



IN-SITU VALVE MAINTENANCE

Globe Valve (Flat Seat) Grinding & Lapping Machine

Model **IS57928**

80 – 600 mm

Valve size range (NB 3" – 24")



2

Machine assemblies
supplied

1-man

Operation – handy, light &
robust

On-site

Or workshop overhaul

E / P

Electric or pneumatic drive

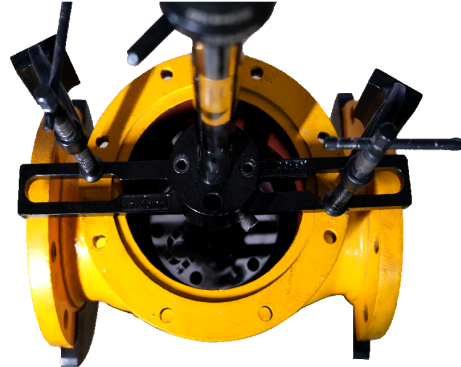
Note: INSITOOOLS will supply 2 Machine Assemblies in this model. You can simultaneously do lapping on 2 different valves of different sizes with the 2 machine assemblies we provide with this model.

01 Product Overview

PORTABLE Globe Valve (FLAT SEAT) Grinding & Lapping Machine for the refurbishing on site (In Situ) of sealing surfaces [body seat ring] in Flat Seat Globe Valves of various makes & size.

Design

- ✓ Modern construction, handy, light, and robust
- ✓ One-man-operation!
- ✓ Suitable for on-site service as well as for overhaul in the workshop
- ✓ Machine, tools, and accessories are corrosion-protected by chrome plated of surface



Flat Bar Clamping mounted on valve body

INSITOOLS will supply 2 Machine Assembly

MACHINE ASSEMBLY NO: 1

Valve Size 80 – 150 mm

Valve Size	80mm to 150mm
Submersible Depth	350mm
Rotating Machine Shaft	15mm

Machine consist of 15mm Rotating Machine Shaft with Adapter Coupling for fitment of Flat Seat for Lapping, and also include Base Clamping for mounting on valve body.

MACHINE ASSEMBLY NO: 2

Valve Size 200 – 600 mm

Valve Size	200mm to 600mm
Submersible Depth	600mm
Rotating Machine Shaft	20mm

Machine consist of 20mm Rotating Machine Shaft with Adapter Coupling for fitment of Flat Seat for Lapping, and also include Base Clamping for mounting on valve body.

Clamping Assembly

Flat Bar Clamping

Working Range 3" to 24"

Drive Options

OPTION A

Electrically Operated Motor (Qty-1No.)

Power Input	1300 Watt
Voltage Input	220-240V / 50-60HZ
Free Speed of motor	3100 RPM
Speed Reduction Gear Box	1 Set
With speed regulator.	

OPTION B

Pneumatic Operated Motor (Qty-1No.)

Power Output	0.83 HP
Free Speed of Air motor	270 RPM
Stall Torque	84 Nm
Required Air Flow	120 PSI
With arrangement for speed control.	

02 Grinding System · DN 80 – 150

Flat Grinding Plates for Working Range DN 80 – 150 (NB 3" - 6") made up of Stainless Steel.

Size of Plates	Valve Size	Suitable for Valves seat ring having maximum OD with ROTATING HEADS		Qty.
		25mm dia	35mm dia	
80mm dia	-	80mm	90mm	1 No.
85mm dia	-	85mm	95mm	1 No.
90mm dia	-	90mm	100mm	1 No.
95mm dia	80mm	95mm	105mm	1 No.
100mm dia	-	100mm	110mm	1 No.
105mm dia	-	105mm	115mm	1 No.
120mm dia	100mm	120mm	130mm	1 No.
145mm dia	125mm	145mm	155mm	1 No.
165mm dia	150mm	165mm	175mm	1 No.
180mm dia	150mm	180mm	195mm	1 No.

Rotating Grinding Heads of SS

Size	Qty.	Product Illustration
25mm diameter	6 Nos.	
35mm diameter	6 Nos.	

Self Adhesive Abrasive Papers

ALUMINIUM OXIDE					
SIZE	80 GRIT	120 GRIT	220 GRIT	400 GRIT	TOTAL
25mm dia	100	100	100	100	400 pcs
35mm dia	100	100	100	100	400 pcs
50mm dia	100	100	100	100	400 pcs
80mm dia	100	100	100	100	400 pcs

ZIRCONIUM OXIDE					
SIZE	80 GRIT	120 GRIT	220 GRIT	400 GRIT	TOTAL
25mm dia	100	100	100	100	400 pcs
35mm dia	100	100	100	100	400 pcs
50mm dia	100	100	100	100	400 pcs
80mm dia	100	100	100	100	400 pcs

03 Grinding System · DN 200 – 600



Variable Planetary grinding disks [made up of Solid Aluminium Plates] for working range DN 200–600 (NB 8"-24"), radial adjustable to the required seat Diameter.

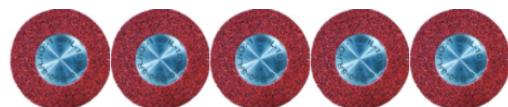
OD of Lapping Plate	Arm's Length	Arms Working Range		Minimum Outer Dia of		Maximum Outer Dia of	
				Radial Plates with Rotating Head		Radial Plates with Rotating Head	
		Min	Max	50mm	80mm	50mm	80mm
130mm	55mm	195	200	215	-	220	-
	85mm	240	250	260	-	270	-
180mm	55mm	230	240	250	-	270	-
	85mm	270	295	290	-	315	-
	130mm	350	380	-	375	-	405
230mm	55mm	300	310	320	-	340	-
	85mm	320	350	340	-	370	-
	130mm	380	420	-	405	-	445
280mm	55mm	325	350	335	-	360	-
	85mm	360	420	370	390	430	450
	130mm	460	490	470	490	500	520
	165mm	490	520	500	520	530	550
330mm	85mm	440	505	450	470	515	535
	130mm	510	540	520	540	550	570
	165mm	540	600	550	570	610	630
	215mm	570	660	580	600	660	680

Extension Arms

Arms Length	Quantity
55mm	5 Nos.
85mm	5 Nos.
130mm	5 Nos.
165mm	5 Nos.
215mm	5 Nos.

Rotating Grinding Heads of SS

Size	Qty.
50mm diameter	5 Nos.
80mm diameter	5 Nos.



Rotating grinding heads

04 Scope of Supply

Machine attachment components and standard accessories included with every IS57928 set.

Machine Attachment Components

Item	Qty.	Remark
Special Base Clamp (3")	2 Nos.	
Special Base Clamp (4")	2 Nos.	
Extension Clamp (Small)	2 Nos.	
Extension Clamp (Big)	2 Nos.	
Machine Hand crank	1 Nos.	
Motor Gear Box	1 Nos.	Electric Drive
Gear Adapter Set	1 Nos.	Electric Drive
FRL Unit (1/4")	1 Nos.	Pneumatic Drive
FRL Fitting	1 Set	Pneumatic Drive
Needle Valve Attachment	1 Nos.	Pneumatic Drive
Air Pipe (10meter)	1 Nos.	Pneumatic Drive
Machine Spare Parts (Bolts, nuts and screws)	1 Set	

Standard Accessories

- ✓ Inspection light
- ✓ Measuring Tape
- ✓ Machine Spanner Set
- ✓ Allen Key Set (mm)
- ✓ Scissor (For Abrasive Paper)
- ✓ Pen Knife (For removal of used lapping papers)

All Packed in Metal Transport Case!

