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APPLICATION OF THERMOVISION METHOD IN ANALYSING METALLURGICAL PROCESSES

Abstract

There are presented possibilities and examples of the use of thermovision in the iron and steel making. There are shown some of practical examples of the use of infrared camera as a method used to solve the problems in metallurgy.

1. Introduction

Crucial element of the iron and steel metallurgy is realisation of many processes connected with the heat exchange. These processes are usually realised in the big devices and a lot of operation and conservation problems is connected with high temperature. Thermovision plays important role in the control of the state of these devices. Furthermore, thermovision can be used in the control of the production and technological processes and also as the assistance for the researches.

2. Use of thermovision in the iron and steel making

- **Analysis of the state of the devices**

Examples:

- detection of defects in refractory lined hot metal containers
- detection of dirt accumulations in overhead gas mains

- **Control of technological processes**

Examples:

- slag detection
- analysis of the processes of the continuous steel casting
- control of the processes of the plastic deformation

- **Assistance for the research processes**

Thermovision can be useful in the works connected with creating new technologies and in the verification of the constructional assumptions.

3. Conclusion

4. References