MIRION
TECHNOLOGIES

Cameras for Extreme Environments

We Understand Your Challenges

Mirion Technologies is a leader in the supply of advanced CCTV and visual imaging systems for demanding environments.

We design and manufacture the IST-Rees® and IST-Quadtek® range of imaging systems for inspection, surveillance and monitoring in industries as diverse as Nuclear (power plants, reprocessing and decommissioning), Cement, Pulp and Paper, Power Generation (gas, coal and oil), Steel, Glass, Petrochemical and Waste Incineration.

With thousands of systems in use worldwide, Mirion has more than 35 years of experience in serving global markets -- and delivering unrivaled support and expertise to address our clients' needs.

Our team of electronic, mechanical and software engineers strive to optimize Mirion products for performance and reliability. Our intense focus on quality, project management and service ensures that we are able to provide our customers with the best engineering solution for their imaging application.

In addition to high quality products, Mirion offers worldwide technical assistance, comprehensive training, on-site installation/commissioning, after sales support and product maintenance.

The entire manufacturing process, from the use of high quality raw materials and components through the final inspection stages, is rigorously monitored to ensure that we meet and exceed the strict requirements and expectations of our customers. Our quality assurance program covers design, applications development, manufacture, repair, servicing and installation and is certified to ISO 9001:2015 by a UKAS and/or ANAB accredited bodies.

Nuclear Inspection Systems

Cameras hardened against the effects of radiation

R93™ Camera

Mini PTZ Mk 2

HD RAD

Dotcam HR

As an acknowledged leader of radiation tolerant CCTV systems for the Nuclear industry, IST-Rees branded products from Mirion offer a wide range of inspection options. Our cameras can be equipped with a selection of lenses and lighting attachments, allowing operators to carry out a variety of inspection tasks for low and high radiation environments. With thousands of cameras in use worldwide, we are committed to supporting and expanding our product line with new systems and product enhancements.

RADIATION TOLERANT INSPECTION CAMERA APPLICATIONS.

- ✓ Refuelling/nuclear fuel ponds
- ✓ Reactor vessel inspection
- ✓ Fuel handling equipment maintenance
- ✓ Fuel movement and verification
- ✓ RV head disassembly/reassembly
- ✓ BWR shroud inspection/repair
- ✓ Reactor internals inspection
- ✓ FOSAR
- ✓ Welding applications
- ✓ Corrosion evaluation
- ✓ Robotics and remote tooling
- ✓ Control rod drive mechanism inspection
- ✓ Tanks and vessels
- ✓ ROVs
- ✓ Inspection in confined spaces
- ✓ Steam headers
- ✓ Circulating pump and wedge inspection

Nuclear Surveillance Systems

Enabling confidence and continuous operation

CCTV monitoring of Nuclear Reprocessing, Waste Management and Storage Plants is an important function in the operation and supervision of these facilities.

Permanently located within the plant and designed to survive the hostile environment frequently encountered, IST-Rees surveillance cameras provide an essential component within the industry's process control infrastructure.

Safety requirements relating to new power station construction and "plant life extension" also necessitate the use of multi-camera monitoring systems. Here, cameras are employed to provide surveillance of areas where access is impaired or restricted, allowing operators to easily and continuously monitor key locations within their facility.

Major project experience and an in-depth knowledge of the latest CCTV technology are crucial in our ability to meet the rigorous specifications that the nuclear industry demands. We employ professionally qualified System Design Engineers and Project Managers experienced in configuring and managing CCTV projects from initial concept to final on-site commissioning.

Hyperion™ Compact Gen II Camera

R981™ Compact

SC985™ HR

R981TR™

High Temperature Industrial

Cameras and imaging systems built to withstand extreme temperatures

CEMENT

Rotary kilns are used extensively in the cement industry and other industries. They can be used as pelletizers, calciners, dryers or can act as the reaction vessel for a host of specialized operations in the metals, chemical and mineral industries. Mirion provides camera systems for rotary kiln viewing and for multiple temperature zone measurement, to allow kiln operations to be observed and optimized for production efficiency and fuel economy.

