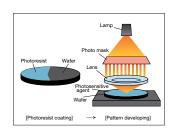
# Applications of the temperature controller from Matsuo $(X \cdot \overline{X} \cdot Y \cdot \overline{Y})$

## Semiconductor purposes

#### Temperature control for coaters / developers (semiconductor manufacturing equipment)

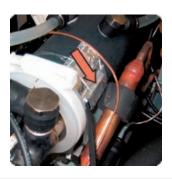
Coaters/developers, equipment used in semiconductor manufacturing, are machines used to coat a substrate with photo sensitive material and develop an image. After applying photoresist onto a wafer, a fine pattern is transferred by exposure equipment. In this process, temperature control is extremely important, and multiple temperature powerful sensors (TPS), the MQT8K K40XA, are installed in the equipment as the thermostats for temperature control, and they pick up the temperature signal instead of the thermistor control or the thermocouple. These play a major role in temperature control during this process.



### Temperature control of chillers (heat exchangers)

The temperature powerful sensors (TPS) from Matsuo are used for temperature control of chillers (heat exchangers). The MQT8H 45XB is used for controlling the temperature of the water tank in the heat exchanger within a range of 40°C~45°C. In addition to this, the MQT8H 70YD and MQT8H 90YD are used for boil-dry protection. As such, a highly accurate temperature powerful sensor from Matsuo is used for control and protection based on its small differential and long life features.





#### Temperature control of linear motors for semiconductor / LCD manufacturing equipment

The temperature powerful sensor (TPS) from Matsuo is used for temperature control of linear motors in semiconductor/LCD manufacturing equipment. The MQT8KT 50XC is designed to turn OFF when the temperature within the equipment reaches 50°C on a temperature rise. Small size and long life are part of the reasons why our TPS is selected.

