

# PROACT with ATEX Study



Facilities handling and storing flammable substances face explosion hazards, as many accidents worldwide have shown. Whether explosive atmospheres are generated by flammable gases and vapours or by combustible dusts, fibres and flyings or even by hybrid mixtures, the importance of the Explosion Protection Document as per the requirements of ATEX 137 Workplace Directive (99/92/EC) or of an Explosion Hazard Assessment Audit is paramount.

The Process Safety Department of **ProAct** has long and extensive experience in the field of explosion protection, having conducted a series of studies, both ATEX and other special studies related to almost every industrial sector in Greece, Cyprus, the Balkans, Egypt, Turkey, Russia and the U.A.E. All of these studies have become a useful tool for new and existing facilities, for their effective explosion protection as well as for relevant investments sustainability.

## Why ATEX Study?

- Classify hazardous areas adopting a **pragmatic approach** that does not hinder operations
- **Identify explosion hazards** without underestimation or overestimation that leads to zone blanketing and unnecessary costs for equipment replacement
- **Prioritize** state-of-the-art suggested technical solutions and organizational measures through detailed explosion risk assessment using Failure Mode and Effects Analysis (FMEA) including ignition hazard assessment
- Continue using existing, not-certified equipment safely by avoiding the risks of ignition
- Set the specifications of **new and existing equipment** in order to achieve a cost-effective investment and safe operation for whole installation's lifecycle

# PROACT with ATEX Inspections



## Why ATEX Inspections?

- Maintain the investment made on Ex equipment by means of inspections performed by **CompEx certified** personnel
- Implement corrective measures according to current harmonized standards and industry best practice to **minimize ignition hazards**
- Ensure a **comprehensive approach** according to protection Scheme using IEC 60079-17 inspection methodology
- Verify the suitability and proper installation after initial inspection of new electrical installations within hazardous classified areas (**Verification Dossier**)
- Demonstrate **full compliance** with national and European regulations

## Electrical Safety Assessments

According to IEC Standards 60079.14 and 60079.17 all electrical equipment and installations within hazardous areas must be installed, inspected and maintained as per the requirements set within these standards. Explosion proof (Ex) electrical equipment is mandatory in hazardous areas and it is often characterized by high costs. However, the protection level ensured by Ex equipment is compromised, in case it is not installed and maintained according to the aforementioned standards. In order to achieve a steady level of protection throughout the equipment's lifecycle, specific initial and periodic inspections of electrical equipment need to be performed by competent personnel.



Certification of equipment and protective systems intended for use in potentially explosive atmospheres as per the requirements of Directive 2014/34/EU can be a difficult and time consuming procedure for companies who wish to place their products on the EU market.

**ProAct's** engineers, having a broad experience in all aspects of explosion prevention & protection, can guide manufacturers, authorized representatives, importers and distributors through the certification process and help them establish compliance with European Legislation regarding electrical and non-electrical equipment as well as protective systems of all equipment-groups (I and II) and categories (M1, M2, 1, 2 and 3). From the selection of the relevant harmonized standards, the design philosophy, the preparation of technical documentation and risk assessment to all necessary communication and collaboration with notified bodies, all certification process stages will be covered to successfully meet the specific obligations.

## Why Help You Certify Equipment?

- Incorporate **state-of-the-art** technical solutions for explosion prevention into the design according to the appropriate protection level without excessive costs
- **Speed** up the certification process ensuring that the equipment is placed on the market without unnecessary delays
- Get certified to **ISO/IEC 80079-34** "Explosive atmospheres - Part 34: Application of quality systems for ex product manufacture"
- Stay **up-to-date** on the latest compliance regulations and standards

# **PROACT**

with ATEX  
Study,  
inspections  
& Equipment



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