

Qualification of I&C and Electrical Equipment

Reliable qualification services for successful projects

We perform your equipment qualification using our long experience and worldwide expertise on I&C and electrical equipment

Challenge

The activities related to the nuclear qualification of I&C and electrical equipment is a significant investment and can put a project at risk if not managed with a high expertise. The equipment qualification must take into account a wide range of parameters and regulatory requirements, such as:

- Environmental conditions like temperature, humidity, air pressure
- Operational conditions, like electromagnetic interferences, voltage fluctuation, short circuit faults
- Hazards like earthquakes, airplane crash, explosion pressure waves, flooding
- Internal events like Loss of Coolant Accidents (LOCA), leakages, pipe breaks, severe accidents
- International and national guidelines, rules and standards (IAEA, IEEE, IEC, RCC-E, KTA, YVL, etc.)

Solution

We offer numerous solutions to cope with the challenges of qualifying I&C and electrical equipment. Our qualification experts define the right qualification strategy in accordance with applicable standards and manage the full equipment qualification process:

- Select already qualified equipment from our Equipment Qualification Data Base where applicable and fitting
- Set-up and manage qualification program
- Perform equipment analyses
- Specify and supervise tests
- Perform tests in-house at own unique test facilities
- Support potentially required design changes during the qualification campaign
- Provide qualification summary report and reference files
- Take care of qualification preservation



I&C cabinet qualification tests



Harsh environment qualification tests

Customer benefits

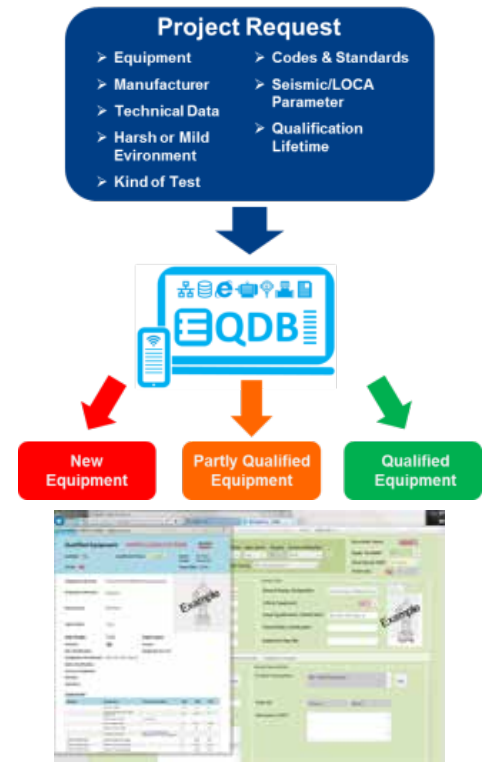
- Rely on our worldwide network and experience in qualification methods
- Reduce project risks and cost
- Optimize qualification thanks to list of pre-qualified devices from our Equipment Qualification Data Base
- Reduce interfaces through comprehensive management of complete qualification strategy and campaign

Your performance
is our everyday **commitment**

Technical information

We contribute to successfully achieving your qualification project building upon our high level of expertise and our proven method:

- Thorough risk assessment before starting equipment qualification
- Use of our Equipment Qualification Data Base containing thousands of already qualified electrical components
- Best practice in qualification methods based on our worldwide experience
- Execution and/or supervision of tests and analysis by professional and skilled personnel
- Performance of delta analyses and dedicated equipment upgrades to reduce cost and time consuming qualification campaigns.
- Deep knowledge in code and standards such as :
 - IAEA
 - IEC/IEEE 60780-323
 - IEC/IEEE 60980-344
 - RCC-E
 - KTA
 - YVL, etc.



Use of our Equipment Qualification Data Base

Key figures

We have already performed Electrical Equipment Qualification in more than **15** different countries for **2500** different electrical equipment

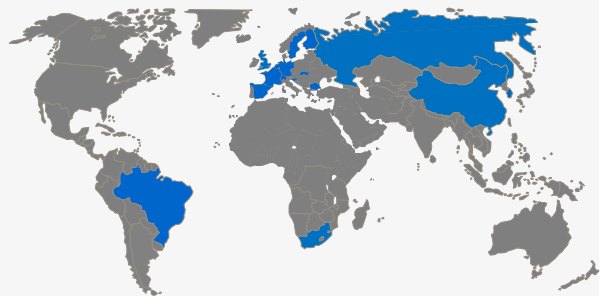
References

New build projects:

- UK
- Finland
- France
- China

Modernization of existing nuclear power plants:

- Belgium
- Brazil
- Bulgaria
- China
- Finland
- Germany
- Netherlands
- Russia
- Slovakia
- Slovenia
- South Africa
- South Korea
- Spain
- Sweden
- Switzerland



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