

COMPEX EX 12

Course overview

Ex12 was developed with an industry working group to deliver a competency certificate to ensure application design engineers understand the risks of potentially explosive atmospheres and know how to select the appropriate electrical equipment.

Ex12 meets the competency requirements of IEC 60079-14 for Designers (design & selection). The course consists of theoretical training, individual exercises, group exercises, and written assignments.

✉ train@eutexinternational.com

📞 USA: +1 832.358.1177
SINGAPORE: +65 6251.8820

📍 USA | SINGAPORE | THAILAND
INDIA | UAE | CLIENT'S FACILITIES

COURSE OBJECTIVES

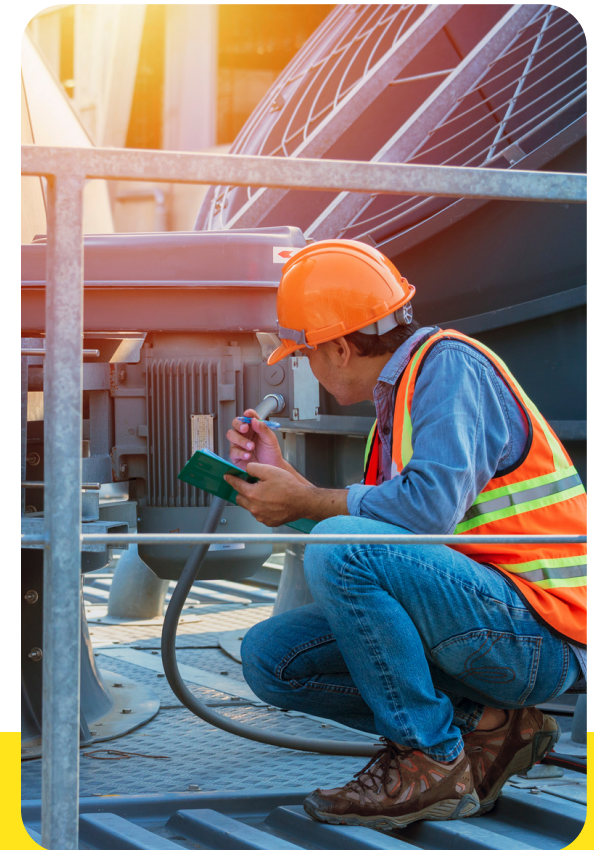
Upon completion of the CompEx Design Ex12 course the student will be able to demonstrate:

- Understanding of Ex markings
- Ability to select Ex equipment based on area classification
- Perform IS Loop calculations for single barrier
- Define proper installation methodology based on method of protection

PREREQUISITES

- Employer letter or proof of electrical qualification
- Successful completion of CompEx ExF plus or employer letter with reference/explanation of current duties are considered proof.

*COURSE NUMBER
AS-CMP-314
MODULES EX12*



DETAILED CONTENTS

- Gas groups
- Temperature classes
- The density of gases and vapors
- Properties of dust
- Flammable range
- Explosive range
- Ambient temperatures
- Minimum Ignition Energy
- Maximum Experimental Safe Gaps
- Standards
- Area Classification
- Protection Concepts
- Electrical concepts
- Ingress Protection
- Equipment Marking/Selection
- Design of equipment installed in gas/vapors and combustible dust environments
- Intrinsic Safety
- Cables and Glands
- Documentation
- IEC standards
- Test methods and data
- Certification
- Installation documentation



LEARNING TECHNIQUES

In order to provide the highest quality training experience, this course will consist of the following instructional elements:

- **Instructor led presentation** – The core elements of skill will be presented and demonstrated in a classroom environment.
- **Final exam** – The final exam will include written and multi-choice examinations.
- **Documentation** – The attendee will receive an attendance certificate from EUTEX. Upon successfully passing the exam, the attendees will receive a CompEx Application Design certificate valid for 5 years.

All CompEx courses are based upon IEC Standards, primarily IEC 60079: Parts 10; 14 & 17 and provide certification suitable as a competency validation.

EUTEX
INTERNATIONAL



COURSE DETAILS



Target Audience

Senior level design engineers, project engineers, or those aspiring to these positions.



Location

All EUTEX training centers or client's premises via mobile facility. (Subject to minimum candidates).



Duration

5 business days from 8:00 AM to 4:00 PM