

Training Course

Advanced Training Course

Electrical - Hardware



Number of days: 2

Subjects:

- Beckhoff Modules
- Application into AsepTec®
- Electrical Architecture
- Focus on the SPNOSS (safety PLC)
- Training on Emerson Parts
- Beckhoff I/O cards

Course material:

- Electrical components

A two day hands-on advanced training for technicians. The training includes the following topics.

- Technical electrical design knowledge
- Material knowledge
- LED & software diagnostics
- Software tools for maintenance
- Practical tips and tricks for electrical maintenance
- Hands-on training parameter settings devices
- Electrical maintenance

4 hours of machine availability desired.

On completion of this course the participants will have the knowledge required to perform maintenance on electrical Beckhoff components.

1.5 day classroom and half a day hands-on.

Entry level of participants: Intermediate technical working and comprehension level



- **Introduction (1 hours)**

General introduction into the course. Defining needs of the group.



- **Machine Design (3 hours)**

Covering the following topics: Machine Architecture, Reading Electrical Schemes and used Materials.



- **Detailed topics (3 hours)**

Explanation of the Beckhoff I/O cards, Beckhoff system manager, PNOZ multi (safety PLC), Frequency drives (emerson) and CT software.



- **Tour around Machine (1 hours)**

Trainer will show electrical components.



- **Wrap up day one (0.5 hours)**

There will be time for questions of the group and evaluate the day.



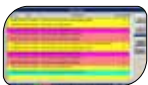
- **Maintenance training (4 hours)**

A variety of maintenance topics will be addressed. As well topics regarding industrial networks, EMC/EMI and do's and don'ts.



- **Practical: Drive programming (2 hours) (machine available!)**

On completion of this module the participant is able to download parameters and program new Beckhoff components when exchanged.



- **Practical: fault finding (2 hours) (machine available!)**

On completion of this module the participant is able to find fault as a ethercat fault.



- **Wrap up day two (0.5 hours)**

More room for questions and evaluation.