

Abstract

SYSTEM FOR MANAGING FLOW-STATE OF FLUID

The present invention comprises: a flow detector (30) that detects the flow of a fluid by opening/closing a valve body; a management unit (60) that detects the opening/closing of the valve body of the flow detector (30) and that manages the flow state of the fluid within the flow detector (30); and a temperature sensor (S) that detects the temperature of the fluid. The management unit (60) comprises: a valve body opening/closing detection means (61); an actual opening/closing time calculation means (63) that calculates, as an actual opening/closing time, the time from when the opening/closing detection means (61) detects the opening of the valve body until the same detects the closing thereof within a defined detection time; a correlation storage means (64) that stores a correlation between the temperature of the fluid and an appropriate opening/closing time range that is appropriate for the valve body; an opening/closing time determination means (66) that determines whether the actual opening/closing time is within or outside the appropriate opening/closing time range derived by an appropriate time range derivation means (65); and an abnormal signal transmission means (67) that transmits an abnormal signal when the actual opening/closing time is determined to be outside the range. Due to this configuration, increases/decreases in the opening/closing time of the valve body caused by the temperature are not determined to be abnormal, and abnormalities in a fluid feeding device due to the length of the opening/closing time of the valve body can be determined.

Figure 5