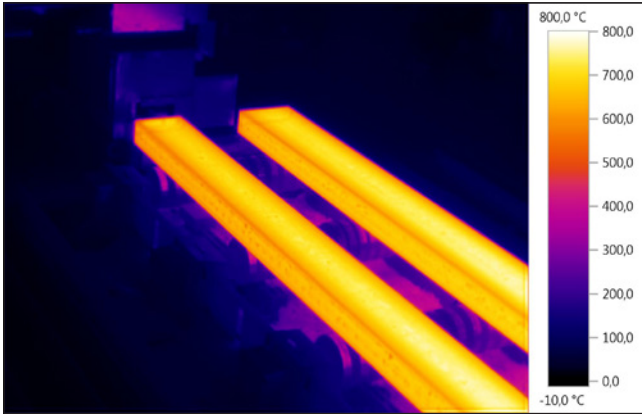


Ensure the efficiency of high-temperature systems with the thermal imager testo 885.



In high-temperature systems in the metal, chemical or building material industries, it is of crucial significance to be able to identify potential damage early, in order to prevent system downtimes and guarantee economic production. In this area, it is important to ensure a uniform temperature distribution of the goods in production, and thus also their quality.

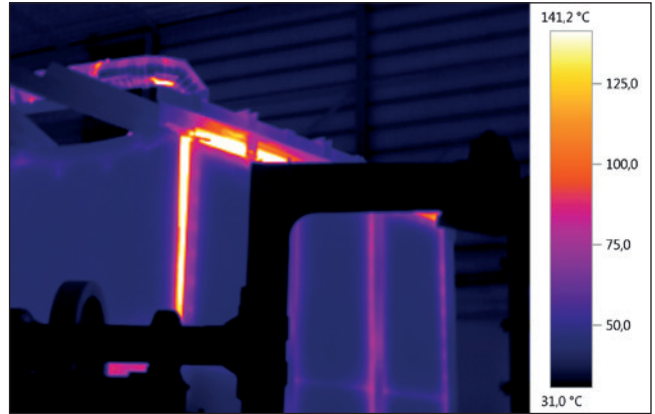
The thermal imager testo 885 fulfils all these requirements. With the help of the thermographic imaging procedure, not only the performance of the system, but also the properties of the products can be regularly checked, allowing a timely reaction to even the smallest thermal anomalies.



Steel slabs in a cooling store. Precise temperature monitoring is essential for optimum further processing.

The challenge.

In energy-intensive industry, products can only be manufactured in the desired quality if the process temperatures fluctuate within the intended range. This requires of the responsible people that they regularly check whether all processes are running according to plan and at the correct temperatures – otherwise there is a danger of slowed or qualitatively inferior processing. In the steel industry, for instance, the products must be heated to a specific temperature, which must then be maintained for some time, in order to process the pig iron into steel, and to achieve the optimum level of hardening. Before they can be cut, the steel slabs must then be cooled to a maximum of 900 to 1000 °C. However, in order to be processed optimally, their temperature may at the same time not drop below the recrystallization temperature (approx. 600 °C). The condition of the plants themselves is also a potential risk and cost factor. The high temperatures involved make the machines used particularly sensitive to malfunction. An incorrectly positioned ladle in a steelworks, for example, can cause follow-on damage to neighbouring systems, or even a fire. In order to ensure system availability and the safety of the employees, system components such as insulators must be regularly checked for damage due to material fatigue or wear. With a view to increasing efficiency, it is also important in the high-temperature range to ensure that no unused energy is lost. Particularly in times of increasing energy costs and stringent environmental regulations, this is more and more important.



The incomplete seal of an industrial furnace door. The energy loss is easily identifiable in the thermal image.

The solution.

