Infrared Early Fire Detection Systems for the Recycling Sector

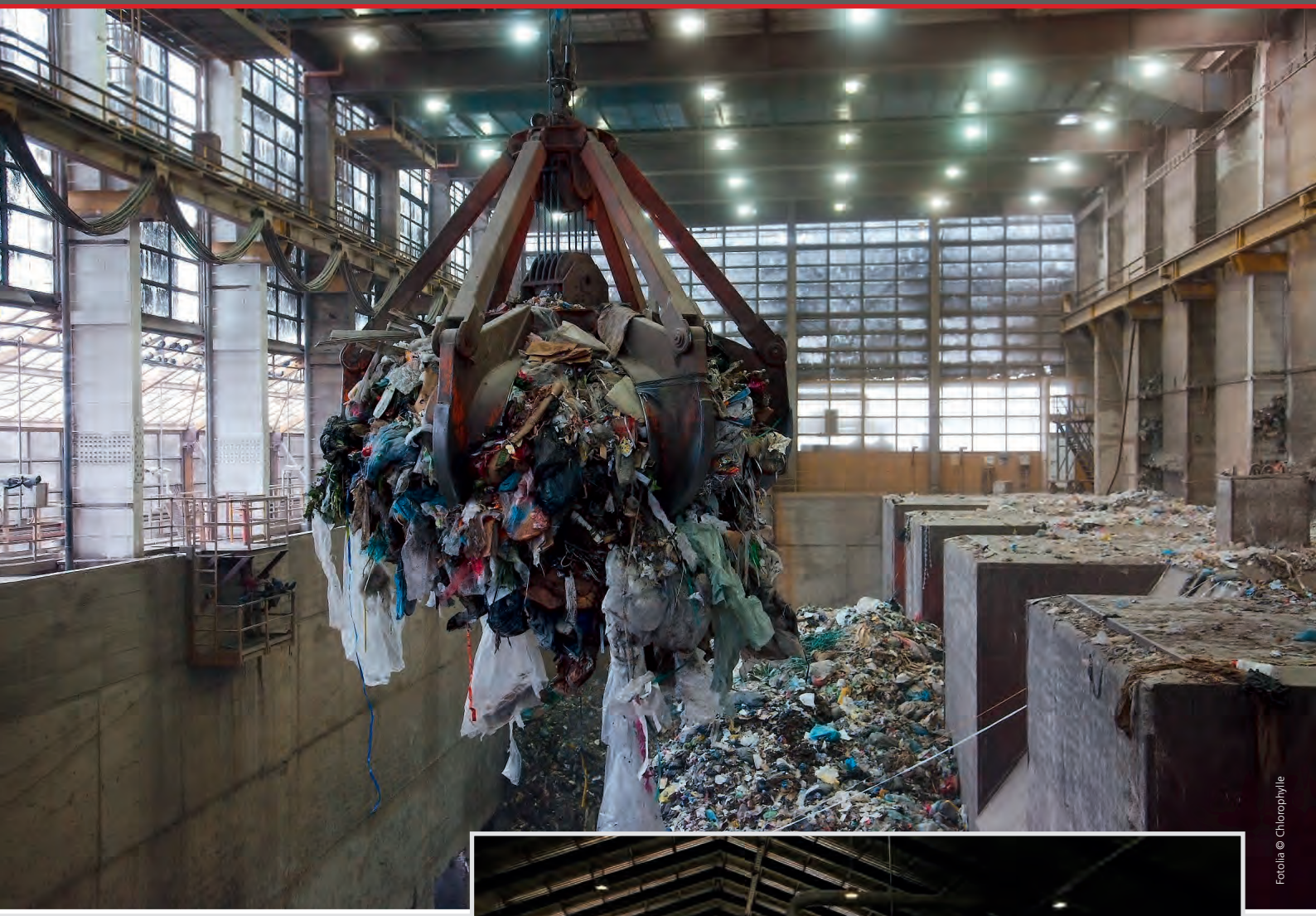
Fotolia © rbkelle

T&B electronic

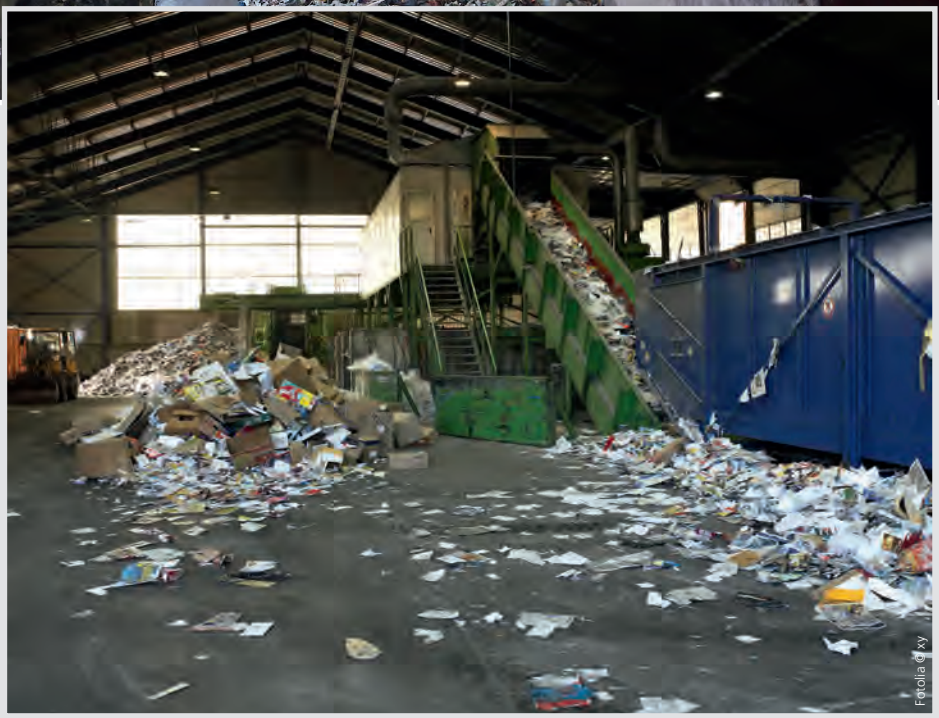
WE HAVE THE RIGHT SOLUTIONS FOR ALL APPLICATIONS.

T&B electronic GmbH · Industriestraße 3 · D-31061 Alfeld
Phone +49 (0) 5181 90991--0 · Fax +49 (0) 5181 90991-29
info@tbelectronic.eu · www.tbelectronic.eu

