

# Ircon® System Solutions – Metals

## Aluminum Smelters

### Customer Need

Aluminum smelters make blocks of carbon that are used on a Pot line. These blocks, called anodes require a basic material called carbon paste. Liquid coke and pitch are mixed together in a large oil heated mixer. The paste is heated to a temperature of 165°C (329°F). This is the temperature that they dump the paste out of the mixer and send it to the anode presses. They often measure the temperature with thermocouples but they break off.

To measure the correct temperature requires a Modline® 7, 76 series series with a peak picker and on off control. The instrument has to be aimed at the center of the mix so as to obtain a homogeneous temperature. In addition, the process requires that the instrument have an air purge and that the sensor be attached to a pipe about 1 meter (3.2 feet) long. This is a very dusty atmosphere and the long tube prevents the dust from getting to the lens.

Typical plants have at least 6-10 mixers and each requires an infrared thermometer.

### Features/Benefits to address

#### Product

- Rugged instrument.
- IR sensors won't break off in process like a thermocouple
- Accurate non contact temperature measurement of every batch

#### Application

- Less downtime due to failed temperature sensors

### What to take?

1. Modline 7, 76 Series

### Application

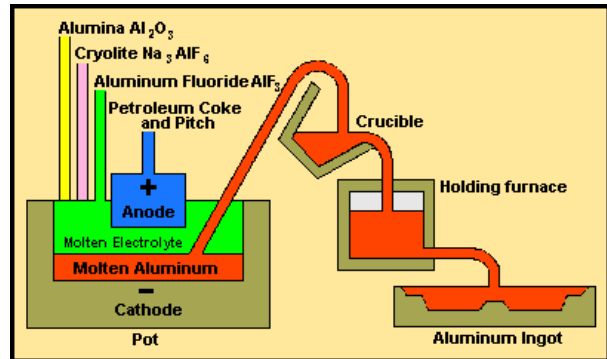


Illustration of Aluminum smelting process