Training
Needle peening

Description

This course covers the theoretical and practical aspects of Needle Peening. The participants will learn the basis of shot peening and the specifics related to Needle Peening.

A written exam is given to the participants and a passing grade will provide a Certificate of Achievement.

Spiker® Practical

Each participant will setup the unit and generate a saturation curve. The instructor will verify the technique and the intensity obtained with the Spiker® using the integrated saturation curve solver.

Outline

Introduction to Peening

- Why do we peen?
- Applications in Aerospace
- How Peening Works
- Importance of Quality Peening
- Considerations before Peening

Peening Intensity

- Intensity = Impact Force
- Thickness of the layer of Compression
- Finding the Intensity
- Generating a Saturation Curve
- Practical Saturation Curve

Peening Coverage

- What is Coverage?
- How is Coverage measured?
- 100% Coverage, 200% Coverage

Using the Spiker® Tool

- Features
- Linear Head
- Single Needle Head
- Spiker® Connectors
- Spiker® Menus
- Spiker® Log

Spiker® Peening Specific

- Needle Peening Applications
- Limitations
- Movement of the Head
- Cap wear verification
- Removing the Cap
- Changing the Needles
- Needle wear verification