

SEMINARS

Statistical tolerancing in product development

- Tolerance to cost ratio**
 - Complete and uncomplete interchangeability
- Tolerance stacks, datum frames**
 - Definition of linear and non-linear dimension chains
 - Direct functional dimensions and Q-characteristics
 - 3-2-1 rule (datum point system)
 - Consistency of datum frames
- Arithmetical tolerance analysis method**
 - Methods and procedures
 - Form and positional tolerances in a dimension chain
- Tolerancing principles:**
 - Envelope requirement DIN 7167
 - Principle of independency DIN ISO 8015
- Fundamentals of statistics**
- Production distribution, process performance models**
 - Process performance models according to DIN ISO 21747
- Quality capability parameters**
 - Distinction between machine capability, provisional process capability P_p and process capability CP ; their parameters according DIN ISO 21747
- Statistical tolerance analysis methods**
 - Statistical tolerance analysis in accordance with former standard DIN 7186
 - Solution procedure for determination of statistical closing Dimension tolerance
- Non-linear dimension chains**
 - Determination of coefficients of linearity
 - Calculation of non-linear dimension chains
- Process reliability of quality characteristics**
 - Possible solutions for the optimisation of process reliability of sub-assembly functions (Q-characteristics)



Methods

Manuscripts containing theory, real-life case studies, sample calculation exercises, discussion.

Target group

Engineers, technicians, employees from the areas of testing and quality assurance, specialists in mechanical engineering and from the automotive and aerospace industries and their associated fields.

General Information

- Duration: 2 days
- Location:
 - In-house (on your premises, date by prior arrangement)
 - casim locations Kassel and Ingolstadt (regular dates)
- Training documents/manuscripts are provided.
- Optional: Integration of company-specific content and issues

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