



VB - VERTICAL BORING AND MILLING MACHINES

AZ spa | MACHINE TOOLS

VB150/M
VB182/M
VB260/M



CONTROL PANEL

All the electronic functions of the VB control panel at the operator fingertips. The control panel is placed on a pivoted arm, fixed on the basement of the machine, as per 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.



VB150 - VB182 - VB260



VB // Vertical Boring and Milling machines



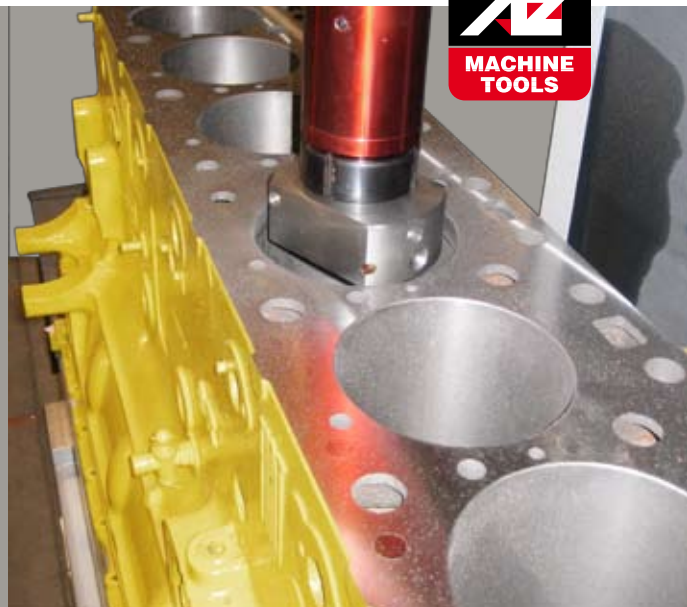
ADVANTAGES OF CBN MILLING

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.

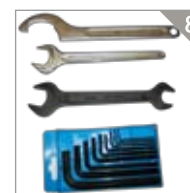
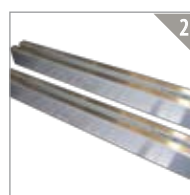
The bit is recommended for high speed machining on non-ferrous and ferrous materials up to 50-60 Rockwell.





STANDARD EQUIPMENT

Electric system single phase
 CBN milling head (only in M version)
 Low voltage electric control 24 V.
 Pair of parallel supports
 30° chamfering tool for cast iron
 Edge clamp set (4 pieces)
 Tools measuring device with instrument
 Device for tool positioning and quick return of boring head at end of cut
 Grinder for tools complete with sharpening supports (only in VB260)
 Service tools
 Operating manual



RECOMMENDED EQUIPMENT

AZ525 Equipment for boring diameter from 30 to 52 mm (VB150)
AZ526 Equipment for boring diameter from 52 to 85 mm (VB150)
AZ527 Equipment for boring diameter from 80 to 125 mm (VB150)
AZ501 Equipment for boring from 30 to 52 mm of diameter (VB182-260)
AZ502 Equipment for boring from 52 to 85 mm of diameter (VB182-260)
AZ509 Equipment for boring from 80 to 200 mm of diameter (VB182-260)



Boring spindle
from 30 to 52 mm



Boring spindle
from 52 to 85 mm



Boring spindle
from 80 to 200 mm



OPTIONAL EQUIPMENT

- AZ237** Safety guard kit conforming to CE standards
- AZ544** Boring head from 80 to 125mm diameter for AZ 526 - AZ502
- AZ512** Boring head from 125 to 150 mm diameter for AZ 527 (VB150)
- AZ505** Radial head for chamfering from 60 to 320mm of diameter (VB150-182-260)
- AZ601** Universal V-engine fixture with 45° reference square (VB182-260)
- AZ601.02** Reference square 30° per AZ 601 (VB182-260)
- AZ701** Cylinder block quick clamp fixture, medium size
- AZ702** Cylinder block quick clamp fixture, heavy duty (VB182-260)
- AZ830** Grinder for tools complete with sharpening support (VB182)
- Inner gauge with centesimal dial gauge:
 - AZ703** capacity from 30 to 100mm
 - AZ704** capacity from 50 to 178mm
 - AZ705** capacity from 100 to 300 mm
- Depth measuring device :
 - AZ715** (VB182-260)
 - AZ720** (VB150)
- Spindle storing and loading fixture:
 - AZ803** (VB150)
 - AZ801** (VB182-260)
- XYZ axis digital readout by linear encoders:
 - AZ781** (VB182)
 - AZ783** (VB150)
 - AZ784** (VB260)



