



MIRION
TECHNOLOGIES



Solutions for Small Modular Reactor Applications





SMR-FOCUSED SOLUTIONS

Vital Technologies. Critical Expertise.

Protecting what's next is essential in the high-potential and high-stakes small modular reactor (SMR) industry. At Mirion Technologies, we understand that today's needs are critical, and tomorrow's challenges are complex. That's why we partner with industry leaders to accelerate innovation and unlock what's possible. Our comprehensive range of radiation safety technologies and unmatched expertise enables us to design, implement, and support radiation safety solutions that safeguard what's next. Trust us to help you protect your most valuable assets and ensure a secure and sustainable future for generations to come.

SUPPORTING CRITICAL SMR APPLICATIONS

- ✓ Reactor Penetrations & Sensors
- ✓ Radiation Monitoring Systems
- ✓ Imaging Systems
- ✓ Secure Integrated Solutions
- ✓ Radiochemistry Solutions
- ✓ Health Physics & Radiation Protection Systems



Solving Essential Nuclear Measurement & Security Challenges

REACTOR MONITORING & SURVEILLANCE

We offer critical plant systems and components for monitoring reactors and surrounding environments.

REAL-TIME MEASUREMENT & INTEGRATIONS

We provide online spectroscopy for process and effluent measurement, plus integration of adjacent system functions like access control and radiation protection.

WORKER & PUBLIC SAFETY

We deliver a full suite of radiochemistry and health physics solutions to protect worker and public safety while supporting plant operations.

PLANT PERFORMANCE OPTIMIZATION

We offer solutions that improve nuclear fuel utilization and safety through real-time assay and criticality monitoring.

REGULATORY COMPLIANCE

We deliver technologies and build customized solutions to meet design, license, and regulatory requirements.

RADIATION SAFETY TRAINING

We offer service and support in training the next generation of nuclear operators, systems engineers, radiochemistry, and radiation protection personnel



Industry-Leading Solutions in Six Key SMR Application Areas



Reactor Penetrations and Sensors

Enhance the safety and control of nuclear reactors with ultra-precise instrumentation, to ensure nuclear power plants can perform at their maximum potential.

- Advanced electrical penetrations through containment walls compliant with IEEE-317, -323, -344, IEC Pub. IEG-60772, and KTA-3404
- Temperature, in-core and ex-core sensors Class 1E qualified to IEEE-323, -344



Radiation Monitoring Systems

Enable the safe operations of nuclear power plants, research reactors, fuel cycle facilities and other specialized SMR systems with a complete range of safety-related fixed and mobile radiation monitoring systems.

- Gaseous and/or liquid effluent monitors including stack monitors
- Neutron flux, nitrogen, tritium and safety-related area monitors
- Systems built in accordance with IEEE 323 and IEC 60780



Radiochemistry Solutions

Quickly and accurately analyze reactor process and environmental samples with gamma spectroscopic and low-background alpha/beta counting solutions for laboratory and in situ applications.

- Laboratory and portable instrumentation for gamma spectroscopy
- Laboratory and portable systems for low background alpha/beta measurements
- Continuous gamma spectroscopy systems for real-time, in-situ nuclide identification/quantification and trending of tanks and liquid or gaseous process lines



Secure Integrated Solutions

Provide a unified security command-and-control platform specifically designed to meet U.S. 10CFR73.55 / 73.54 requirements for nuclear power generation facilities.

- Perimeter intrusion detection, alarm management, access control/biometrics, and video surveillance for site security
- Integrated cybersecurity solutions compliant with NEI 08-09



Imaging Systems

Gain confident visibility in the most extreme environments with radiation-tolerant imaging systems that ensure safe and continuous operations at nuclear facilities.

- Radiation-tolerant cameras and lighting accessories for inspection and surveillance tasks in low- to high-radiation areas, with total gamma dose up to 2M Gy (2 x 10⁸ rad)
- Underwater operational depths up to 60 m (200 ft)



Health Physics & Radiation Protection Systems

Protect worker safety and ensure smooth plant operations through contamination and clearance monitoring, portable radiation measurement, and personnel and environmental monitoring, as well as criticality monitoring for nuclear fuel facilities.

- Contamination and clearance monitors for personnel, objects, and vehicles at radiation/security boundaries
- Electronic dosimetry for personnel with optional telemetry and/or dose and location tracking
- Personnel dose management database software
- Handheld radiation instrumentation for alpha, beta, gamma, and neutron surveys
- Area, criticality and perimeter gamma monitoring systems

Advancing Outcomes Through Collaborative Expertise

Our global service team is dedicated to providing customers with the support they need, when they need it to help drive their business forward:

PRE-PURCHASE SOLUTION CONSULTING

We offer high-touch, pre-purchase consulting services to ensure our customers get the right technologies and solutions to meet their application requirements and fit their budgets—including customization where necessary.

RESPONSIVE TECHNICAL SUPPORT & SERVICES

Our 270+ distributed field service engineers rapidly respond to deliver dependable technical support and service. Tiered service partner agreements provide flexible support—on-demand anytime and on-site anywhere, to keep customers safely operating at peak performance.

