

## VG // Valve Grinding machine



## VG - VALVE GRINDING MACHINE

### WORKING CAPACITY

	VG19	VGX
Min. and max. valve stem diameter admitted	4-16 mm	6-16 mm
Max. valve head dia. admitted	90 mm	90 mm

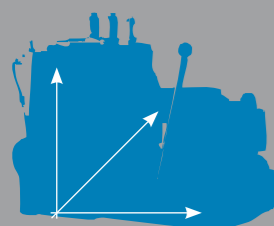
### GEOMETRIC FEATURES

	VG19	VGX
Grinding angle	15°-60°	15°-60°
Grinding wheel diameter	150 mm	180 mm
Diameter of the straight-cup grinding wheel	-	80 mm

### SPEEDS AND POWERS

	VG19	VGX
Grinding wheel rotation speed	2800 RPM	0-2800 RPM (variabile)
Spindle motor speed	0-55 RPM	0-55 RPM (variabile)
Grinding wheel motor power	0,18 KW	0,18 KW
Spindle motor power	0,12 KW	0,11 KW
Pump power	0,005 KW	0,005 KW

AZ spa MACHINE TOOLS



	VG19	VGX
Dimensions without packing	800x780x670 mm	820x780x670 mm
Height with base	1180 mm	1100 mm
Weight	70 kg	70 kg

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Subject to change, as of OCTOBER 2011



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AZ spa MACHINE TOOLS

VG19  
VGX

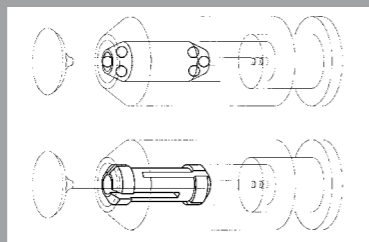




**VGX - NEW MODEL**

Variable rotation speed of valve  
 Variable speed of grinding wheel  
 Valve headstock adjustment from 15 to 60  
 Valve clamping by a collet  
 V-ways and valve stop for repeatible valve stem butt  
 Coolant flow adjusting by valve  
 The machine can be supplied with two different valve clamping system:

A: Optional ball chucks available  
 B: Precision collet available for each stem diameter of valve stem diameter



**VG19**

The AZ VG 19 Valve refacing machine is designed for several uses. Besides refacing the valve head, it can also recondition the valve stem. By means of special subsidiary tools, it can may also reface rocker shoes. The machine is easy to operate, has a stiff construction and is the answer to all precision requirements. The longitudinal and transverse carriage slide on dovetails guides, which make it possible to adjust the clearance. The transverse carriage - serving to approach the workpiece - is driven by the handwheel, whereas the longitudinal carriage - serving to feed the workpiece - is driven by rod with adjustable stroke. The valve headstock has an adjustment range from 30° to 60°. The valve is clamped in the head stock by means of expansible collets which ensure maximum stiffness and best centering of the valve and high precision operations. The standard machine is equipped with coolant attachment with gear pump and settling tank, incorporated in the machine base.



Grinding rockers arm device



Collet



Collet for short valves



Steel sheet base



AZ668



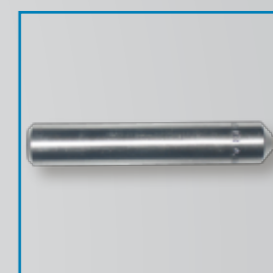
AZ667



Cup grinding wheel



Support for grinding valve's stem



Diamond and rest

**VG19**

**STANDARD**

Coolant system  
 Collet from 6 to 9 mm. dia.  
 Collet from 9 to 12 mm. dia.  
 Collet from 12 to 16 mm. dia.  
 Support for diamond holder (diamond excluded)  
 Grinding wheel 150x12x25 mm. dia.  
 Service tools  
 Operating manual

**OPTIONAL**

AZ392 5 liters of special cutting oil  
 AZ411 Diamond and rest 0,40 kt  
 AZ659 Collet for short valves 4 mm diameter  
 AZ660 Collet for short valves 5 mm diameter  
 AZ661 Collet for short valves 5,5 mm diameter

AZ662 Collet for short valves 6 mm. dia  
 AZ663 Collet for short valves 7 mm. dia  
 AZ664 Collet for short valves 8 mm dia  
 AZ665 Collet for short valves 9 mm dia  
 AZ666 Collet for short valves 10 mm. dia  
 AZ865 Grinding rockers arm device  
 AZ866 Steel sheet base



**VGX**

**STANDARD**

Variable speed of valve spindle  
 Adjustable grinding wheel speed system  
 Grinding wheel 180x12x32 mm  
 Cup grinding wheel 80x30x15mm  
 Support for diamond holder (diamond excluded)  
 Support for grinding valve's stem  
 Coolant system  
 Service tools  
 Operating manual

**RECOMMENDED**

AZ667 3 collets system for valves with dia. 6-16 mm.  
 AZ668 Ball chuck system for valves dia. 4 to 14 mm (2 pieces)

**OPTIONAL**

AZ392 5 liters of special cutting oil  
 AZ411 Diamond and rest 0,40 kt  
 AZ659 Collet for short valves 4 mm diameter

AZ660 Collet for short valves 5 mm dia  
 AZ661 Collet for short valves 5,5 mm dia  
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