FLAMESCAN

EARLY WARNING FLAME FIRE DETECTION

A PRODUCT BY HELIOS FIRE SYSTEMS

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THE ULTIMATE IN FIRE DETECTION TECHNOLOGY

Waste Disposal and recycling facilities are the industrial properties most vulnerable to fire. A study conducted by the Chief Fire Officers Association of the UK found there to have been an average of 250 waste fires a year over the last 10 years, at a cost of £16 million (US$20.7 million).

This number has remained steady through that period, as the tools to combat and mitigate these fires more effectively have simply not been available.

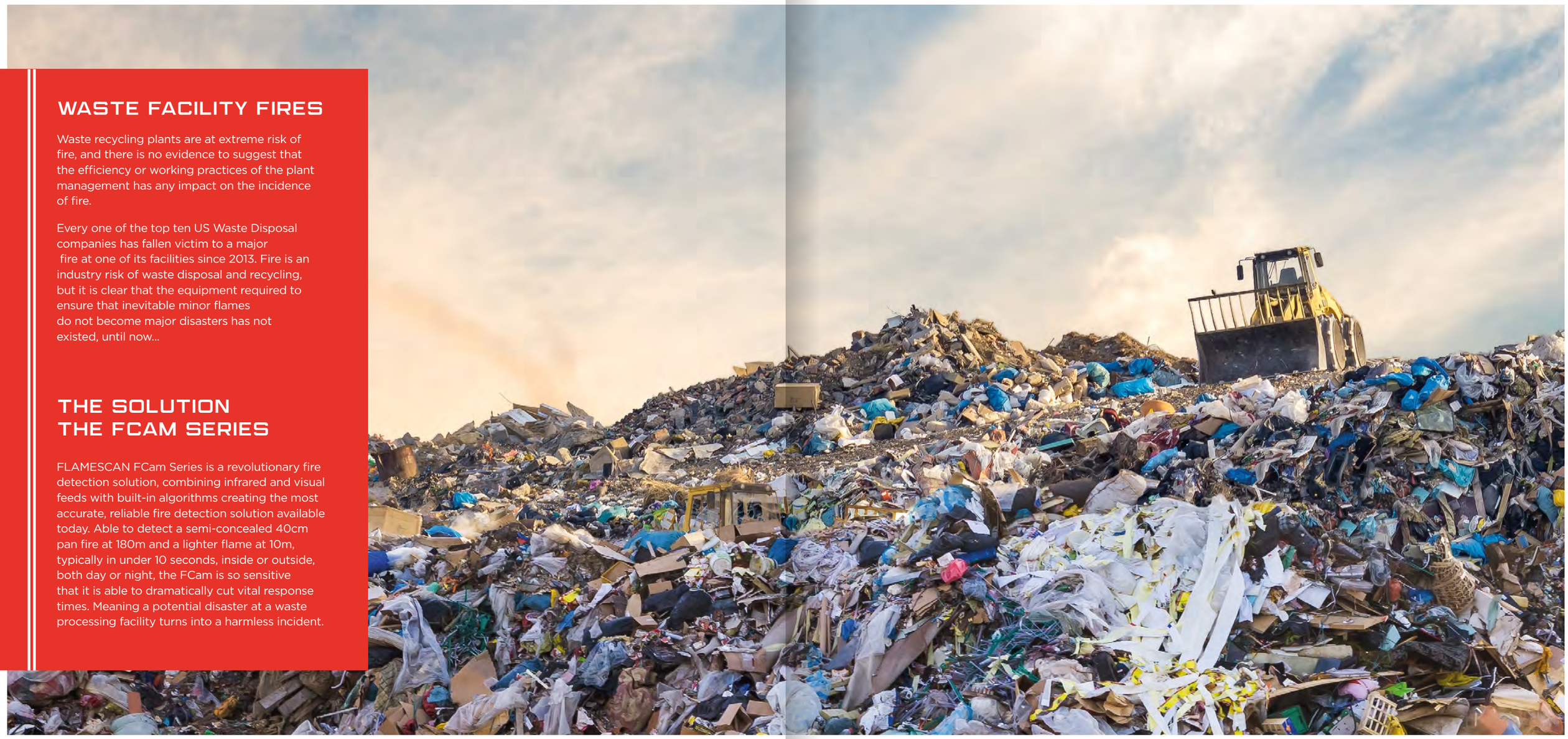
WASTE FACILITY FIRES

Waste recycling plants are at extreme risk of fire, and there is no evidence to suggest that the efficiency or working practices of the plant management has any impact on the incidence of fire.