Rotary cement kilns normally discharge into grate-type clinker coolers. Mirion cameras are extensively used in these coolers to monitor production and to look out for potential upset conditions. The Spyrometer® system with its temperature measurement capabilities can be used in coolers to optimize cooling profiles and maximize heat recovery.

POWER GENERATION

Power boilers can use fuels such as pulverized coal, lignite, coke or other solid fossil fuels. Gas or oil fired boilers are also prevalent. Such boilers use cameras to monitor flame shape and progression during start-up, to ensure safe burner ignition and monitor fireball development in wall and corner fixed configurations. Additionally, our infrared imaging systems are used to monitor slag build-up on boiler walls and superheater areas.

Mirion offers unrivaled expertise in the field of boiler viewing and is one of the largest suppliers of viewing systems to the power industry worldwide.

Fluidised Bed Boilers are becoming increasingly popular due to greater efficiency and the ability to handle solid fuels without intensive pre-processing. They present a challenging viewing environment, yet Mirion's Lynx® camera series are extensively used to monitor the inside of these boilers to ensure an evenly distributed and safely controlled burning operation.

High Temperature Industrial

INCINERATION AND ENERGY FROM WASTE (EFW)

Energy from Waste (EfW) plants are becoming generally accepted as a very efficient way of dealing with household and industrial waste.

The exact design and type of the furnace can vary from rotary kilns for the disposal of industrial waste, through to stepped grates for the conversion of waste to energy, but in each case the principal need for a camera is much the same.

Mirion can provide cameras designed for the viewing needs of an incinerator. Our cameras offer various fields of view and have a wide dynamic range, allowing material in the furnace to be observed during and immediately after combustion.

Mirion's Lynx high temperature camera systems are extensively used for boiler and furnace viewing applications, owing to their robust construction and excellent picture quality. Operators can see conditions clearly from the safety of the control room, avoiding the need to go to the boiler face, furnace wall or kiln hood to check on the process.

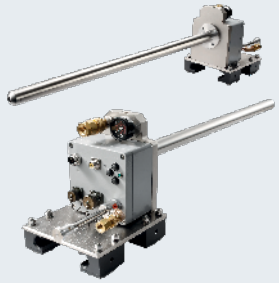
PULP AND PAPER

Pulp mills have a number of applications for our cameras. Whether it is viewing in the recovery boiler or a supervision system for the burners in a bark fired furnace, Mirion can provide a high temperature camera system tailored to your needs.

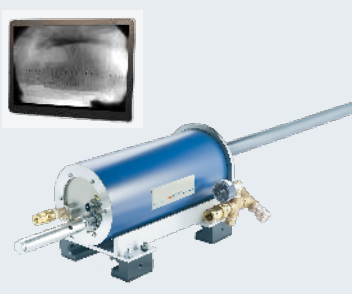
Kraft recovery boilers present a very challenging viewing requirement for a camera system. Mirion's range of BEDBUG® cameras utilize advanced infrared viewing techniques to provide operators with a clear image of the smelt bed, allowing the bed profile to be accurately controlled.

M555™ Spyrometer Camera

Power Generation



M535™ Camera



M560™ Camera

Vital Protection. Transformative Potential.™

MIRION IS A GLOBAL LEADER IN RADIATION SAFETY, SCIENCE AND MEDICINE.

We offer a diverse portfolio of products and services that protects people and the planet from the harmful effects of ionizing radiation and accelerates innovation across a diversity of end markets.

The Mirion Technologies group provides proven radiation safety technologies that operate with the highest levels of precision – from R&D labs, to critical nuclear facilities, and on the front lines. In collaboration with our customers, Mirion empowers innovations that deliver vital protection and harness the transformative potential of ionizing radiation to shape our future world.




MIRION

Protect What's Next™

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TECHNOLOGIES

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