermal and mechanical shock resistance.

The bit is recommended for high speed machining on non-ferrous and ferrous materials up to 50-60 Rockwell.



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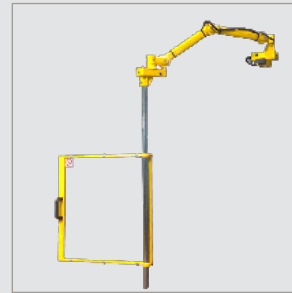


**STANDARD EQUIPMENT**

- Machine with surfacing equipment including variable speed table trasverse
- CBN milling head (diam. 400mm)
- Electric system conforming to CE standards
- Safety-guard conforming to CE standards
- Fixture for storing and loading of spindles and milling head (AZ801)



CBN milling head



Safety-guard

VB400M  
VB500M



AZ544



AZ524



AZ601



AZ601.02

**EQUIPMENTS >>>**



**RECOMMENDED EQUIPMENT**

- AZ503 Equipment for boring from 80 to 200 mm dia.
- AZ504 Equipment for boring from 125 to 320 mm dia.
- AZ524 Boring head from 320 to 400 mm dia. (for AZ 504)
- AZ508 Equipment for boring from 300 to 500 mm dia.



AZ501



AZ502



AZ503



AZ504

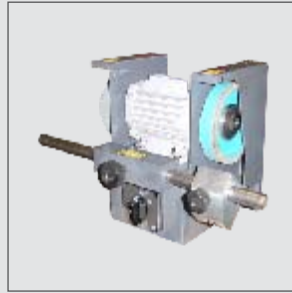
Device for tool positioning and quick return of boring head at end of cut  
 Tools grinder complete with sharpening supports  
 Parallel supports ( 2 pairs )  
 30° Brased tool for cast iron  
 Edge clamp assembly (4 pieces)  
 Tools measuring device with instrument  
 Service tools  
 Operating manual



Edge clamp assembly



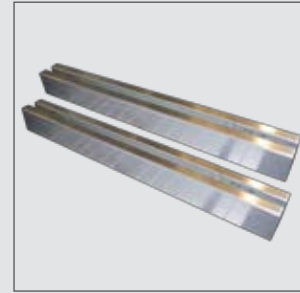
AZ801



Tools grinder



Parallel supports



Parallel supports



AZ702



AZ703-4-5



AZ609



AZ712



AZ505

**OPTIONAL EQUIPMENT**

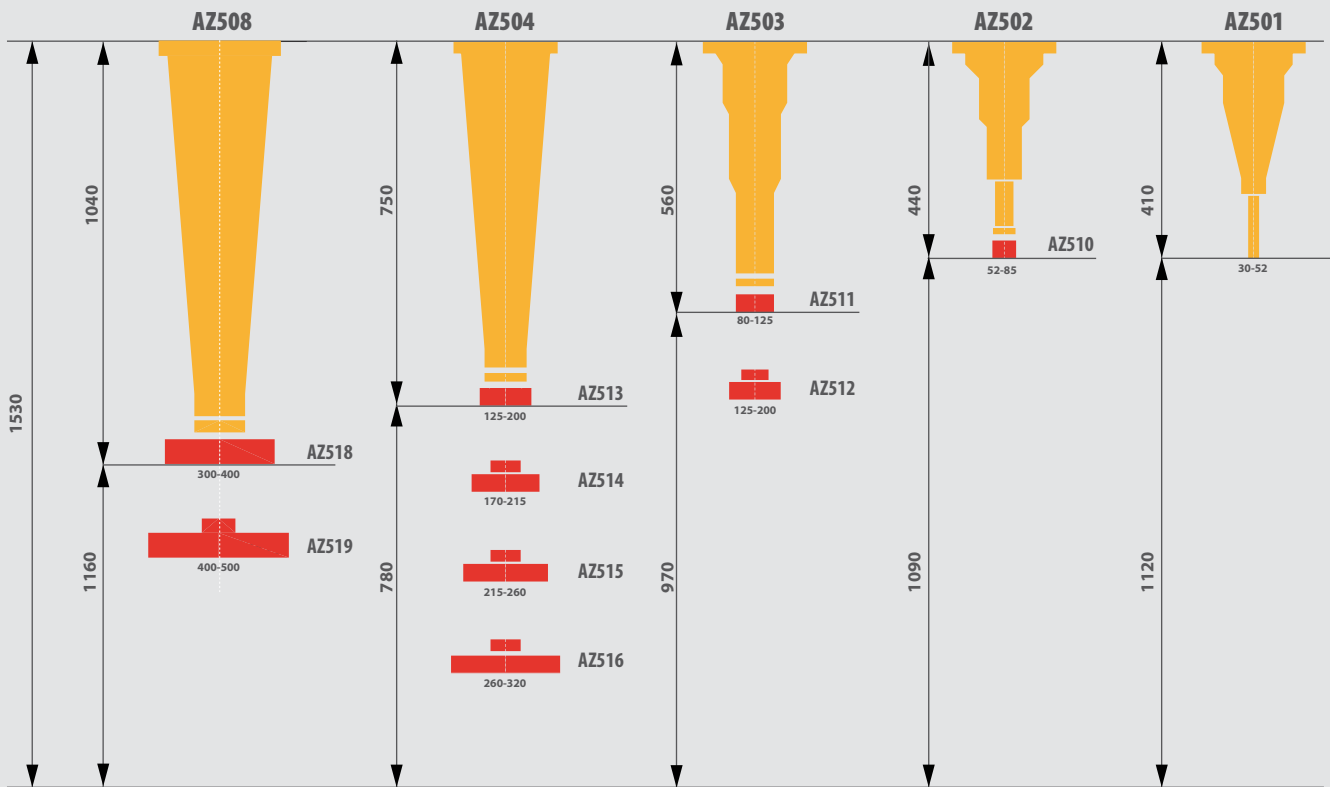
- AZ501 Equipment for boring from 30 to 52 mm dia.
- AZ502 Equipment for boring from 52 to 85 mm dia.
- AZ544 Boring head from 80 to 125mm. diameter for AZ502
- AZ505 Radial head for chamfering from 60 to 320mm. dia.
- AZ601 Universal V-engine fixture with 45° reference square
- AZ601.02 Reference square from 30° to 60° per AZ 601
- AZ702 Cylinder block quick clamp fixture, heavy duty
- AZ703 Inner gauge capacity from 30 to 100 mm. with centesimal dial gauge
- AZ704 Inner gauge capacity from 50 to 178 mm. with centesimal dial gauge
- AZ705 Inner gauge capacity from 100 to 300 mm with centesimal dial gauge
- AZ609 Universal support for V engines
- AZ712 Device for depth measuring



