

tyco / *Electronics*

**GLOBAL
APPLICATION TOOLING DIVISION**



**Training Programme
for Customers**

Successfully trained for maximised productivity and quality

New manufacturing processes and termination technologies, increased customer expectations and the competitive pressure of the market place the highest demands on the training of your staff. The Tyco Electronics AMP Training Programme provides your personnel with the latest technical know-how to optimise the utilisation of your machines, control systems and tools. The training courses take place on a regular basis at our training centre in Bensheim, or, upon request, at your own facility. The course contents, specifically tailored to meet your needs, enable your operators and maintenance personnel to achieve precise and cost effective production, within appropriate quality standards and with due regard to all economic aspects, such as reduction of set up times to a minimum, expert maintenance and optimised tool selection and use.

For the current training schedule and a registration form please refer to the attached sheet.

Every participant receives a certificate for having attended the training.

Training Programme

Course No.: 4901

The fundamentals of crimp technology

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel

Training contents:

- Requirements for an electric connection, principle types of electric connections and various crimp forms
- Crimp tools and machines as well as actions during crimping and the advantages of the F-crimping
- Optimal crimp connection, requirements for a crimp connection and the testing of a crimp connection
- Correlation between mechanical strength, electric conductivity and crimp height
- Required contents of documents and specifications
- Practical exercises

Course No.: 4902

The proper handling of crimp applicators

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel

Training contents:

- Usage purpose of the tools
- Tool types and tool description according to assembly groups and the functionality of assembly groups
- Understanding of the part list and the drawing showing the exploded view
- Practical exercises on tool settings, fault analysis, maintenance and care

Course No.: 4903

Combination the training 4901 and 4902

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel

Inhalt der Schulung:

- This training program covers the contents of the programs 4901 and 4902.

Course No.: 4906

FFC - crimp technology

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel, Work Preparation Personnel

Training contents:

- Components of the FFC-crimp technology
- Foil conductor, FFC-standard-crimp contact and FFC-multiple-crimp contact
- Various types of application equipment
- Quality parameters of the FFC-crimp technology

Course No.: 4907

Basics of crimp technology for machine operators

Target Groups

Machine Operators, Setters, Maintenance Personnel

Training contents:

- Requirements for an electric connection, principle types of electric connections and various types of crimp forms
- Crimp tools and machines as well as the optimal crimp connection, requirements for a crimp connection and testing the crimp connection
- Practical exercises

Course No.: 4910

Magnet wire - connection technology

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel, Work Preparation Personnel

Training contents:

- Introduction and components of the magnet wire – connection technology as well as magnet wire and its characteristics
- Application tools and machines as well as contact types for the production of magnet wire connections
- Quality parameters of a magnet wire connection

Course No.: 4911

Advanced seminar crimp quality

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel, Work Preparation Personnel

Training contents:

- The objective of this advanced seminar is to provide sound knowledge for the evaluation of crimp quality and to cover the following instruction subjects:
- Optimal crimp connection, causes for the deviation from the ideal-crimp and possible effects of poor crimp quality
- Aids for the evaluation of crimp connections and their correct application
- Basic rules when processing solid conductors and of wire combinations as well as the correct storage of terminals and wire.
- **Note:** Participants in this seminar are expected to have basic knowledge of crimp technology

Course No.: 4912

Advanced seminar crimp quality

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel, Work Preparation Personnel

Training contents:

- Brief introduction to crimp technology as well as the principle design and application of the monitoring systems
- Prerequisites for working with monitoring systems on machines and tools
- Various types of monitoring systems and their operation
- Explanation of the crimp force curve and case studies on the basis of cross sections

Course No.: 4913

Advanced cross section photos

Target Groups

Setters, Maintenance Personnel, Quality Assurance Personnel, Work Preparation Personnel

Training contents:

- A brief history on the preparation of cross sections
- Producing cross sections and the equipment required for this purpose
- Evaluation of crimp quality and the tool setting with the help of cross sections
- Preparation of a cross sections and, if possible, a demonstration in the laboratory
- Documentation and literature references

Course No.: 4914

Mag-Mate-Modul, pneumatic

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel, Work Preparation Personnel

Training contents:

- Brief introduction to magnet wire connecting technology as well as application areas and technical features of the Mag-Mate connecting technology
- Application tools and machines for the Mag-Mate system, quality monitoring and potential application of the Mag-Mate system
- Mechanical and pneumatic function sequences, as well as setting possibilities at the Mag-Mate module
- The handling of technical documentation, maintenance instructions and fault analysis
- Replacement and installation of wear parts and feed finger Adjustment of feed, insertion depth, module position and product input

Course No.: 4930

Insulation displacement technology

Target Groups

Machine Operators, Setters, Maintenance Personnel, Quality Assurance Personnel, Work Preparation Personnel

Training contents:

- Requirements for an electric connection, principle types of electric connections as well as the various types of insulation displacement technology
- Actions during termination and advantages of insulation displacement connection
- Correlation between mechanical strength, electric conductivity and insertion depth
- Optimal insulation displacement connection with the use of single and stranded conductors
- Requirements for a insulation displacement connection and testing the connection

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