

Mapag™ valve maintenance recommendations for PSA units BAC / BAR / BAX-serie. CL300 / PN40

Components	Elements	Recommended maintenance 3 years / 750,000 cycles	Recommended maintenance 6 years / 1,500,000 cycles
Valve	Shaft sealing Seat Bearings Disc Shaft	Replace Replace Check * Check * Check *	Replace Replace Replace Check * Check *
Actuator F1 serie	Bearings, Seals, Keilpack Housing, Cylinder Pistons Shaft connection	Replace Check * Check * Check *	Replace Check * Check * Check *
Actuator B1 serie	Lever arm High cycle spare parts set Spring assembly Cylinder	Check * Replace Check * Check *	Replace Replace Replace after 4,800 kcycles Check *
Valve controller, Neles ND9000™	Complete device Spool valve Prestage Position feedback system (linear valves)	Download and analyse diagnostics Calibration and reset counters Replace No action Replace	Download and analyse diagnostics Calibration and reset counters Replace after 4,800 kcycles Replace Check * Replace
Valve controller, Neles NDX™	Complete device Prestage bottom filter Silencers Pneumatic set	Download and analyse diagnostics Calibration and reset counters Replace Replace No actions	Download and analyse diagnostics Calibration and reset counters Replace Replace Replace
Solenoid valve	Complete device	Check *	Replace
Booster / quick exhaust valve	Complete device	Check *	Replace
Limit switch	Complete device	Check *	Check *
Air filter	Complete device	Replace	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.

* Replace if needed

Wearing out of devices:



Bearings and sealing elements



Lever arm, bearings and sealing elements



Valve controller components



Instrumentation components

Operational benefits:



Improved plant availability



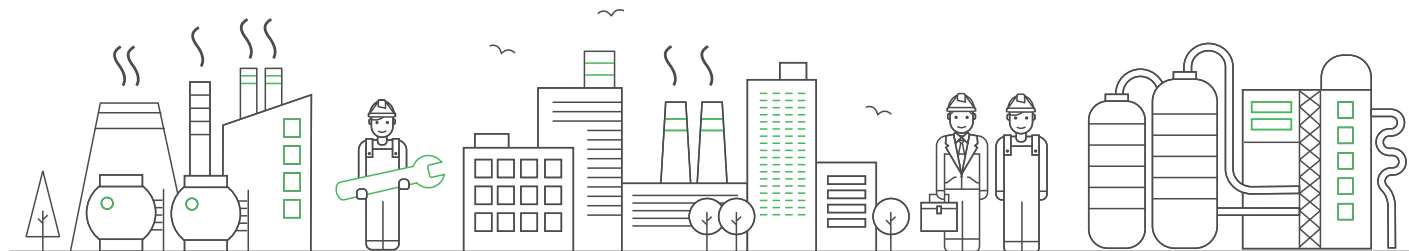
Optimized performance



Ensured quality



Improved safety



Mapag valve maintenance recommendations for PSA units BAC / BAR / BAX-serie. CL600 / PN63

Components	Elements	Recommended maintenance 2 years / 400,000 cycles	Recommended maintenance 4 years / 800,000 cycles
Valve	Shaft sealing Seat Bearings Disc Shaft	Replace Replace Check * Check * Check *	Replace Replace Replace Check * Check *
Actuator F1 serie	Bearings, Seals, Keilpack Housing, Cylinder Pistons Shaft connection	Replace Check * Check * Check *	Replace Check * Check * Check *
Actuator B1 serie	Lever arm High cycle spare parts set Spring assembly Cylinder	Check * Replace Check * Check *	Replace Replace Replace after 4,800 kcycles Check *
Valve controller, ND9000™	Complete device Spool valve Prestage Position feedback system (linear valves)	Download and analyse diagnostics Calibration and reset counters Replace No action Replace	Download and analyse diagnostics Calibration and reset counters Replace after 4,800 kcycles Replace Check * Replace
Valve controller, NDX™	Complete device Prestage bottom filter Silencers Pneumatic set	Download and analyse diagnostics Calibration and reset counters Replace Replace No actions	Download and analyse diagnostics Calibration and reset counters Replace Replace Replace
Solenoid valve	Complete device	Check *	Replace
Booster / quick exhaust valve	Complete device	Check *	Replace
Limit switch	Complete device	Check *	Check *
Air filter	Complete device	Replace	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.

* Replace if needed

Wearing out of devices:



Bearings and sealing elements



Lever arm, bearings and sealing elements



Valve controller components



Instrumentation components

Operational benefits:



Improved plant availability



Optimized performance



Ensured quality



Improved safety