Tools measuring device



30° Brased tool for cast iron



**VB400M  
VB500M**

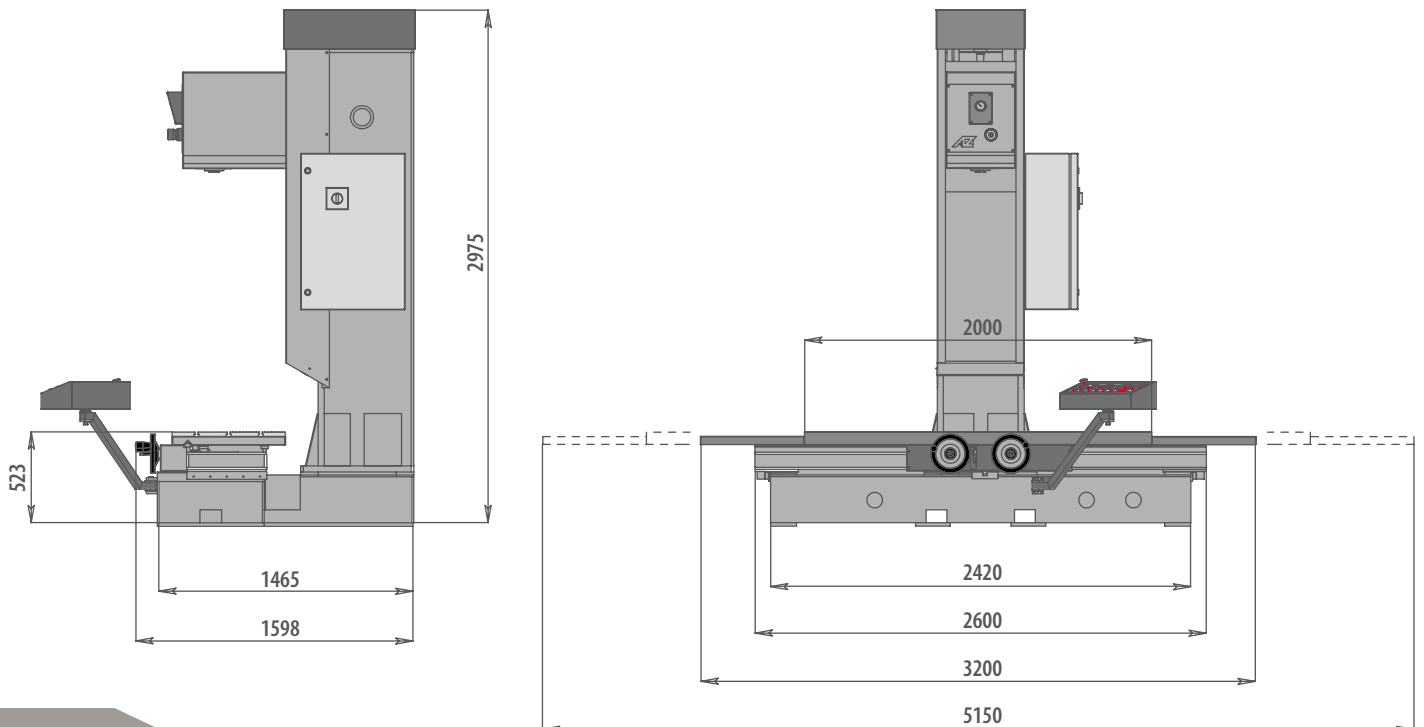
### EQUIPMENT FOR BORING

AZ504 Equipment for boring from 125 to 320 mm diameter  
 AZ503 Equipment for boring from 80 to 200 mm diameter  
 AZ501 Equipment for boring from 30 to 52 mm diameter