Infrared Early Fire Detection Systems for the Recycling Sector



Fotolia © Chlorophylle



Fotolia © xy

Where paper, waste and fuels are stored in closed bunkers and open spaces, reliable equipment for fire detection and fire-fighting is required.

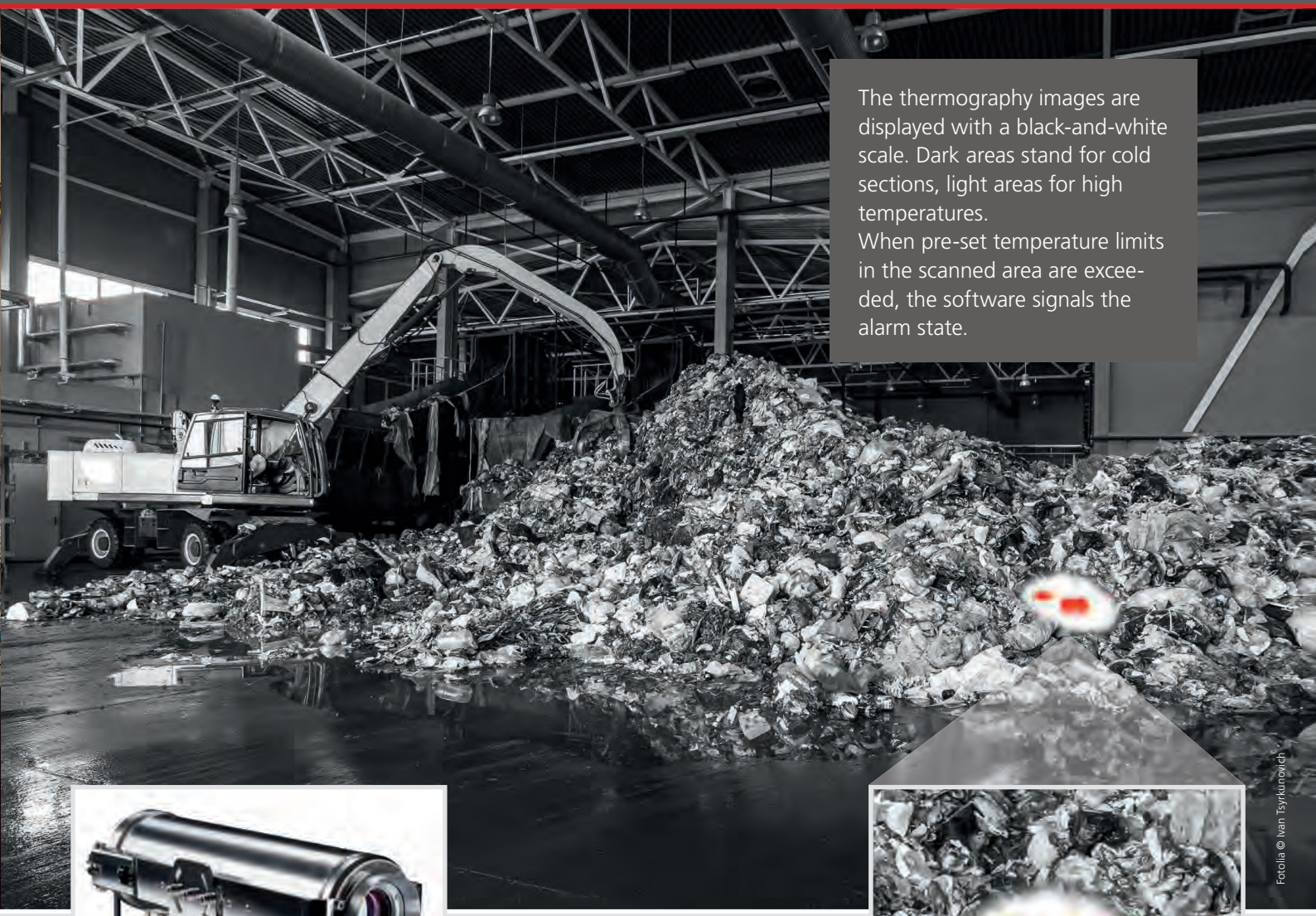
Self-ignition of the stored materials or contamination by hot materials can result in fires which constitute a high risk for both operators and the environment.

