

# Agenda

## Geometrical Product Specifications Advanced Training - 2 days

### Day 1

#### 1. Introductions

- Instructor
- Students
- Training material

#### 2. GPS basics

- Tolerance hierarchy
- Functional tolerancing
- Datums
- Degrees of freedom

#### 3. Optimizing tolerance schemes

- Local datum systems

#### 4. Advanced Datums

- Situation features
- Datum targets
- Contacting features
- Moveable datum targets

#### 5. Sizes

- Linear sizes
- Dimensions other than linear sizes
- Angular sizes

#### 6. Flexible tolerances with Material modifiers

- Maximum material (M)
- Least material (L)
- Reciprocity (R)

### Day 2

#### 8. Advanced Modifiers

- Any cross section (ACS) - SZ / CZ / UF
- Specified tolerance zone offset (UZ)
- Unspecified linear tolerance zone offset (OZ)
- Free state (F)
- Orientation constraint only (><)
- Common toleranced feature of size (CT)

#### 9. Patterns

- CZ, SZ, CZR
- Multiple indicator pattern specification (SIM)
- Multi-level single pattern specification (SZ CZ)

#### 10. Non-rigid parts

#### 11. Surface texture and Surface Imperfections

#### 12. Design and Verification

- Duality principle
- Functional control principle
- Responsibility principle

#### 13. ISO vs ASME

