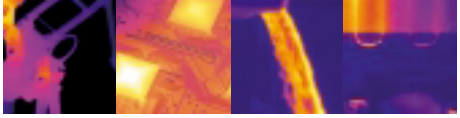


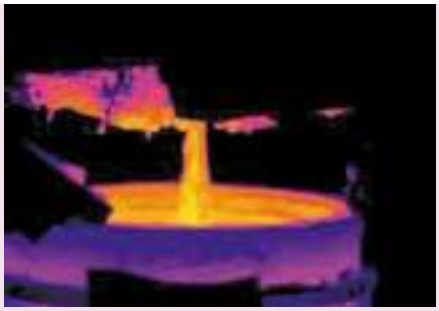
Application: **Automatic slag detection**

Industry: **Steel**

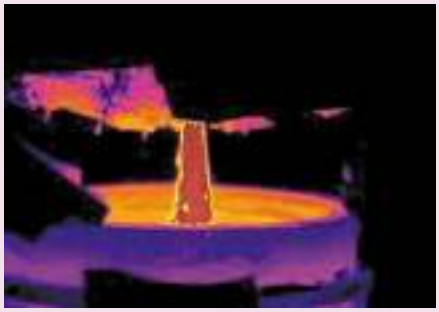
Principle: In steel production it is impossible to prevent the occurrence of slag. However, this by-product may only be carried through to the following processing steps in a strictly defined percentage. Otherwise the steel is loosing its quality. An IR camera can distinctly identify the slag during casting of the crude steel, due to its higher emissivity, and give a control signal to interrupt the casting process.

Benefits:

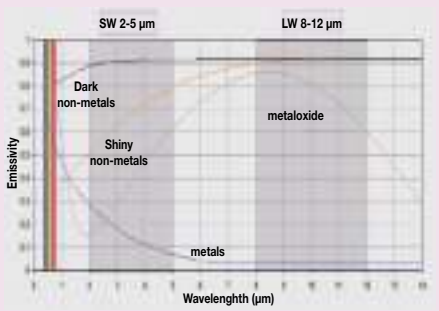
- Reliable slag detection in crude steel during the casting process
- Automatic triggering of alarm, independently of machine controller or operator
- Clearly improved steel quality and product quality
- Cost saving for replacement materials, such as slag stoppers, etc.



Crude steel without slag.



Crude steel with slag.



Emissivity comparison between crude steel and slag (metal oxide).

Application: **Process control on calendering machines**

Industry: **Plastics industry**

Principle: Plastic sheeting is produced in a lengthy calendering process. The pre-heated raw material, e.g. in the form of balls or as a continuous extruded mass, is fed in between the rollers. An IR camera can provide valuable information to guarantee the optimum distribution, and thus also the desired thickness, of the plastic sheeting. The IR image shows a clear distinction of the plastic balls from the glossy calendering rollers, regardless of the colour of the plastic or even when the balls are completely transparent.

Benefits:

- Automatic distribution of the raw material feed
- Product identification regardless of the material colour
- Identification of transparent plastics
- Higher material throughput and production volume
- Reliable material feed 24 hours a day, 7 days a week

IR image of the material feed. The material distribution between the first rollers can be clearly recognised.