Every one of the top ten US Waste Disposal companies has fallen victim to a major fire at one of its facilities since 2013. Fire is an industry risk of waste disposal and recycling, but it is clear that the equipment required to ensure that inevitable minor flames do not become major disasters has not existed, until now...

THE SOLUTION THE FCAM SERIES

FLAMESCAN FCam Series is a revolutionary fire detection solution, combining infrared and visual feeds with built-in algorithms creating the most accurate, reliable fire detection solution available today. Able to detect a semi-concealed 40cm pan fire at 180m and a lighter flame at 10m, typically in under 10 seconds, inside or outside, both day or night, the FCam is so sensitive that it is able to dramatically cut vital response times. Meaning a potential disaster at a waste processing facility turns into a harmless incident.



WHY FCAM

In section 13 of the Environment Agency's Fire prevention plans, issued May 2018, it states "You must have procedures in place to detect a fire in its early stages so you can reduce its impact. Your detection system should be proportionate to the nature and scale of waste management activities you carry out and the associated risks.

Appropriate automated systems may include: smoke and heat detectors including temperature probes, CCTV visual flame detection systems, spark, infrared and ultraviolet detection." Of these options the only one which provides accurate and early detection of a fire, without false alarms, is CCTV visual flame detection.

Smoke detectors are rarely appropriate because of the site conditions - they are easily contaminated and often triggered by dust, dirt, fumes or moisture. Heat detectors are slow to operate and will trigger far too late to allow any useful intervention.

Temperature probes and standard IR flame detectors does have limited use in monitoring specific piles of waste against the risk of self-combustion, but they are complicated to set up and prone to false alarms. Spark, infrared and ultraviolet flame detection again have some uses, but are restricted to close range detection and prone to false alarms from sunlight or other sources of IR/UV light. CCTV visual flame detection on the other hand can give early warning of a confirmed fire, with no false alarms, over large distances.

The Helios Fire Systems FCam system will see a fire starting and tell you about it immediately. It uses a combination of visual and InfraRed image processing analytics to locate and notify of small fires at up to 180m distance within just a few seconds. The FCam system integrates seamlessly into any existing fire alarm and/or CCTV systems, or can stand alone. It will instantly notify staff on site, responders off site and (via a remote monitoring centre) the Fire and Rescue Service and any keyholders. Cost effective, simple to use, and with proven reliability - why would you not used the Helios Fire Systems FCam to limit your exposure to the damaging effects of fire on your site?

We will come to your site and conduct a survey, free of charge, and provide a detailed design for your site using state of the art 3D CAD modelling software to ensure all angles are covered. We work with your existing fire/security/ CCTV installer, or we can recommend an approved local installer.

We support them with training if required, and we commission the finished system. Once commissioned and tested by us, we then provide full certification to BS5839-1 for the design and commissioning of the system.

