

Online training session

Geometric Dimensioning and Tolerancing based on ISO and ASME standards

Agenda:

1. Basic information about technical drawing. How to read drawing. Explanation dimensioning rules
2. GPS – Geometrical product specification
3. GPS standards – How standards are created, their application. Description of most common standards
4. GD&T - Geometric dimensioning and tolerancing
5. General tolerances – example of application based on standards
6. Geometrical tolerances – types and classification. Tolerances frame, tolerances zones.
7. Shape tolerances
8. Datums, datums systems. Rules of application
9. Orientation tolerances
10. Location tolerances
11. Run-out tolerances
12. Modifying symbols - types, examples of application and their interpretation
13. Differences between ISO and ASME standards
14. Exercises – analysis of issues presented by training participants

Participant will learn:

- **Understanding of dimensioning and tolerancing principles:** Participants will acquire a comprehensive understanding of the fundamental concepts and principles of dimensioning and tolerancing as per ISO (International Organization for Standardization) and ASME (American Society of Mechanical Engineers) standards. They will learn the importance of precise and clear dimensional communication in engineering drawings.

- **Proficiency in interpreting engineering drawings:** The training will enable participants to effectively interpret engineering drawings with dimensioning and tolerancing specifications. They will learn how to decipher geometric symbols, feature control frames, and various tolerance types, such as bilateral, unilateral, and limit dimensions.
- **Application of ISO and ASME standards:** Participants will learn how to apply ISO and ASME standards for dimensioning and geometrical tolerancing in practical scenarios. They will understand the different datums, datum reference frames, and how to establish and interpret datum features.
- **Tolerancing techniques:** The training will cover tolerancing techniques, including position tolerancing, profile tolerancing, and concentricity, as per ISO and ASME standards. Participants will learn how to define and interpret these tolerance types accurately.
- **Dimensional metrology:** Participants will gain insights into dimensional metrology, which involves the measurement, verification, and validation of geometric features. They will understand the importance of proper measurement techniques and equipment in ensuring the compliance of manufactured components with the specified tolerances.
- **Clear communication and collaboration:** The training will emphasize the significance of clear communication and collaboration among different stakeholders, such as design engineers, manufacturing personnel, and quality control professionals.
- **Compliance with international standards:** By gaining knowledge of ISO and ASME standards, participants will be able to ensure that their organization's engineering drawings and manufacturing processes align with globally recognized practices. This will facilitate seamless communication and collaboration with international partners and customers.

Price:

- 540 Euro. In case of 2 or more participants from the same plant offer **10% discount** on the second and all other participants.

The invoice due date will be 30 days from the invoice issue date. The invoices for the services will be issued after the service delivery.

Open online training session:

Information you will find directly on our webpage.

Price include:

- Training participation
- Training materials
- Certificate

Duration:

- 2 days