

T-011 MV VSDS TECHNOLOGY AND APPLICATION

A practical training course on the most recent MV VSDS technology, with special reference to application engineering point of view

VSDS are more and more used in all main industrial application fields (Oil&Gas, Marine, Metals, Energy, etc.).

It is important to understand the real advantages compared to fixed frequency/speed motors (not simply speed regulating capability), in order to set up the basic choices since FEED engineering stage.

Various VFDs technology are presented, considering different power electronic components, different cooling method, limits of technology at present time and typical applications with emphasis on the application point of view.

Converter transformer are a basic component almost always treated as an integral part of VFD. Therefore their particular features will be also explained, with reference to different technologies (oil type, dry type, integrated type).

Also important topic about energy saving , dynamic behavior, motor starting and braking features will be also treated.

Who should Attend?

The course is suitable for the following:

- Electrical and Control Engineers
- Process & Operations Engineers
- Decision maker for technical investment about VFDs on different plant (ROI evaluation, and so on)

Duration

One day

Course structure and content

A one-day technical course aimed at responsible managers and engineers:

- Definitions
- Applications
- Main assemblies and topologies
- Cooling system types

- Control system
- Product types and relevant features
- Energy saving by means of VFDs
- Motor starting comparison
- Acceleration and deceleration / braking

Training Outcome

On completion of the course, you should be able to:

- Understand VFDs features and capabilities
- Understand IEC61508/IEC-61511 Safety Lifecycle Stages
- Understand principles of risk management & aspects of risk reduction
- Perform qualitative & semi quantitative SIL selection

Course Presenter

The course presenter is a senior VSD design engineer with over 20 year of experience.