One effective preventative measure is an early fire detection system on the basis of an infrared camera incl. evaluation of the thermal images using software.

T&B electronic
WE HAVE THE RIGHT SOLUTIONS FOR ALL APPLICATIONS.

T&B electronic GmbH · Industriestraße 3 · D-31061 Alfeld
Phone +49 (0) 5181 90991-0 · Fax +49 (0) 5181 90991-29 · info@tbelectronic.eu · www.tbelectronic.eu

Infrared Early Fire Detection Systems for the Recycling Sector



The thermography images are displayed with a black-and-white scale. Dark areas stand for cold sections, light areas for high temperatures.
When pre-set temperature limits in the scanned area are exceeded, the software signals the alarm state.

Fotolia © Ivan Tsyrkunovich

© OPTRIS

Camera in compact housing

Fotolia © Ivan Tsyrkunovich

The infrared cameras, in a compact or weatherproof housing, are directed automatically to the freely definable sectors of the area to be monitored by means of the pivoting-tilting head, and continually measure the temperature distribution at the different positions. Thanks to the infrared technology, the measuring result is not influenced by smoke or dust.

In the event of a fire, areas which exceed the temperature limits are coloured red. This enables the user to detect the location of the fire immediately and trigger fire-fighting measures.

T&B electronic
WE HAVE THE RIGHT SOLUTIONS FOR ALL APPLICATIONS.

T&B electronic GmbH · Industriestraße 3 · D-31061 Alfeld
Phone +49 (0) 5181 90991-0 · Fax +49 (0) 5181 90991-29 · info@tbelectronic.eu · www.tbelectronic.eu

Infrared Early Fire Detection Systems for the Recycling Sector

© T&B

Alarms and system states are displayed on the monitor and on the control panel. External alarm equipment options (forwarding to a manned control centre, alerting of personnel e.g. via text message) and fire-fighting can be triggered directly.

When combined with a water mist extinguishing system, the system is able to put out fires automatically. For this, the monitored area is divided into individual sections, each of which is assigned to a sprinkler alarm valve station.

Since the camera determines the position of the source of the fire precisely, the specific water mist extinguishing section located above the source of the fire can be actuated. This minimises the use of extinguishing water.

Parallel to the extinguishing system being actuated, personnel are alerted and machines switched off.

A completely equipped system fulfils the requirements of the VdS guideline 3189 for IR camera units for temperature measurement in fire protection applications.

To supplement the installation of an early fire detection system incl. water mist extinguishing system, T&B offers the installation of spark extinguishing systems to protect conveyor lines and filters against dust explosions as well as the installation of gas extinguishing systems for object protection (e.g. machining centres).

We will be happy to draw up an individual protection concept for you. With a well thought-out protection concept, you send out a message of reliability and safety to your customers.

Reserve technical changes.

T&B electronic
WE HAVE THE RIGHT SOLUTIONS FOR ALL APPLICATIONS.

T&B electronic GmbH · Industriestraße 3 · D-31061 Alfeld
Phone +49 (0) 5181 90991-0 · Fax +49 (0) 5181 90991-29 · info@tbelectronic.eu · www.tbelectronic.eu