AZ512 Boring head



AZ544 Boring head



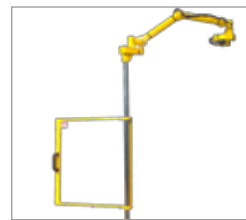
Axis digital readout



AZ601



Reference square



Safety guard



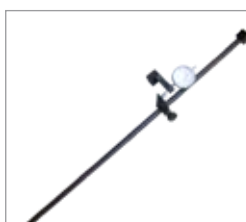
Cylinder block



Inner gauge



AZ505 Radial head



Measuring device

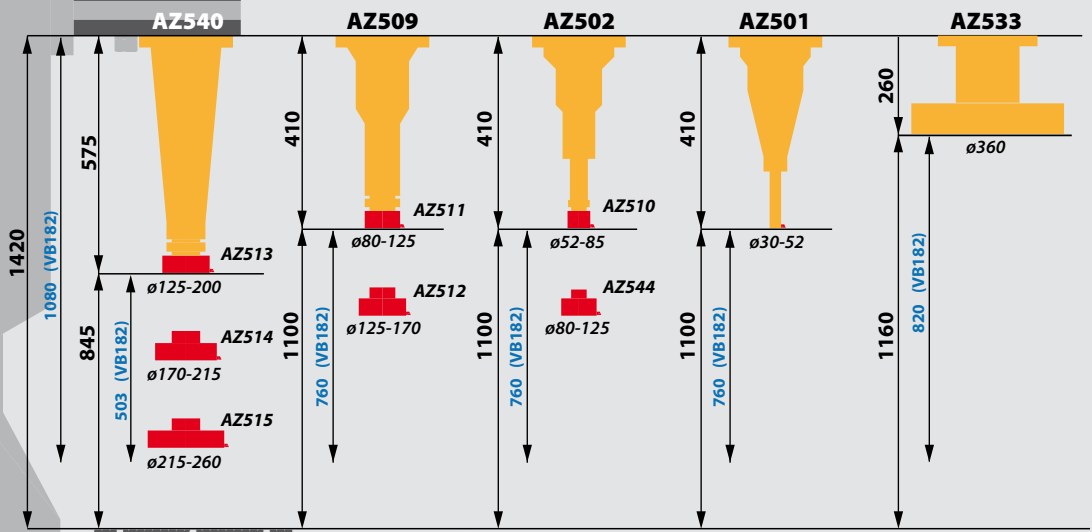


Spindle storing

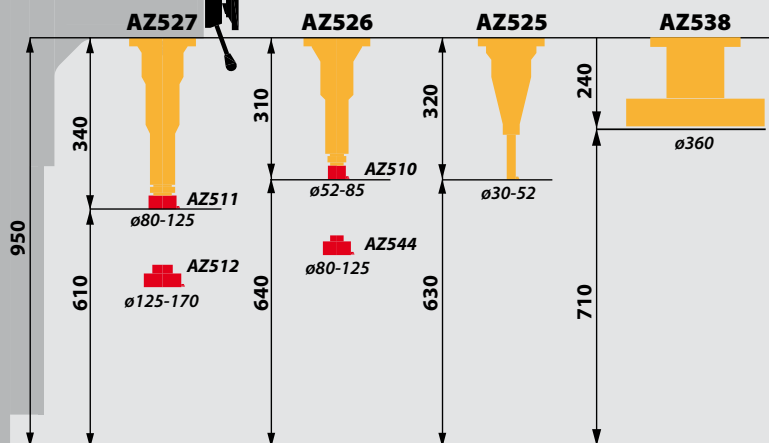


Grinder for tools

EQUIPMENT FOR BORING FOR VB182-VB260



EQUIPMENT FOR BORING FOR VB150



WORKING CAPACITY

	VB150	VB150M	VB182	VB182M	VB260	VB260M
Boring range	30-170	30-170	30-200	30-200	30-260	30-260
Max boring height	590	590	600	600	675	675
Max milling width	-	340	-	340	-	340
Max milling length	-	635	-	1225	-	1725

