Temperature measurement by means of IR-thermography



IMA-TechSheet #102140 V2



Infratec VarioTHERM II high-resolution thermographic camera on sealing ring endurance test bench



Hand-held Fluke Ti32 thermographic camera on sealing ring endurance test bench



False-color image of the surface temperature in the air-side contact area of sealing rings and shaft

Description:

- Non-contact measurement of surface temperature
- High-resolution measurement with microscope lens (Infratec Vario Therm II)
- Fast measurement with handheld thermographic camera (Fluke Ti32)
- Live display as false color image on display or on laptop
- Result storage as single image or video
- Emission coefficients of measuring surface can be set in camera or evaluation software

Technical Data: Infratec VarioTHERMO II:

Spectral range:	3,4 – 5 μm
PtSi-detector:	256 x 256 Pixel
Measuring	-25 1200 °C
range:	(with standard lens)
	50 250 °C
	(with microscope objective)
Thermal	< 0,1 K (by 30 °C)
resolution:	
Optical	25 μm
resolution:	(with microscope objective)

Available Test Methods:

- Measurement of the temperature in the air-side contact area of the seal an shaft
- Measurement of temperature in the contact area of the seal and shaft (by sapphire shaft with deflection mirror)
- Monitoring of the temperature near the contact area during endurance tests by means of pyrometer