VB VERTICAL BORING AND MILLING MACHINES

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 ef-
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)
OPTIONAL EQUIPMENT

AZ237 Safety guard kit conforming to CE standards

AZ512 Boring head from 125 to 150 mm diameter for AZ527 (VB150M)
AZ541 Boring head from 125 to 170 mm diameter for AZ503- AZ509 (VB182M-260M)

AZ505 Radial head for chamfering from 60 to 320 mm of diameter (VB150-182-260)

Safety guard kit conforming to CE standards
AZ237
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)

Spindle storing and loading fixture:
AZ803 (VB150)
AZ801 (VB182-260)

Depth measuring device:
AZ715 (VB182-260)
AZ720 (VB150)

XYZ axis digital readout by linear encoders:
AZ781 (VB182)
AZ783 (VB150)
AZ784 (VB260)

Inner gauge with centesimal dial gauge:
AZ703 capacity from 30 to 100 mm
AZ704 capacity from 50 to 178 mm
AZ705 capacity from 100 to 300 mm

AZ540 Boring spindle from 125 to 200 mm VB260

AZ544 Boring head from 80 to 125 mm diameter for AZ 526 - AZ502

AZ512
AZ544
AZ550
AZ544
AZ512
AZ831 Grinder for tools complete with sharpening support (VB182)
### Working Capacity

<table>
<thead>
<tr>
<th></th>
<th>VB150</th>
<th>VB150M</th>
<th>VB182</th>
<th>VB182M</th>
<th>VB260</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Boring range mm</td>
<td>30-170</td>
<td>30-170</td>
<td>30-200</td>
<td>30-200</td>
<td>30-260</td>
<td>30-260</td>
</tr>
<tr>
<td>Max boring height mm</td>
<td>590</td>
<td>590</td>
<td>600</td>
<td>600</td>
<td>675</td>
<td>675</td>
</tr>
<tr>
<td>Max milling width mm</td>
<td>-</td>
<td>340</td>
<td>-</td>
<td>340</td>
<td>-</td>
<td>340</td>
</tr>
<tr>
<td>Max milling length mm</td>
<td>-</td>
<td>635</td>
<td>-</td>
<td>1225</td>
<td>-</td>
<td>1725</td>
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### Geometric Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>VB150</th>
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</thead>
<tbody>
<tr>
<td>Max vertical travel of the head mm</td>
<td>590</td>
<td>590</td>
<td>600</td>
<td>600</td>
<td>675</td>
<td>675</td>
</tr>
<tr>
<td>Distance from spindle center to column mm</td>
<td>240</td>
<td>240</td>
<td>300-420</td>
<td>300-420</td>
<td>360-560</td>
<td>360-560</td>
</tr>
<tr>
<td>Table surface mm</td>
<td>860x340</td>
<td>860x340</td>
<td>1430x400</td>
<td>1430x400</td>
<td>2000x500</td>
<td>2000x500</td>
</tr>
<tr>
<td>Max longitudinal travel of table mm</td>
<td>810</td>
<td>810</td>
<td>1400</td>
<td>1400</td>
<td>1900</td>
<td>1900</td>
</tr>
<tr>
<td>Max traverse travel of table mm mm</td>
<td>60</td>
<td>60</td>
<td>120</td>
<td>120</td>
<td>135</td>
<td>135</td>
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<tr>
<td>Max distance between head and table mm</td>
<td>950</td>
<td>950</td>
<td>1100</td>
<td>1100</td>
<td>1420</td>
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### Speed

<table>
<thead>
<tr>
<th>Feature</th>
<th>VB150</th>
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</thead>
<tbody>
<tr>
<td>Spindle rotation rpm</td>
<td>900</td>
<td>900</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Head movement mm/min</td>
<td>0-50</td>
<td>0-50</td>
<td>0-100</td>
<td>0-100</td>
<td>0-100</td>
<td>0-100</td>
</tr>
<tr>
<td>Table movement mm/min</td>
<td>-</td>
<td>0-100</td>
<td>-</td>
<td>0-200</td>
<td>-</td>
<td>0-200</td>
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### Motor Powers

<table>
<thead>
<tr>
<th>Feature</th>
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<th>VB182</th>
<th>VB182M</th>
<th>VB260</th>
<th>VB260M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spindle rotation rpm</td>
<td>1,5</td>
<td>1,5</td>
<td>1,1</td>
<td>1,1</td>
<td>1,1</td>
<td>1,1</td>
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<tr>
<td>Head movement (working and rapid feed) KW</td>
<td>0,75</td>
<td>0,75</td>
<td>0,55</td>
<td>0,55</td>
<td>0,55</td>
<td>0,55</td>
</tr>
<tr>
<td>Table movement KW</td>
<td>-</td>
<td>0,75</td>
<td>-</td>
<td>0,75</td>
<td>-</td>
<td>0,75</td>
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### Dimensions

<table>
<thead>
<tr>
<th>Feature</th>
<th>VB150</th>
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<th>VB182M</th>
<th>VB260</th>
<th>VB260M</th>
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</thead>
<tbody>
<tr>
<td>Dimensions mm</td>
<td>1620x1300x2100</td>
<td>1620x1300x2100</td>
<td>2700x1870x1520</td>
<td>2700x1870x1520</td>
<td>2750x1900x1950</td>
<td>2750x1900x1950</td>
</tr>
<tr>
<td>Dimensions with packing mm</td>
<td>1500x1170x2000</td>
<td>1500x1170x2000</td>
<td>2000x1250x2280</td>
<td>2000x1250x2280</td>
<td>2500x2300x1600</td>
<td>2500x2300x1600</td>
</tr>
<tr>
<td>Weight kg</td>
<td>1010</td>
<td>1010</td>
<td>2480</td>
<td>2480</td>
<td>2600</td>
<td>2600</td>
</tr>
<tr>
<td>Weight with packing kg</td>
<td>1260</td>
<td>1260</td>
<td>2600</td>
<td>2600</td>
<td>2950</td>
<td>2950</td>
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