

Explosion Protection for Hazardous Environments



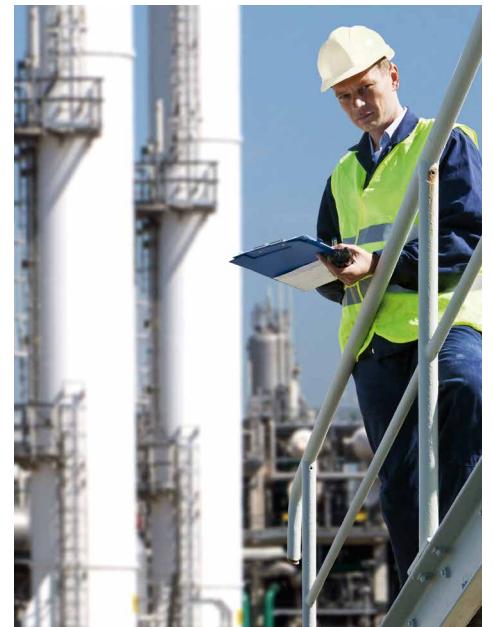
Explosion protection services to ensure safety and compliance of your plants and assemblies

When operating plants or assemblies in hazardous or explosive areas, you need to ensure safety of your assets and personnel. You must also comply with a number of different directives and standards, depending on local and applicable regulations and operation methods.

As an internationally accredited Notified Body, and authorized inspection agency for fire and explosion protection for the European Union, and as an accredited Certification Body under internationally recognized IECEx Scheme, we provide support for the safe construction and

operation of your plants, assemblies and equipment, as well as for the competences of your personnel.

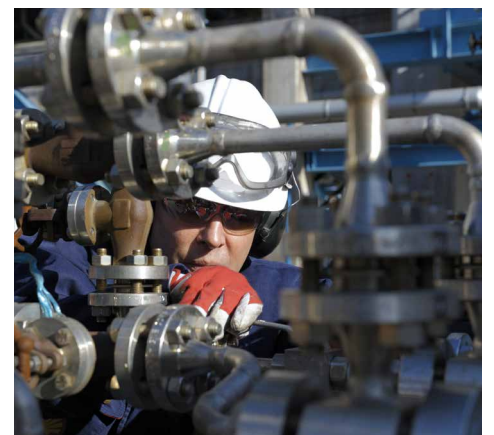
Our experts analyze and classify dangerous areas in your operations, supervise installations in areas with a high risk of explosion, and test and certify explosion-proof machines. We can help you generate the necessary explosion protection documents for performing operations in areas with a risk of explosion. Moreover we supplement your risk assessment with a list of measures to help you to increase safety, and train your personnel to maintain it during its lifetime.



Your benefits at a glance - why TÜV Rheinland?

When you work with us for your explosion protection responsibilities, we enable you to:

- Add a proof you are fulfilling your due diligence, helping to protect yourself in the event of litigation due to loss or damage
- Develop a system to support your case in the event of an insurance claim
- Avoid major planning errors and ensure timely operation
- Benefit from our extensive industrial and customer service experience, our high quality standards and our professional objectivity



A comprehensive range of services for explosion protection

Our services include:

- Analysis and classification of the dangerous areas in your facility, including separation by barriers, helping you to ensure the safety of your assets.
- Developing concepts and implementing strategies, so you can achieve cost-effective explosion protection.
- Planning and assistance in the selection of suitable machines, equipment, and systems, so you can be sure of adequate explosion protection.
- Document explosion protection to allow review and verification.
- Supervision for the installation of your industrial equipment
- Testing and certification of your explosion-proof machines, equipment and assemblies, such as agitators, pumps, compressors, conveyor systems, and the capacity of inertization systems, electrical equipment and protection equipment to ensure compliance with national and international standards.
- Providing explosion protection documentation to ensure your risk assessment is thorough.
- Training and certification of personnel competences for your own human resources, to keep and maintain your assets and related documentation.

Meet your legal obligations

Our services can help you to meet your legal obligations, including:

- Directive 1999/92/EC, also ATEX 137 – minimum requirements for the improvement of health protection and safety of employees who can be endangered by explosive atmospheres
- Directive 94/9/EC, ATEX 95 – equipment and protection systems intended for use in areas with a risk of explosion (from April 20th 2016 replaced by Directive 2014/34/EU)
- EN/IEC 60079-14: Explosive atmospheres - Part 14: Electrical installations design, selection and erection (also under IECEx Certified Service Facilities Scheme)
- EN/IEC 60079-17: Explosive atmospheres – Part 17: Electrical installations, inspection and maintenance (also IECEx Certification of Personnel Competencies - CoPC)
- EN/IEC 60079-19: Explosive atmospheres – Part 19: Equipment repair, overhaul and reclamation (also under IECEx Certified Service Facilities Scheme)

About TÜV Rheinland

Since our founding in 1872, we have stood for safety, quality and efficiency in interactions between man, technology and the environment. We are convinced that progress in society and technological advances are inseparably connected. Safety, consulting and compliance are our contributions to global and local markets. Service is our profession and customer satisfaction our motivation. We follow our customers on their paths of international expansion and we are always aware of our responsibility as a global company. Our goal is to be the most successful, sustainable, independent and self-financed service provider for testing, inspection, certification, consulting and training.

Always a good sign.



This mark stands for all the information about products, services and systems that are tested, certified or inspected by TÜV Rheinland. Transparent, available anytime worldwide – powerful and unique. The TÜV Rheinland test mark.