



Jamesbury™ Wafer-Sphere™ valve maintenance recommendation for Vacuum Swing Adsorption (VSA) / Vacuum Pressure Swing Adsorption (VPSA) units

Component	Element	Recommended inspection on a regular basis	Recommended maintenance 5M cycles
Valve	Disc	Check valve assembly performance and operation on site (1)	Check *
	Shaft		Check *
	High cycle spare parts set (including bearings, seat and seals)		Replace
	No play coupling bolts and nuts		Replace
Actuator	Lever arm	Check valve assembly performance and operation on site (1)	Replace
	High cycle spare parts set		Replace
	Housing, Cylinder		Check *
Booster / quick exhaust valve	Complete device	Check *	Replace
Solenoid valve	Complete device	Check *	Check *
Limit switch	Complete device	Check *	Check *
Air Filter	Complete device	Replace every year	Replace

During maintenance Valmet technicians check parts that are not mentioned here and replace damaged parts if possible. Valmet technicians also make recommendations for future inspection and maintenance. Device condition monitoring helps determine whether a particular valve needs attention. Oxygen (O₂) valves can be maintained only by authorized persons.

(1) External leakage = Damaged seals / Need in higher supply air pressure = Damaged Actuator, Bearings / Slow Opening, closing time = Damaged Seat, Actuator, Bearings / Noise = Damaged no play coupling, shaft, bearings

Note: 5M cycles are reachable with the Super long run option of BC actuator

* Replace if needed

Valve components:



Bearings and sealing elements



Lever arm, bearings and sealing elements



Instrumentation components

Operational benefits:



Improved plant availability



Optimized performance



Ensured quality



Improved safety