



General maintenance recommendation for Flowrox™ knife gate valves

Components	Elements	Recommended maintenance 6 months***	Recommended maintenance 12 months***
Valve	Gate	Check*	Check*
	Ring sleeves	Check*	Replace
	Secondary seal	Check*	Replace
	Body	Check*	Check
Actuator, Pneumatic, Hydraulic	Sealing set	Check*	Check*
	Piston rod	Check*	Check*
	Complete cylinder	Check*	Check*
Actuator, Manual, Bevel gear	Stem	Check*	Check*
	Seal (manual)	Check*	Check*
	Drive nut	Check*	Check*
	Complete actuator**	Check*	Check*
Filter regulator	Complete device	Check*	Check*
Solenoid valve	Complete device	Check*	Check*
Limit switch	Complete device	Check*	Check*

*Replace if needed

** See manufacturer recommendations

*** Maintenance intervals may vary based the application.

Checkpoint	Check	Finding	Action
Bottom cover plate	Check for leakage	Leakage between the bottom plate and body Damaged ring sleeve Damaged gate	Check bottom plate bolt tightness. Clean surface and replace seal. Replace ring sleeve Replaced gate
Flange connection	Check for leakage	Leakage Pipeline and valve misalignment	Tighten the flange connection bolts to correct torque Ensure that flanges are parallel and concentric to valve
Secondary seal	Check for leakage	Tower mounting bolts loose Secondary seal worn out	Tighten tower mounting bolts Replace secondary seal
Valve	Smooth operation	Insufficient lubrication	Lubricate valve and increase scheduled lubrication
Manual and Bevel gear actuator		Gate surface dirty	Check and clean gate surface.
Pneumatic and hydraulic actuator		Damaged gate, secondary seal or ring sleeves	Check and replace damaged parts
		Insufficient lubrication.	Lubricate valve and increase scheduled lubrication
		Supply pressure low.Pneumatic and Hydraulic	Increase supply pressure Check and replace damaged seals
Valve	Does not open or close	Locking pins in place Clogged up with Solids Damaged ring sleeves Actuator supply pressure low. Pneumatic and Hydraulic Fault in actuator, limit switch or control system	Remove locking pins. Clean gate and body cavity. Check or Install flushing Replace ring sleeves. Increase supply pressure. Check and fix acuator operation

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.

Operational
benefits:



Improved
plant
availability



Optimized
performance



Ensured
quality



Improved
safety