

Instruction Manual for the RIGAKU Magnetic Seal Unit



Thank you for purchasing our RIGAKU Magnetic Seal Unit.

Please use the Magnetic Seal Unit keeping in mind the precautions below:

【Requirements for using the Unit】

1. Only use the Magnetic Seal Unit in the conditions described in the specifications or approval drawings (temperature, pressure, atmosphere, rotation speed, load, etc.)
2. If you are using the Unit for the first time or want to use it 2 weeks or more after the last time you used it, **make sure to perform the break-in procedure before drawing a vacuum.** The break-in procedure consists of rotating the shaft 20 times or more at atmospheric pressure. Any drive system can be used to turn the shaft for this break-in procedure. **If you don't perform this procedure, air or ferrofluid may leak from the unit.** To test the Unit for leaks, you must also perform the break-in procedure before testing.
3. To test the Unit for leaks, use a helium leak detector. Never try to test for leaks with a solvent such as alcohol. The ferrofluid characteristics may change and cause the seal to fail.
4. Never allow any solvent (acetone, thinner, alcohol, water, Freon, etc.) to get inside the Magnetic Seal Unit. If you need to clean the surface of the Unit, never apply solvent directly on the Unit. Apply a bit of solvent to a lint-free piece of paper and wipe off any dirt on the surface of the Unit.
5. When installing the Unit, be careful not to damage the sealing surface (O-ring), or mix up the atmosphere and vacuum ends of the line. In addition, make sure to align the center of the shaft accurately with the load and then secure the coupling tightly so that the shaft will not be subject to any impacts or overloading.
6. Do not apply lubrication oil to the ball bearings. It may cause the seal to fail.
7. If there is a possibility that the rotating section of the Unit may be exposed to gasses or solid objects that could interfere with the Unit's operation, provide a protective cover or similar device outside the Unit.

【Requests for repairs to the Unit】

1. If the Magnetic Seal Unit needs to be repaired or rebuilt, do not try to disassemble the Unit by yourself. Please return the complete Unit to us. Be aware that if you disassemble the Unit yourself, the quality and performance of the Unit will not be guaranteed.
2. To have a Unit that has had hazardous material in it repaired or rebuilt, please ask a specialist to clean it or contact us before shipping the Unit.
3. If the Unit will be stored for a long time after being rebuilt or repaired, store the Unit in a sealed container along with some desiccant. If the Unit is not stored in the specified environment, corrosion may occur.

Rigaku Corporation

3-9-12, Matsubara Cho, Showa City, Tokyo, 196-8666, Japan

TEL: +81-42-545-8100 FAX: +81-42-544-9605