



PYROSCAN 28™

Pyrometric camera for combustion monitoring

INTRODUCTION

Traditionally, rotary kiln hoods/grate coolers are fitted with a video camera which views the flame and a separate radiation pyrometer to indicate the clinker zone temperature. Over the years these two instruments have been combined into one, i.e. one video camera and one dual colour pyrometer which sweeps across the video image to indicate the temperature at preselected points. PYROSCAN 28™ is a new generation pyrometric camera which has one video camera and two monochromatic cameras for true real time temperature measurement. The instrument enables the kiln operator to see the heat transfer effect of burner adjustments or variation in raw meal composition as well as to monitor changes in flame diameter and black root length.

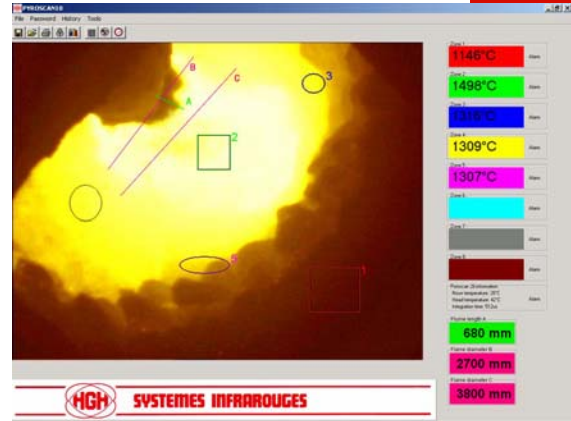
PRINCIPLE

PYROSCAN 28™ comprises one video camera for traditional colour image display and two monochromatic cameras for temperature measurement. The two monochromatic cameras have the same field of view as the video camera and therefore a multitude of temperature points are available within the image.

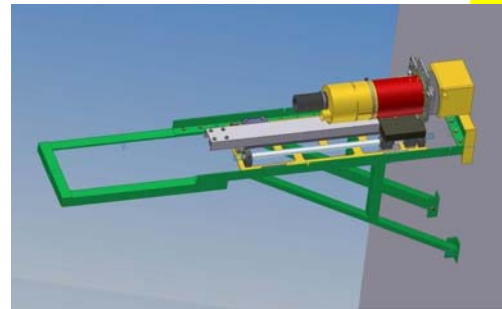
CONFIGURATION

The PYROSCAN 28™ equipment comprises:

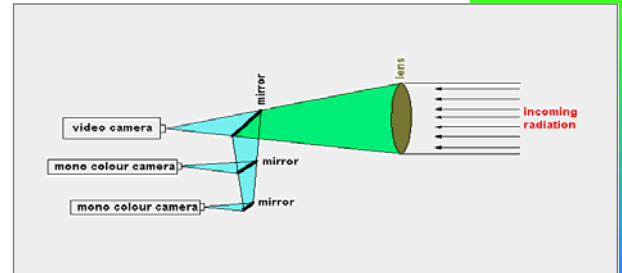
- The viewing head unit which includes the three video cameras, the periscope and water cooled jacket.
- The automatic retraction system.
- The control cubicle installed locally.
- The PC with dedicated software under Windows XP Professional environment, located in control room and connected to the local control cubicle.



Live video display with selected temperature zones



Camera assembly



The 3-camera principle



Typical installation



Straight sighting

OPTIONS

- 4-20 mA outputs
- Alarm dry contacts
- OPC server

ADVANTAGES

- No moving parts inside the viewing head.
- Reliable temperature reading (minimized effect of dusty atmosphere).
- Efficient monitoring of any changes in flame pattern and heat transfer to the product.
- Comprehensive tool for burner adjustment, particularly for firing alternative fuels.
- Measurement of flame length

TECHNICAL DATA

- field of view : 65° horizontal x 50° vertical
(alternatively 47.5° h x 35 °v)
- temperature measurement range : 700 °C to 1800 °C
- colour video camera : 768 x 576 pixels
PAL video output
signal to noise ratio: 46 dB
- Temperature measurement resolution: 1°C
- PC with RS-422 interface for viewing head control and frame grabbers for video signal acquisition
- electricity supply : 220/110 V , 1 ph., 50/60 Hz

Above information is subject to changes without notice



SYSTEMES INFRAROUGES

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