



Choose certainty.  
Add value.

## Equipment Qualification

Ensure the safety of your nuclear equipment at all times.

### Your challenges

To ensure the safety, reliability and efficiency of nuclear facilities, it is important for authorities, manufacturers and licensees to guarantee the quality and functionality of the equipment at all times. Manufacturers and licensees must therefore ensure that they comply with rigorous quality requirements and qualify their equipment according to national and international standards and regulations.

### Why is equipment qualification important for authorities, developers and licensees?

Equipment qualification provides documented evidence that the electrical, instrumentation and control (I&C), and mechanical equipment are able to perform their safety-related functions reliably on demand - in normal and abnormal conditions, or even in the event of an accident. Equipment qualification also enables early detection of errors and weaknesses, which helps to prevent costly rework and saves time.

### How can we help you?

As an independent technical expert organisation that is familiar with the relevant regulations and standards, TÜV SÜD helps authorities, nuclear power plant developers and licensees ensure that all safety and security requirements are fulfilled. Our comprehensive service portfolio includes equipment qualification for new build as well as retrofitting projects around the world. By leveraging on our experience in international activities and participation in regulatory working groups, we are able to transfer state-of-the-art methods into practical applications that help you meet national and international requirements.

TÜV SÜD is an internationally-recognised and impartial Inspection Body certified according to DIN EN ISO 17020, Type A. We also provide theoretical and practical testing in our DIN EN ISO 17025-accredited test laboratories in the UK and Germany.



## Our equipment qualification services

- **Specification preparation**

We help you define the requirements and specifications for the qualification of your safety-related equipment according to applicable standards and regulations.

- **Document review and assessment**

We review and assess your technical documentation, including layout, drawings, calculations, inspection plans, etc. Our experts will also conduct a code compliance check, taking into account national and project-specific requirements.

- **Conformity assessment**

We carry out practical tests, such as environmental, seismic, electromagnetic compatibility (EMC) tests, etc. in our own DIN EN ISO 17025-accredited test laboratories. As an Inspection Body certified according to DIN EN ISO 17020, Type A, as well as a Notified Body, TÜV SÜD can help you prove that your equipment complies with applicable standards.

## Your business benefits

- **Ensure quality** - through independent verification of your equipment properties, design and manufacturing process.
- **Minimise risk** - with our third-party testing, inspection and certification services that ensure your project performs safely and efficiently, reducing chances of quality and safety issues.

- **Benefit from complete solutions** - with TÜV SÜD's one-stop service covering the entire plant lifecycle.
- **Gain confidence and assurance** - by working with a trusted and objective third-party organisation.

## Why choose TÜV SÜD?

TÜV SÜD is an independent third-party technical expert organisation that provides impartial and objective equipment inspections and testing, while protecting your intellectual property. We provide end-to-end solutions from the initial design stage through the entire lifecycle of nuclear facilities, equipment and components.

Backed by more than 50 years of experience in the industry, we offer world-class expertise, which includes extensive knowledge of national and international standards and regulations. Our international reach enables us to draw upon global best practices whilst taking into consideration your local needs.

## Choose certainty. Add value.

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in assessment, testing, inspection, auditing, certification, training and knowledge services. Represented in over 1,000 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East, Africa and Asia. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

## Related services

TÜV SÜD provides the following related services:

- Design and construction of nuclear power plants
- Nuclear power plant operation
- Safety assessment of nuclear installations
- ASME Code services for the nuclear sector
- DIN EN ISO IEC 17020 inspection services
- Seismic hazard analysis and design