19. Measurement of level in an electrolysis tank

A level switch that are designed with a consideration of effects of a high electromagnetic field is required, to measure and control the level of electrolysis tank where a few thousand ampere current flows. Our All Purpose Electrode-Type Level Switch MCM2121 is designed to operate stably in such environments.

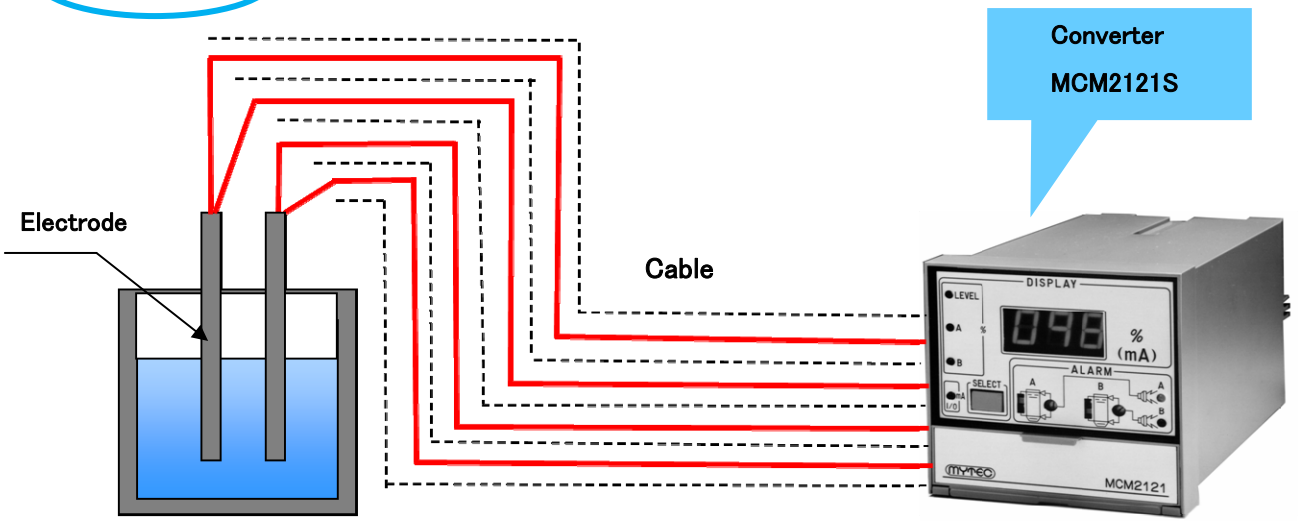
Principles

Suspend two isolated electrodes.

→ Between the timing when the electrode is in the gas to the timing when it's dipped to the liquid, the change of electrical prperty will happen.

→ Measures the difference with high-frequency waves and convert to a level signal.

Compositions



Equipment configuration

Probe

- 5 coaxial cables can be connected corresponding to the electrolysis tank.
- The electrode is coated by Teflon and when the intensity of electrolysis is large, the apex of SUS316's metal part will contact liquid.
  Temperature = Can operate from −200℃ to +200℃

Employed cable

Use 5 core individual shield shorter than 30 m, and when the ambient temperature is high, use the cable for high-temperature (Teflon isolator etc.).

Converter

Uses Mystar MCM2121.