FCAMX FEATURES

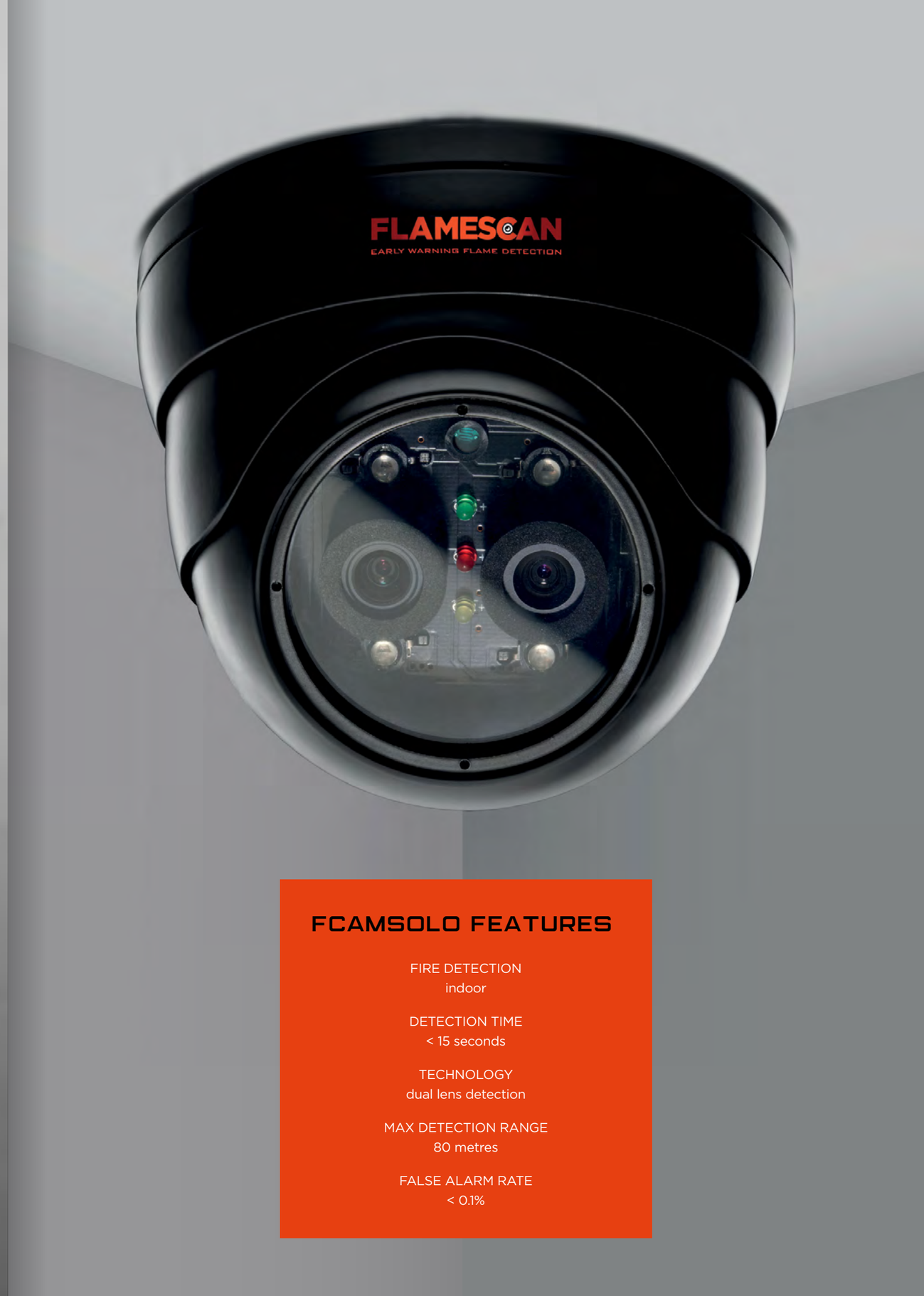
FIRE DETECTION
indoor and outdoor

DETECTION TIME
< 15 seconds

TECHNOLOGY
dual lens detection

MAX DETECTION RANGE
180 metres

FALSE ALARM RATE
< 0.1%



FCAMSOLO FEATURES

FIRE DETECTION
indoor

DETECTION TIME
< 15 seconds

TECHNOLOGY
dual lens detection

MAX DETECTION RANGE
80 metres

FALSE ALARM RATE
< 0.1%

FCAMEX FEATURES

FIRE DETECTION
indoor and outdoor

DETECTION TIME
< 15 seconds

TECHNOLOGY
dual lens detection (EX)

MAX DETECTION RANGE
180 metres

FALSE ALARM RATE
< 0.1%

FCAM CONTROLLER FEATURES

The FCamController monitors the status of the FCam network and communicates alarm events and camera status to the outside world. It also allows remote reset of camera alarms. Normally used with one or more FCam I/O Modules to provide remote inputs and volt-free outputs from the FCam network.

CHOOSE THE SUPERIOR SYSTEM

The FCam series is not a thermal camera. It is a camera which utilises near IR detection sensors with dual overlay real time CCTV. Incorporating algorithms for detecting flames at their earliest inception, this hugely reduces false alarm rates to less than 1 in 1000 events.

Also if a fire starts at a higher temperature than the Flame detector has been set to this could lead to catastrophic consequences.

