

Minimize plant risks

Following the valve manufacturer's maintenance recommendations ensures plant availability.

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		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

Other non mentioned parts are checked during maintenance in Metso Service Center. Damaged parts are replaced if possible and advice for parts replacement are made for the upcoming maintenance. Oxygen (O₂) valves can be maintained only by authorized persons. Use of device condition monitoring helps to determine if a particular valve needs an early maintenance.

(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

Wearing out of devices:

Bearings and sealing elements



Lever arm, bearings and sealing elements



Instrumentation components



Operational benefits:



Improved plant availability



Optimized performance



Ensured quality



Improved safety