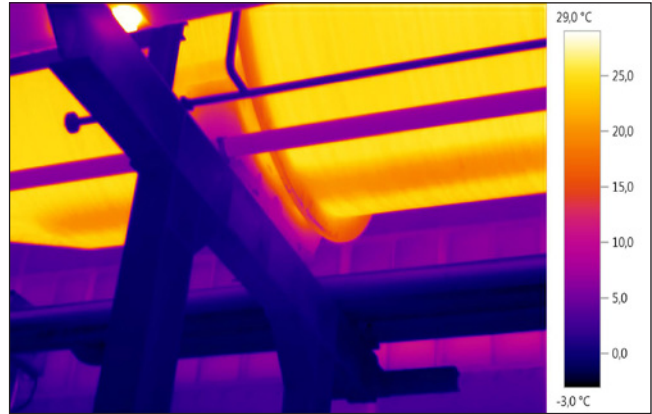
With numerous innovative functions, the thermal imager testo 885 enables you to ensure the efficiency of high-temperature systems precisely and reliably, before they become uneconomical, or the products show quality deficits.

High-resolution thermal images up to 1200 °C

In order for you to be able to work with high-resolution thermal images in the range of extremely high process temperatures, the testo 885 has a high-temperature option. This allows you to extend the measuring range to up to 1200 °C.

Contrast intensification for more precise data analysis

When testing extremely high process temperatures with a thermal imager, the temperature range, which is displayed in the form of a scale in addition to the thermal image, can be very large. However, especially in the high-temperature range, these extremely relevant values are usually in a particular area which is only insufficiently differentiated by colour. The histogram adjustment, which was developed especially for this application, shifts the colour palette into exactly the range which is of interest to you and in which the relevant temperature differences occur. This way, a starkly contrasted and very meaningful thermal image is created, allowing you even more precise data analysis.



Deposits in a furnace gas stack. They reduce the efficiency of the furnace, but are quickly and easily identifiable with the testo 885.

Precise thermography even on large objects.

The objects tested in energy-intensive industry are often of considerable size. In order to be able to test them conveniently and precisely with a thermal imager in spite of this, the testo 885 has a wide field of view. This allows even large machines and plants to be recorded thermographically at a glance.

Thanks to the panorama image function and the exchangeable lenses, you are extremely flexible when making thermographic recordings in the high-temperature range. You can cover the systems without danger using a wide-angle lens. If this is not sufficient, the panorama image assistant can help: You simply take several high-resolution thermal images of sections, and the panorama image assistant creates a composite image for you which provides an overview and details at the same time.

If there are certain system components for which you need an even more exact measurement, the telephoto lens offers the possibility of examining the measurement object precisely, even from a distance.

Four times more measurement values

Thanks to the intelligent SuperResolution technology, the thermal imager testo 885 offers optimum image quality. The patent-pending innovation from Testo uses the natural movement of your hand, and records several images, slightly offset to each other, one after the other in the shortest possible time. These are then calculated into one image using an algorithm. This produces a thermal image with four times as many measurement values. In the subsequent

analysis using the professional analysis software IRSoft developed by Testo, even higher-resolution thermal images are then available to you.

If you would like to learn more about Testo SuperResolution technology, simply order the brochure: +49 7653-681 700 or thermografie@testo.de.

Measurement site recognition with automatic thermal image management

In regular measurements directly on high-temperature systems, Testo offers you more efficiency and security with the innovative SiteRecognition function. It takes over the recognition of measurement sites as well as the storage and management of thermal images and measurement data fully automatically after each measurement tour.

For every measurement site stored in the IRSoft software, you can create markers (small symbols similar to QR codes), and attach them on site. In the next inspection, you simply record this marker with the SiteRecognition assistant of the imager, which then automatically stores the measurement site and the corresponding information together with the thermal image. When you transfer these thermal images to the analysis software after the measurement, they are then fully automatically sorted into the archive – and troublesome sorting and renaming by hand is eliminated. You can then conveniently open the images from the archive, and analyze and process them in reports.



With the thermal imager testo 885, you can:

- Identify damage to your systems in time
- Improve energy efficiency in production
- Ensure process temperatures up to 1200 °C in order to guarantee product quality

More information.

More information on high-temperature measurement with the thermal imager testo 885 and answers to all your questions concerning thermography at www.testo.com.



Thermal imager testo 885