

VHT-111 Safety Valve Pressure Calibration Station

Introduction



(External Reference)

Name	Length	Width	Height	Net weight	Remarks
Operation console	1180mm	620mm	1430 mm	165kg	320mm between operation console and inspection seat
Inspection table	1420mm	750mm	800 mm	400kg	
Accessory kit (under operation console)				100 kg	

Applicable Valve Range

1. Safety valves of PS≤4640psi (see chart I- chart II)
2. Diameter DN15~200mm flange type safety valve
3. 1/2"~ 2 1/2" thread type safety valve
4. Various whole opening or micro opening relief valves.
5. Various thin or thick flange type valves
6. Commonly used metric and inch thread type valves

Specification

1. Apply imported German MAXIMATOR gas booster which can increase the gas pressure to high pressure.
2. Freely shift among four pressure ranges according to the calibration pressure.
Equipped with 4 precision pressure gauges
Accuracy: 0.25%
Ranges: 0~300psi、0~600psi、0~3000psi、0~10000psi
3. Dedicated low-micro pressure calibration system which is more convenient to check low-micro pressure safety valves, and protect precision pressure gauges.
4. Two-seat pneumatic clamping structure, for easy and fast operation.
5. Small diameter seat with adjustable height and width of the eccentric clamping structure, validation no need of using Center Pad. When checking with the same size of eccentric discs, the valve location does not need to change. It is very efficient, very quick and easily to use. (Patented)
6. According to the diameter and clamping pressure, large diameter valves have an adjustable clamping force structure. This is in the application of high pressure safety valve checking.
7. Various relief valves and pressure switch valves are adopted aerospace defense industry valves.
8. Equipped with checking guard for checking high pressure relief valve.
9. The calibration station has a built-in clamping overpressure protection device, which can automatically open.
- 10.Operation console and inspection table are stainless steel panel.

Technical Specialty

1. Diameter range: Flange type: DN15~200mm
Thread type: 1/2"~ 2 1/2" safety valve
2. Highest pressure: 4640psi
3. Accuracy: ±0.25%
4. Unit: DN—mm PS—psi

Small—diameter

Chart I

DN	32	40	50	65	80	100
PS	1378	943	653	435	290	218

Large—diameter

Chart II

Verifiable max PS- psi		Valve diameter DN-mm							
		≤32	40	50	65	80	100	150	200
Clamping pressure psi	80	2610	1740	1233	943	653	363	218	116
	150	4640	3770	2755	1595	1305	798	435	290
	220	4640	4640	4133	2465	1958	1233	725	435
	300	4640	4640	4640	3335	2683	1668	1015	580
	360	4640	4640	4640	4205	3335	2103	1233	725

Note: Adjustable large diameter clamping structure, it should be adjusted according to the DN and opening pressure of safety valve.

Too large clamping pressure may cause damage of safety valve or accident.

Too small clamping pressure may not meet the seal requirements.

5. Working media: Clean compressed air and nitrogen gas.

This equipment should not be used to validate other valves.

Configuration

Name	Specification reference	Qty.
Operation console		1
Inspection seat		1
Gas booster	Imported from Germany (has been installed in the station)	1
Pressure gauge	0~300psi; 0~600psi; 0~3000psi; 0-10000psi	1 for each
Movable caliper	Newly forged flexible caliper	1 for each
Center pad	DN20、25、32、40、50、65、80、100、150、200	1 for each
Rounded sealing ring	Related specifications	60
External pressure hose	M20×1.5、M16×1.5	1 for each
Standby power switch	2-position 3 way (big)	1
Standby reset switch	2-position 3 way	1
Spare clamp switch	2-position 5 way	1
Metric thread fittings	M27×1.5、M30×1.5、M33×1.5	1 for each
Joint transition mat	Blue color	1
Inch non-standard diameter exterior joint	1/2"、3/4"、1"、1 1/4"、1 1/2"、2"、2 1/2"	1 for each
Inch thread bedplate		1
Shields		1
Universal active wheel		4