



## TVR90 Valve Grinding Machine

Valve Grinding Machine Model:TVR series can complete following work in five minutes: Clamping of valve stem and keep high accuracy positioning at the moment; Precision grinding of the conical surface of valve, roundness can be achieved 0.005 mm, finish can be achieved Ra0.32. The whole process is simple and perfect, very easy to use the machine, do not need specialist training, you can do that perfect work, depended on the 2×3 ball high precision pneumatic chuck. TheTVR series is new standards in speed and accuracy for valve grinding.

### Features

1. Air – operated, Six – Ball chuck design for perfect alignment and grinding, only five minutes from the clamping to finish grinding, and can get a very good roundness and finish.
2. Variable valve speed allows the operator to adjust surface speed when working with different size of valves
3. High accuracy dovetail guide of grinding wheel moving, manual scraping to reach super smooth, it can effectively absorb vibration.
4. Valve steam depth stop is a practical device, especially when you need to process several of the same valves, and allow valves to ground to the exact same length.
5. Casting iron base reduce the vibration, sturdy and durable.
6. Centralized lubricating system to avoid the cumbersome manual multi – point add oil.
7. The valve head grinding wheel and the valve steam grinding wheel are equipped with diamond dresser, very convenient dressing of grinding wheel.
8. The optional tools cabinet has a extra 2 liters coolant tank, of course, there is enough space you can change more bigger coolant tank, if you want to more coolant water.
9. The V rest of Stem/Butt End Grinding device allows all valves in a set to be ground to the same distance from valve seat to stem end - essential for overhead camshaft type cylinder heads. Exact amount of material removed from the stem end can be measured with the micrometer adjustment system.

## Specifications

Model	TVR90	TVR100
Type of Drive System	Air / Electric	
Valve Stem Diameter Range with Chuck	4 – 14 mm	
Valve Stem Length Range with Chuck	54 – 260 mm	
Valve Head Diameter Range	20 – 102 mm	
Valve Total Length Range	90 – 315 mm	
Max. Boring Dia.	14 – 60 mm	
Valve Head Grinding Angle	15 – 55°	
Valve Stem Butt Grinding Angle	0° and 45°	
Valve Head Grinding Wheel Diameter	178 mm	
Valve Stem Butt Grinding Wheel Diameter	76 mm	
Valve & Butt Grinding Wheel Speed	3500 rpm at 50 Hz ; 4200 rpm at 60 Hz	
Chuck Rotation Speed	50 – 230 rpm	
Working Accuracy	≤0.015 mm ( 0.006")	≤0.005 mm ( 0.002")
Coolant Capacity	3 Liter	
Required Rated Air Pressure	6 Bar / 85 PSI	
Power of Grinding Wheel Motor	0.37 kW	
Power of Chuck Rotation Motor	0.09 kW	
Overall Dimension of Machine	945×650×430 mm	
Overall Dimension of Tools Cabinet	700×380×810 mm	
Package Size of Machine	930×710×690 mm	
Package Size of Tools Cabinet	850×550×1070 mm	
N.W. / G.W. of Machine	130 Kg / 160 Kg	
N.W. / G.W. of Tools Cabinet	50 Kg / 70 Kg	