

10. Thickness measurement of high-temperature metal plates

A thickness of a plate can be measured even at high-temperature.

Measuring principles

Set the shielded electrodes on molten metal away from each other.

Measure the electric property between those electrodes and the metal plate.

This indicates the distance between those electrodes and the metal plate.

If the lower surface of the metal plate is secured

The distance between the lower surface and the electrodes

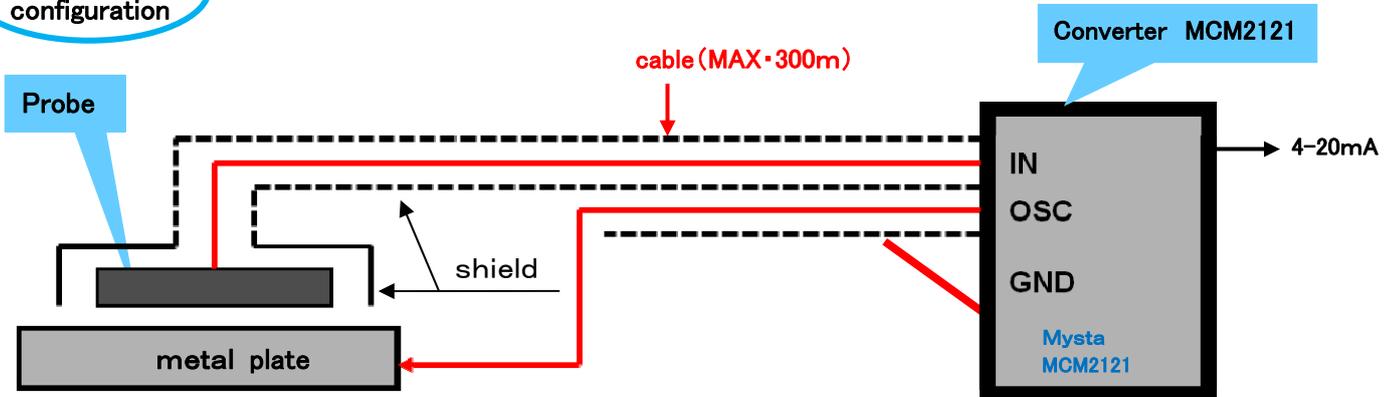
The distance between the electrodes and the upper surface of the metal plate

The thickness of the metal plate

**Mystar MCM2000
MYM3100
series**

Mystar series enables to install an electronic circuit in a distant place and can measure without influence of capacitance etc. Therefore it can measure the distance to the metal plate without influence even when the probe head becomes hot.

Equipment configuration



How to use

Probe

A linearizer will be designed with special materials, heat expansion, etc. that can tolerate at high-temperature.

Employed cable

Uses 300 meters of 2 core individual shield. Or, uses a cable manufactured for high-temperature when the terminal position is high.

Converter

Use Mystar MCM2121 which is developed as All Purpose Electrode-Type Level Switch. If you do not require high accuracy, a combination of MYM3110 with one flat plate probe will be sufficient enough.