Serial number	Maintenance items	Process points	Quality requirements
1	Valve body inspection	1. Remove dirt and remove insulation	No heavy skin, cracks, sand holes on the surface of the valve body
		2. Check the surface of the valve body for defects such as heavy skin, cracks and trachoma	
2	Valve disintegration	1. Make a record of cooperation before disassembly.	1. The bolts and parts should be intact.
	j	<ol> <li>The valve is open when it is disassembled.</li> <li>Pay attention to the disassembly order.</li> <li>Do not damage parts.</li> <li>Clean the removed bolts and parts.</li> <li>Spectral review of internal parts of</li> </ol>	2. The internal parts of the alloy steel valve are qualified by spectrum inspection.
		alloy steel valves	
3	Valve stem inspection and repair	1. Clean up the dirt on the surface of the valve stem and check the defects of the valve stem.	<ol> <li>The curvature of the valve stem is not more than 1% of the total length of the valve stem, and the out-of-roundness is less than 0.05mm.</li> <li>The valve stem should be smooth, free of pits,</li> </ol>
		2. Straighten or replace if necessary.	scratches and cracks. The uniform pitting depth of the contact part between the valve stem and the packing is not more than 0.3mm, and there is no defect in other parts.
		3. Carry out surface nitriding treatment as appropriate.	3. The thread of the valve stem is intact and should be replaced when the wear exceeds 1/3 of the original thickness.
	Inspection and	1. Chack the valve plate, valve coat and	
4		1. Check the valve plate, valve seat and valve body for cracks, grooves and other defects.	1. The valve plate, valve seat and valve body are free of cracks and grooves.
		2. Check the matching degree of the sealing surface with red powder, determine the repair process and grinding method according to the inspection situation.	2. The sealing surface should be straight, the roughness of the sealing surface should be less than $0.1\mu m$ , the radial anastomosis should not be less than 80%, and the circumferential contact of the sealing surface should be uniform without disconnection.
		3. Polish the joint surface of the valve body and the self-sealing gasket, and replace the detachable seat which cannot be repaired.	3. There are no foreign objects and other defects in the valve body.
		4. Check whether the joint surface of the valve seat and the valve body is firm.	4. The joint surface of the valve body and the self-sealing gasket is smooth without grooves.
			5. The valve body and the valve seat are firmly combined without loosening.
5		1. Clean the stuffing box and polish the inner wall of the stuffing box, packing gland and seat ring.	1. The inner wall of the stuffing box, the gland of the stuffing box and the seat ring are smooth.
		2. Polish the joint surface of the valve cover and sealing washer.	2. The joint surface of the valve cover and the sealing gasket is smooth and smooth.
6	Inspection and repair of bracket	1. Clean the thrust bearing and check the bearing for wear. Corroded and broken.	1. The bearing quality meets the requirements, otherwise it must be replaced.
		2. Check the stem nut on the bracket.	2. The stem nut is intact.
		3. Check the bracket for damage.	3. No damage to the bracket.
		4. Polish the joint surface of the valve body.	4. The joint surface of the valve body is smooth.
7	Repair of Sihe	1. Polish the quadruple ring and	1. The quadruple ring and gasket are smooth and free of

	ring (Lihe ring), washers, etc.	washer.	rust. The thickness of the quadruple ring is uniform, without damage or deformation. The gasket has no defects such as deformation and cracks.
		2. Check the material and hardness of the Sihe ring.	2. The material and hardness of the quadruple ring meet the requirements.
8	Valve assembly	1. When the valve is assembled, the valve should be in the open state.	1. The center line of the valve plate should be higher than the center of the valve seat when the valve is closed.
		2. Assemble in the order of cooperation.	2. The valve stem is firmly connected to the valve plate, and the valve stem is in good agreement.
		3. Replenish lubricant.	3. The gap between the gasket and the valve body cover is 0.1-0.3mm.
		4. Replace the packing.	4. The gap between valve stem and gland is 0.1-0.3mm.
		5. Adjust the contact area between the gate and the valve seat.	5. The gap between filler and gland is 0.1-0.15mm.
		6. Load the Sihe ring in order.	6. The gap between valve stem and seat ring is 0.1-0.2mm.
		7. Tighten the connecting parts evenly.	7. The gap between the seat ring and the stuffing box is 0.1-0.15mm.
		8. Check the gap of each part	8. The accessories and signs are complete, and the valve body is well insulated.
9	Switch test	Proof of switch degree indication, check switch condition	The valve has no jamming and virtual stroke during the full stroke of the switch
10	Replace with a new valve	1. Disassembly inspection and necessary spectral inspection of the valve	1. The components are intact, and the materials and gate valve quality meet the requirements.
		2. 100% flaw detection of the welded joint.	2. Welding quality is qualified.
		3. Water pressure test when necessary.	3. There is no leakage on the joint surface and sealing surface during the hydrostatic test.