CLAIMS

1. A condition monitoring system for an anode of a metal recovery device,
wherein the condition monitoring system, comprising:
a metal recovery device; and
a control device;
wherein the metal recovery device includes
a voltage measuring unit measuring a voltage between an anode and a cathode;
wherein the control device includes
a data calculation unit processing voltage data received from the voltage measuring unit;
wherein the data calculation unit calculates first-order differential value or second-order differential value as a feature amount based on the voltage data,
calculates an average value and a standard deviation (σ) of the feature amount,
sets, as a threshold value, a value obtained by adding nσ (where n is an arbitrary number) to the average value, and
diagnoses the anode as being in a maintenance-required state due to degradation when the feature amount is equal to or greater than the threshold value by comparing the feature amount with a predetermined threshold value.

2. The condition monitoring system according to claim 1, wherein the condition monitoring system notifies a diagnostic result obtained by comparing the featured amount with the predetermined threshold value to a management terminal via a telecommunication line.

3. The condition monitoring system according to claim 1 or 2, wherein
a target for the requiring maintenance is an anode coated with an electrode catalyst.