

Temperature measurement at cast steel

Ratio-Pyrometer
for temperature
measurement of
swaying cast steel



Ratio pyrometer

Temperature measurements on highly volatile objects have often been a challenge to companies. If, in addition, the ambient temperature rises up to 250°C, the measurement instrument must still be reliable.

The company Proxitron recently had to face a challenge like this. A steelwork (the ambient temperature was up to 200°C) needed a sensor for temperature measurement of cast liquid steel. The cast steel swayed while pouring it in a mold according to speed and amount, so that the application of a customary pyrometer was not possible. The problem has been solved with the ratio pyrometer OKS L Q18.194 S10.

The pyrometer ensures reliable measurement even at less covering of the measuring surface. If the measuring surface is filled out more than 10 % by an object, the special optic guarantees an exact result. The temperature of the in strength and position varying cast steel gets captured and measured more reliably. This ensures the optimum controlling of the downpour process. Besides, the response time of 5 ms allows the use in applications where quick measurements are indispensable. With the integrated laser-pilot light the pyrometer can be aligned any time – also during running measurement – on the measuring object.

But not only at the pouring of liquid metal the ratio pyrometer can be used. It is especially suitable for temperature measurement in the wire manufacturing, because the wire doesn't have a fixed measuring position as well.

At a glance

- 10% filling of the measurement surface
- Response time of 5 ms
- Low emissivity
- Up to 250°C ambient temperature

Accessories

- Interface adapter
- Fibre optic cable
- Mounting clamp
- Connection cable
- Optic
- Laser pilot light

Technical data

Measuring temperature range:	700°C up to 1800°C
Output:	0/4 - 20mA
Ambient temperature:	0 up to +70°C
Fibre optic cable and optic:	up to 250°C
Measuring failure:	0,5%
Service Interface RS 485:	yes
MAX data storage:	yes
Housing material:	stainless steel
Protection class:	IP 65