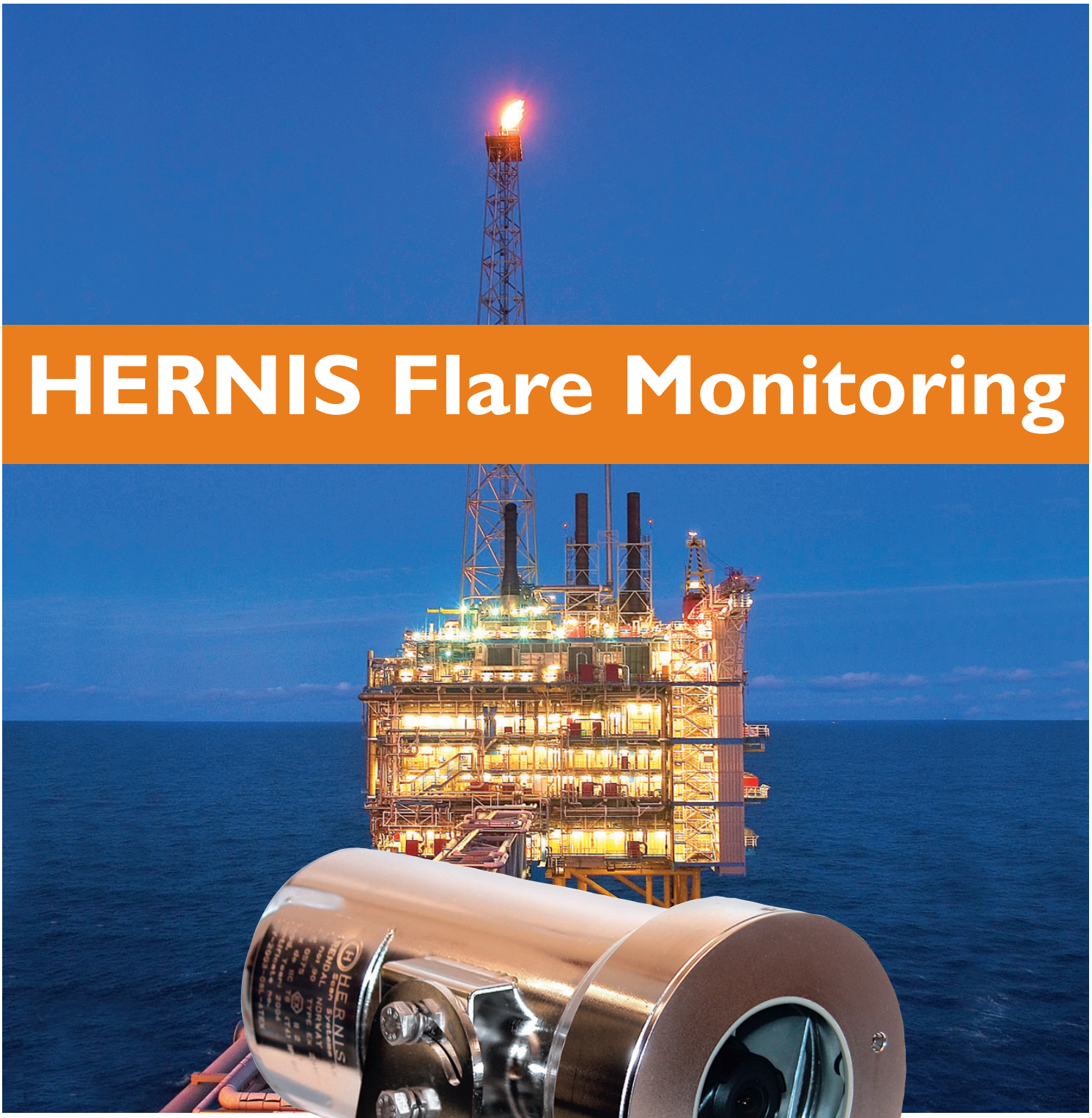
HERNIS Flare Monitoring



HERNIS Scan Systems

– when reliability counts

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HERNIS Flare Monitoring

HERNIS Scan Systems AS has supplied systems for visual surveillance of flares for many years. These systems could be either stand alone or be an integrated part of a larger CCTV system.

Flares

A flare serves as a safety device as it burns off gases vented from drilling or refinery process units. Excess gases are especially produced during start-up and shut-down procedures. Flares range in size, but most are normally about 6m high with a 1m diameter.

Camera station EX 291

Basic Flare Monitoring will facilitate a fixed camera station connected to a monitor located in the control room. All camera stations are made in stainless steel and are available in both explosion proof or weatherproof versions. Normally the camera sensor will be of CCD type, and a suitable lens is selected based on the height of the flare itself and the distance between the camera and flare. Remote controlled camera stations with pan, zoom and tilt could be utilized to overview several flares.

HERNIS offers **Intelligent Flare Detection** optionally as an important feature for their flare surveillance systems. The video image will be fed to and analyzed by a PC with special software application suitable for this purpose. In event of the flare stops burning operators will be notified by an alarm and the incident may also be recorded.

Another choice of camera would be to use an IR sensitive camera. This alternative will reproduce only rays emitted from the heat of the flare. In such way we can avoid the unwanted effects created by visible light. These effects are normally caused by reflections, changes made by clouds or general difference between day and night time conditions.

Reliable Concept

Typical System Lay-out

Signal Transmission

The type of transmission for video, power and eventual control signals are normally selected based on distance between location of camera and control room. HERNIS can offer their Multicables or alternatives based on fibre optical or twisted pair cable for this purpose. In some cases equipment using wireless transmission could provide a cost effective choice.

Features and Benefits

- Full visual overview of remote flares
- Reduced danger for personnel
- Integrated alarm if flare is not burning
- Simple and reliable concept
- Reduced downtime and operational cost
- Interface to remote ignition system
- Application available on all control systems

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