WHAT IS CLAIMED IS:

1. A cleaning device comprising:

a chuck table that holds a workpiece on a holding surface;

a nozzle that supplies a cleaning liquid to the workpiece held by the chuck table; and

a spindle unit that supports the chuck table in a rotatable manner;

the cleaning device comprising~~cleaning the workpiece in~~ a cleaning chamber that accommodates the chuck table and the nozzle,

wherein the spindle unit has

a spindle that supports the chuck table,

a bearing that supports the spindle in a rotatable manner, and

a case that accommodates a part of the spindle and the bearing,

a pressure variable section and an opening section are provided between the case and the spindle,

the pressure variable section is disposed between a negative pressure supply pipe and a positive pressure supply pipe which are connected to the case and a negative pressure or positive pressure supply pipe formed inside the spindle and communicating with a space on the

holding surface, and is disposed at a position farther from the chuck table than the bearing,

the opening section is provided between the bearing and the pressure variable section and is opened through a through-hole formed in the case or through an opening pipe connected to the case,

the spindle has an end portion projecting from the case,

a part of the cleaning chamber is defined by a cover member having an opening into which the end portion of the spindle is inserted,

a seal section that interrupts communication between a space, in which the bearing is provided, between the case and the spindle, and the cleaning chamber is provided between the cover member and the end portion of the spindle, and

the seal section has

an annular magnet ring provided on an inner circumferential surface defining the opening of the cover member, and

a magnetic fluid provided on an inner side of the magnet ring and making contact with the end portion of the spindle.

2. The cleaning device according to claim 1,

wherein the end portion of the spindle has a cylindrical sealed section making contact with the magnetic fluid, and a cylindrical extension section extending from the sealed section toward the chuck table side and being the same as the sealed section in diameter.