

ALUMINUM MELT / POURING STREAM

THE OPPORTUNITY

Pouring streams of aluminum can only be measured with pyrometers using the optical non-contact technology. The measurement of aluminum melt in the melting pot is critical. For valid measurements, the liquid aluminum must be stirred, otherwise the oxide film would influence the result of the measurement in an unpredictable way.

The surface of molten aluminum in a melting furnace is fully oxidized at temperatures of around 700°C. Even stirring the molten mass will not prevent the surface from being quickly oxidized. This causes a significant change in the radiation of the molten aluminum surface, which is impossible to be compensated by an infrared pyrometer.

However, it is possible to measure the molten aluminum at the pouring stream in the pouring process. The dross is pushed back by a strong stream of air generating an almost oxide-free surface, which can be measured.



OUR SOLUTION

The measurement of poured aluminum is only possible using non-contact infrared technology. Because of the fast response time of the IS 12-AI, the pouring stream temperature as well as the aluminum temperature in the channel can be precisely assessed.

