1 Cylinder inspection items

The following describes the general contents of the cylinder inspection items. Actually, add inspection items suitable for the customer’s specifications and perform the inspection work.

Inspection items

1) Check the cylinder mounting bolt or nut for looseness.
2) Check the cylinder mounting frame for looseness or unusual deflection.
3) Check the rod end bracket, tie rod, or bolt for looseness or rattle.
4) Check the rod for dent or sliding scratch.
5) Check that the cylinder operates smoothly and that the minimum operating pressure does not increase.
6) Check that the piston speed or cycle time does not change.
7) Check that any shock does not occur at the operation end or that any unusual noise is not heard.
8) Check for eternal leak. In particular, carefully check the rod seal.
9) Check that the stroke is correct and that the cylinder operates the specified stroke.
10) Check that the auto switch operates correctly, that the switch joint is not loose, and that the switch position does not deviate.

Trouble judgement from cylinder status (Judgement from appearance)

1) Only one side of the rod surface is contaminated blackly.
   → The seal is worn out unevenly by the eccentric load or lateral load.
2) Thin sliding scratch is marked on the entire periphery of the rod in the operation direction.
   → The lubrication is faulty due to grease run-out.
3) Sliding scratch is marked on only one side of the rod surface.
   → The rod is strongly in contact with the bushing by the eccentric load or lateral load, causing scratch.
4) A part of the rod is scratched in a direction perpendicular to the cylinder operation.
   → A large lateral load is applied when the cylinder stops.
5) Air leaks from the rod seal.
   → Scratch, dent, eccentric load, or external foreign object (solid or liquid) may be the cause.

Probable troubles (Reference)

Refer to the cylinder troubleshooting. (P.4)