LIVE IMAGE

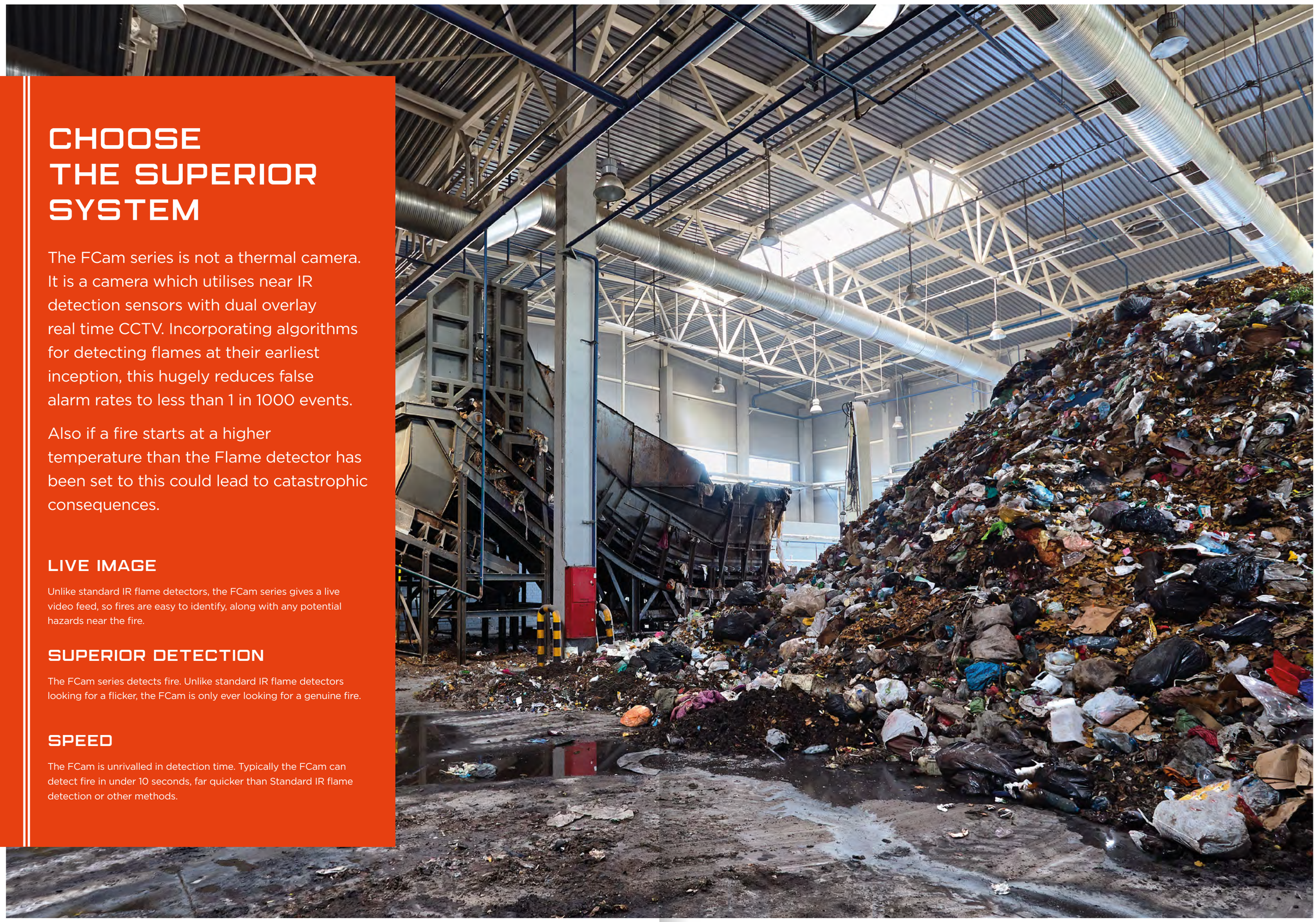
Unlike standard IR flame detectors, the FCam series gives a live video feed, so fires are easy to identify, along with any potential hazards near the fire.

SUPERIOR DETECTION

The FCam series detects fire. Unlike standard IR flame detectors looking for a flicker, the FCam is only ever looking for a genuine fire.

SPEED

The FCam is unrivalled in detection time. Typically the FCam can detect fire in under 10 seconds, far quicker than Standard IR flame detection or other methods.



HELIOS FIRE SYSTEMS PROVIDE EARLY WARNING INNOVATIVE TECHNOLOGIES

We offer advanced, state-of-the-art solutions to protect your business and the local environment around it. Full project management by our in-house team of engineers is provided for ease, speed and complete peace of mind.

PYROSMART
Early Warning Targeted Detection

A.T.F.S.
Targeted Fire Suppression

I-DETECT
Infrared Early Fire Detection

ATEXON
Automatic Spark Detection

AMFE
Miniature Fire Extinguisher

FIRE MIST
High Pressure Mist

TO FIND OUT MORE ABOUT OUR PRODUCTS VISIT WWW.HELIOSFIRESYSTEMS.UK

HELIOS
FIRE SYSTEMS

SPECIFICATION
Systems are tailored to each individual client requirements, using the most innovative technology throughout Europe.

DESIGN
Complete bespoke design to suit your business requirements.

INSTALLATION
Our in-house team of engineers with over 25 years experience install and manage the project from start to finish.

SERVICING
Our after sales service includes maintenance contracts for serviceability and continuity over the lifespan of the system.

SPARE PARTS
Our warehouse stocks all spare parts required for servicing installed systems.

COMMISSIONING
All projects are given 4 weeks commissioning and testing. This can be re-visited/re-tested throughout product lifespan.

TO DISCUSS YOUR REQUIREMENTS CALL US ON +44 (0) 161 226 1885

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