Smelter Level Measurement System
AGELLIS EMLI S

Metal Level

Measurement of true metal level to improve process control, optimize melting, increase productivity & safety and reduce maintenance.

System Capabilities

The AGELLIS EMLI S unit constantly measures the true metal level in smelters/furnaces where real-time accurate monitoring is required. The system does this irrespective of metal type, amounts of slag on top of the metal, required measurement range and temperature.

With sensors protected and mounted behind the refractory bricks covering the required measurement range, the system provides information to track metal levels during melting and tapping. High and low levels are all indicated and displayed.

The unit works well in all kinds of industrial environment.

The AGELLIS EMLI S unit can be customized to fit your needs with several different options for measurement display.
Technical Information

**AGELLIS EMLI S**

### System Overview

- **Sensors**
- **Pre-Amp Unit**
- **Control Unit**
- **Management Unit**

### Technical Information

**Power Supply:**
- 90 - 230 VAC 50/60 Hz max 500 W

**Frequency:**
- Normally 140 Hz

**Sensitivity:**
- 0.2%

**Mounting specification:**
- Designed to endure the industrial environment mounted in a smelter/furnace

**Cooling:**
- Sensor – no cooling required
- Main Electronics Unit – ambient temp. range up to +55°C

**Safety standard:**
- Complies with known safety standards

### Principles of Operation

A transmitter sensor is supplied with a current of a selected frequency that in turn induces a corresponding voltage of the same frequency in the receiver sensor by electromagnetic coupling. As the metal in the smelter/furnace moves so the electromagnetic coupling changes the amplitude of the induced receiver sensor voltage. The calibrated signal output is linearised to denote the actual metal level in the smelter/furnace.

Agellis follows a policy of continual improvement of design and we must therefore reserve the right to supply equipment differing in detail from that described herein.