ON-SITE & VIRTUAL TRAINING

Expert-led training is available both on-site and virtually to provide our customers' employees with radiation safety fundamentals and in-depth product usage best practices to help promote safe, efficient operations.

GLOBAL CALIBRATION FACILITIES

Four fully certified calibration facilities spread across the globe enable streamlined calibration and recalibration of radiation safety equipment to ensure ultra-precise functionality and maximize equipment life.

MEASUREMENT SERVICES

To support our customers' in-house teams, we provide nuclear measurement services such as laboratory, environmental, safeguards, and nuclear waste assays.

FACILITY DESIGN CONSULTING

Our SMR experts can engage early in the facility design process to help optimize facility spaces for their specific application(s) and technologies they house.

Empowering Progress Across Continents

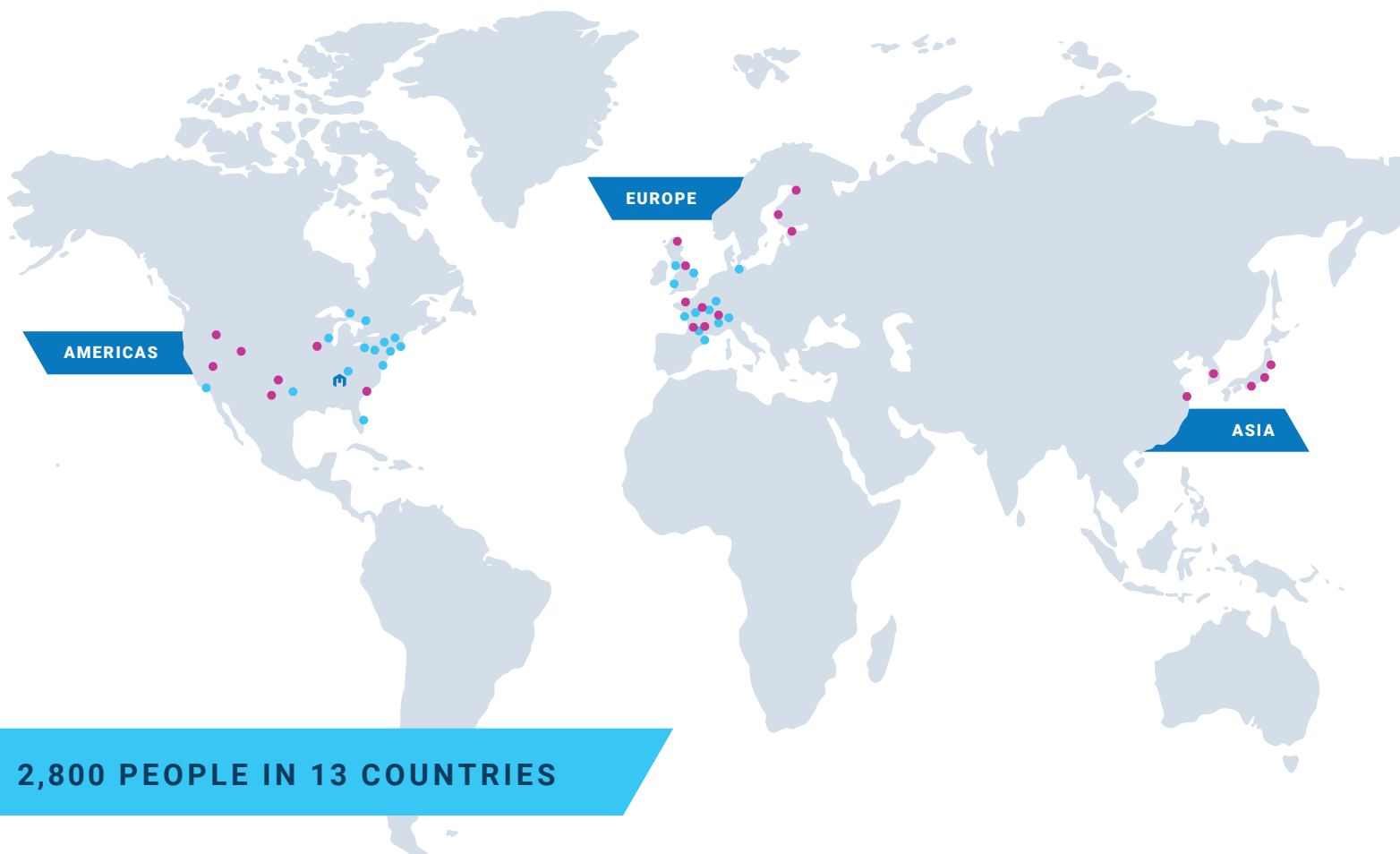
Mirion Technologies combines innovative radiation safety technologies with unrivaled expertise, cultivated over decades of collaboration with reactor manufacturers and operators, nuclear fuel facilities, regulators, national labs (such as the U.S. DOE), nuclear institutes, universities, and national military/security organizations worldwide.

Trust us to provide the solutions and support you need to safeguard your valuable assets and ensure a secure and sustainable future.

 CORPORATE HQ (ATLANTA, GA)

 MANUFACTURING SITES

 SERVICE & SALES CENTERS



2,800 PEOPLE IN 13 COUNTRIES



Protect What's Next™



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