

Training



REGISTRATION

Registration becomes final 10 days after receipt of the signed agreement, or 15 days before the scheduled date of training, whichever comes first. Registration fees include: Trainee's access to the course and supporting documentation. It does not include any travel expenses nor accommodation fees for trainees. Registration for one of our courses implies acceptance of all conditions & regulations. No verbal agreement will be considered if not confirmed by an email.

REPORT OF TRAINING

Cancellation of a training:

- Due to H2P Solutions: If the training is not rescheduled, H2P Solutions will reimburse the payments already received.
- Because of the trainee: Any participant may be replaced on the same session with another person from the same company at any time, at no additional cost, provided that H2P Solutions is notified at least one day before the beginning of the training. Cancellation will need to be notified to H2P Solutions in writing no later than 10 days before the planned training. In this case only, a 30% of the full fee (including taxes) will be due. In any other case, the full fee (including taxes) will be due.

TERMS OF PAYMENT

- By check to H2P Solutions for the full amount including taxes according to the invoice.
- Wire Transfer. IBAN FR76 1090 7000 0196 0210 9173 572
- In any cases, the payment period can't exceed 30 days at the end of the training.
- At the end of the training, an invoice and a certificate of attendance of the participants are sent to the company.

Summary

FMEA Training

FMES Training

HALT / HASS Training

Accelerated Life Testing Training

Functional Safety Training

Customized training

FMEA

Training objective

Allow participants to participate and to develop an analysis of failure modes, their effects and their criticalities.

Program

- o Definition and terminology: 1h30
- o The bases of a AMDEC: 1h30
- o The different types of AMDEC: 1h30
- o Criticality scales: 1h30
- o Risk analysis: 1h30
- o Corrective actions: 1h30
- o FMECA synthesis with questions / answers: 1h30
- o Examples and practical work: 1h50
- o Definition of the dedicated FMECA frame: 1h30
- o Multiple choice questionnaire with 10 questions: 0h10

Duration: 2 days

Price: 3000 € excluded taxes

FMES

Training objective

Allow participants to participate and to elaborate a synthesis of the analyzes of the modes of failures, their effects and their criticalities.

Program

- o Definitions and terminologies
- o Basics of a FMEA (Failure Mode Effects Analysis)
- o FMES (Failure Mode Effects Summary)
- o Practical work: Concrete example

Duration: 1 day

Price: 1400 € excluded taxes

Highly Accelerated Testing HALT/HASS

Training objective

Allow participants to understand HALT/HASS methodology and participate in its implementation.

Program

1. Introduction to aggravated trials

- ☐ Identify business sectors and products/equipment
- ☐ Why conduct HALT tests
- ☐ How are HALT tests positioned in the product life cycle?
- ☐ HALT tests versus qualification tests

- ☐ Norms and standards

2. Presentation of test resources

- ☐ Technical characteristics
- ☐ Specificity
- ☐ Advantages and disadvantages

3. Definition of HALT concepts

- ☐ Methodology
- ☐ Preparation
- ☐ Realization

4. Definition of HASS concepts

- ☐ Objective
- ☐ Creation of a profile
- ☐ POS (Proof of screen)
- ☐ HASA (Highly Accelerated Stress Audit)

5. HALT/HASS feedback

- ☐ Examples

Duration: 1 day

Price: 1600 € excluded taxes

Accelerated Life Testing

Training objective

Be able to understand the methodology and participate in its implementation.

Program

1. Introduction to accelerated testing

- ☐ Objective and concepts
- ☐ Types of accelerated tests
- ☐ Types of constraints
- ☐ Norms and standards

2. Accelerated life test models

- ☐ Structural/life stress models
- ☐ Acceleration factor
- ☐ Single factor models (Arrhenius, Norris-landzberg, Peck, inverse power law)
- ☐ Guidelines for ALT models
- ☐ Example of ALT data analysis and modeling

3. Two- and multiple-stress ALT models

- ☐ Temperature-humidity model
- ☐ Temperature-voltage model
- ☐ Generalized Eyring model

4. Feedback from accelerated tests

- ☐ Examples

Duration: 1 day

Price: 2000 € excluded taxes

Safety

Training objective

Allow participants to apply the techniques of calculation and control of RAM (Reliability, Availability and Maintainability) during the design of a mechatronic system.

Program

- o Product tree and logistic tree
- o FMEA
- o Predictions Reliability
- o Testability
- o Maintainability
- o Availability
- o Integrated Logistics Support: Spare Parts Definitions

Sector-specific standards (IEC61508, EN50129, etc.)

Duration: 2 days

Price: 3000 € excluded taxes

Customized Training

Training objective

Respond to a specific request from a company on the following topics:

- Reliability of electronic or mechatronic systems.
- Industrialization of products

Program

o To be defined according to specific requirements of the company.

Duration: To be defined according to the need

Price: From 300 € to 500 € HT / Day / Participant.