[SUMMARY OF THE INVENTION]

[PROBLEM TO BE SOLVED BY THE INVENTION]

[0004]

The state monitoring system disclosed in Patent Document 1: sets a threshold based on an amount of statistics such as an average value or a standard deviation of a feature amount; and, when the feature amount exceeds the threshold, diagnoses an abnormality. Behaviors of a facility vary, however, depending on processing load or environment (for example, weather conditions). When the facility is managed using a threshold based on an amount of past statistics, as in Patent Document 1, it may be difficult in some cases to detect an indication of an operation anomaly in the facility at an early stage. In another technique of determining an anomaly, an estimation mode of an operating state is created for each of instruments constituting the facility, based on which an anomaly is diagnosed. The technique has, however, a problem that creation of the estimation model requires man-hours.

[0005]

In light of the aforementioned background, the present invention has been made in an attempt to provide an anomaly detection device and an anomaly detection method, each of which can efficiently extract an anomaly indication in a facility.

[MEANS FOR SOLVING THE PROBLEM]

[0006]

According to a first aspect, an anomaly detection device of the present invention includes: an anomaly indication index calculation part configured to calculate a statistical amount of a state amount of a facility, the state amount being a time series data; and calculate an anomaly indication index which shows a degree of anomaly of the state amount; and a correlation analysis part configured to calculate a correlation coefficient between the anomaly indication index and a variable factor candidate which becomes a variable factor of the anomaly indication index.

[0006a]

According to a second aspect, an anomaly detection method of an anomaly detection device of the present invention, comprises the steps, performed by the anomaly detection device, of: calculating a statistical amount of a state amount of a facility, the state amount being a time series data; and calculating an anomaly indication index which shows a degree of anomaly of the state amount; and calculating a correlation coefficient between the anomaly indication index and a variable factor candidate which becomes a variable factor of the anomaly indication index.