AZ502 Equipment for boring from 52 to 85 mm diameter  
 AZ508 Equipment for boring from 300 to 500 mm diameter

### DIMENSIONS & EQUIPMENT FOR BORING >>>

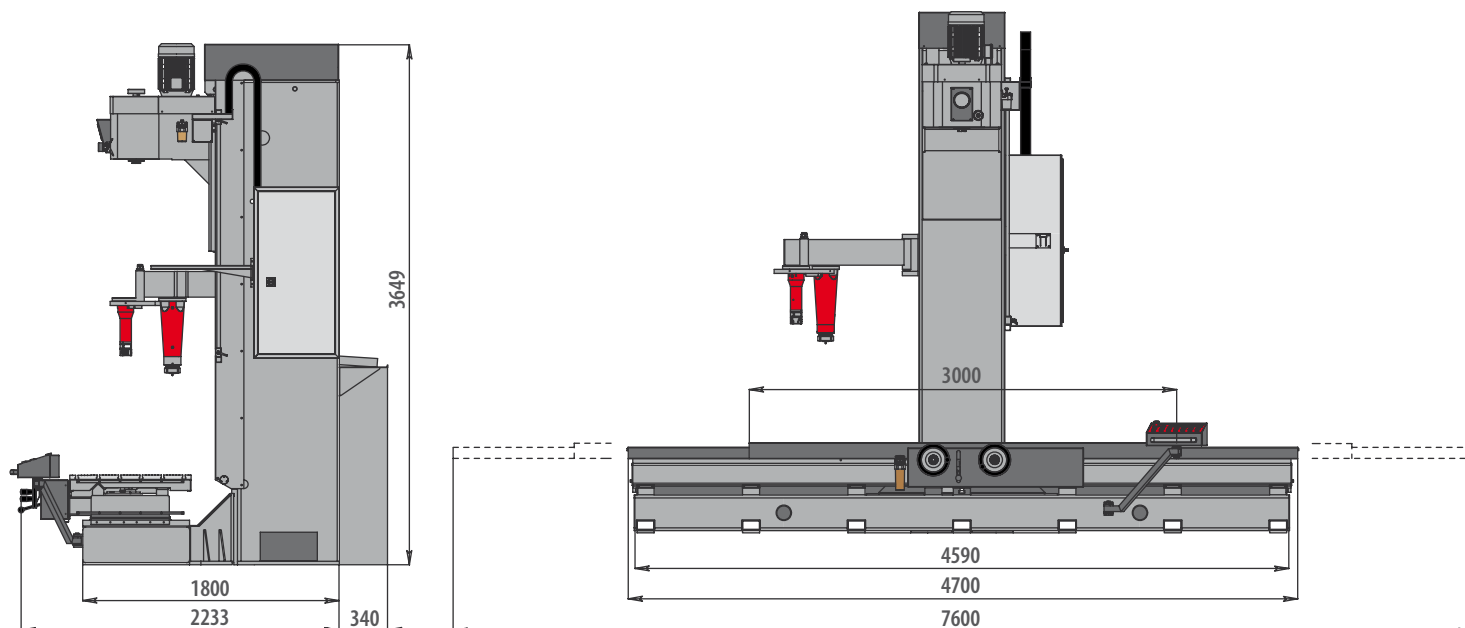
**VB400**



	<b>VB400M</b>	<b>VB500M</b>
<b>WORKING CAPACITY</b>		
Boring range	30-400 mm	30-500 mm
Max boring height	970 mm	1450 mm
Max milling width	400 mm	500 mm
Max milling length	1750 mm	2700 mm
<b>GEOMETRIC FEATURES</b>		
Max vertical travel of the head	970 mm	1450 mm
Distance from spindle center to column	420 mm	550 mm
Table surface	2000x650 mm	3000x850 mm
Max longitudinal travel of table	1950 mm	2900 mm
Max traverse travel of table	175 mm	200 mm
Max distance between head and table	1530 mm	2160 mm
<b>SPEED</b>		
Spindle rotation	60-600 rpm	40-400 rpm
Head movement	0-100 mm/min	0-100 mm/min
Table movement	0-200 mm/min	0-200 mm/min
<b>MOTOR POWERS</b>		
Spindle rotation	4 KW	5,5 KW
Head movement (working and rapid feed)	3 KW	3 KW
Table movement	3 KW	3 KW

**SPECIFICATIONS >>>**

**VB500**





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