What Is Claimed Is:

1. A vacuum pump for exhausting gas by rotating a rotor blade, the vacuum pump comprising:

a cleaning function portion for a cleaning function that performs cleaning of a deposit in the vacuum pump; and

a deposition detection function portion for a deposition detection function that detects the deposit; and

a cleaning completion determination function portion for a cleaning completion determination function that determines completion of the cleaning, wherein

the cleaning function portion is dry cleaning, wet cleaning, heating removal and / or a vacuum pump component that ultrasonically vibrates,

the cleaning is performed by the cleaning function portion, and

the cleaning completion determination function portion is configured to output a cleaning completion signal indicating completion of the cleaning, based on a detection result of the deposition detection function portion.

2. The vacuum pump according to claim 1, wherein the cleaning completion determination function portion is configured to determine completion of the cleaning, based on the detection result of the deposition detection function portion and a changeable threshold value.

3. The vacuum pump according to claim 1 or 2, wherein

the deposition detection function portion includes:

a light projecting portion oriented toward a flow passage of exhaust gas; and

a light receiving portion that faces the light projecting portion across the flow passage and is configured to receive detection light projected from the light projecting portion.

4. The vacuum pump according to claim 1 or 2, wherein

the deposition detection function portion includes:

a light projecting portion oriented toward a flow passage of exhaust gas;

a reflection portion arranged to face the light projecting portion across the flow passage and is configured to reflect detection light projected from the light projecting portion toward the flow passage; and

a light receiving portion configured to receive the detection light reflected by the reflection portion.

5. The vacuum pump according to claim 4, wherein the light projecting portion and a reflection surface of the reflection portion are arranged at a predetermined angle other than 90 degrees.

6. The vacuum pump according to claim 1 or 2, wherein

the deposition detection function portion includes at

least one pair of electrodes positioned within a flow passage of exhaust gas, and

the deposition detection function portion is configured to be capable of detecting a change in one or both of a resistance and a capacitance between the electrodes.

7. The vacuum pump according to claim 6, further comprising:

a temperature detection function portion configured to detect a temperature of a section to which the deposition detection function portion is attached; and

a detected value correction function portion configured to correct a detected value read from a detection amount of the deposition detection function portion, based on a detection result of the temperature detection function portion.