GEOMETRIC FEATURES

Max vertical travel of the head	590	590	600	600	675	675
Distance from spindle center to column	240	240	300-420	300-420	360-560	360-560
Table surface	860x340	860x340	1430x400	1430x400	2000x500	2000x500
Max longitudinal travel of table	810	810	1400	1400	1900	1900
Max traverse travel of table	60	60	120	120	135	135
Max distance between head and table	950	950	1100	1100	1420	1420

SPEED

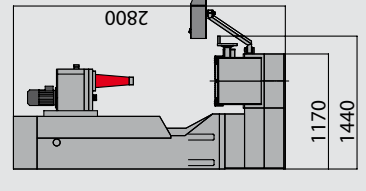
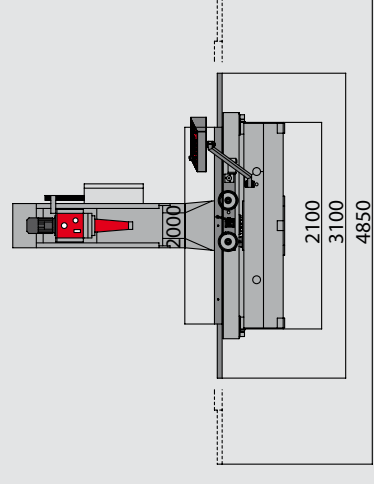
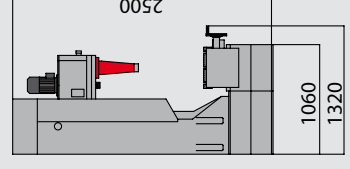
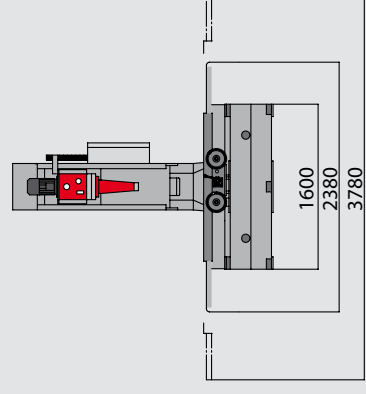
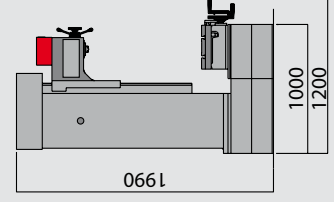
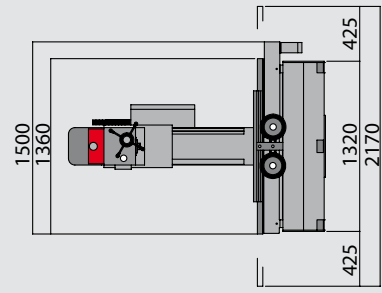
Spindle rotation	900	900	1000	1000	1000	1000
Head movement	0-50	0-50	0-100	0-100	0-100	0-100
Table movement	-	0-100	-	0-200	-	0-200

MOTOR POWERS

Spindle rotation	1,5	1,5	1,1	1,1	1,1	1,1
Head movement (working and rapid feed)	0,75	0,75	0,55	0,55	0,55	0,55
Table movement	-	0,75	-	0,75	-	0,75

DIMENSIONS

Dimensions	1620x1300x2100	1620x1300x2100	2700x1870x1520	2700x1870x1520	2750x1900x1950	2750x1900x1950
Dimensions with packing	1500x1170x2000	1500x1170x2000	2000x1250x2280	2000x1250x2280	2500x2300x1600	2500x2300x1600
Weight	1010	1010	2480	2480	2600	2600
Weight with packing	1260	1260	2600	2600	2950	2950



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Subject to change as of September 2011