

Wire Wrapping to ECSS Specifications ECSS-Q-ST-70-30

Fact Sheet E07

European Space Agency Training Centre (UK)

This ESA-approved course is designed to teach the practical skills and theories associated with solderless interconnection processes.

The E07 course is based on ECSS specifications: "The Wire Wrapping of High-Reliability Electrical Connections", ECSS-Q-ST-70-30.

This fully documented course is intended for Production operators, inspectors and operator-inspectors. Engineers from Quality Assurance, Design and Manufacturing also benefit from the course.

The course has practical hands-on experience at every opportunity. All necessary tools and equipment are supplied, although delegates are welcome to bring their own hand tools if they wish.

Course aims

- To review and understand the requirements of the above specifications.
- To identify the factors which influence the quality, reliability and performance of wire-wrapped connections
- To develop correct assembly and testing methods
- To develop ability to identify and analyse associated faults.

Course content

Theory of solderless connection methods *
Knowledge of critical parameters affecting quality and function of connections *
Advantages and disadvantages of wire wrapping compared with soldering * Tool selection * Tool adjustment and quality control *
Processing wire wrap surveys * Correct wire preparation * Correct terminal preparation *
Tensile testing sample connections * The importance of cleanliness * Recognition of faults.

Experience and pre-requisites

- Minimum one year of relevant industrial experience, verified by the employer / manager
- Familiarity with electronic wiring and assembly processes
- Good practical skills
- A positive attitude to high quality workmanship
- A visual acuity certificate according to ESA-STR-258.

Duration, schedule and fees

2 days – see the current Course Calendar for dates and fees.

Award

In accordance with ESA-STR-258, an ESA approved, Category 3, Category 2 or Category 2 & 3 Certificate, valid for 2 years, will be awarded on successful completion of the course.

Recertification

To renew certification for a further 2 years, a 1-day recertification course is available, E97.

Course content, duration, dates and venue are negotiable to meet the special requirements of small groups of delegates from individual clients. This course can be combined with other short courses to create an integrated, cost effective training package.

Enquiries are welcome – please use the website [contact form](#) for security.

