

# Nadcap Audit Preparation



**Audit Preparation for Shot Peening Applications Complying to Nadcap AC71177**  
Testing, optimisation and verification of reproducible and fully documented shot peening processes for applications in the aviation industry.

Quality audits in companies must be prepared very thoroughly. The various questions and specific features of shot peening technology require dedicated audit preparation, regardless of whether the audits are conducted by authorities, customers or internally.

In the aerospace industry, Nadcap has established itself as a specialised quality audit for component manufacturers and service providers. The audit is based on specific questionnaires:

- AC7117 Nadcap Audit Criteria for Surface Enhancement Peening
- AC7117/1 Nadcap Audit Criteria for Computer Controlled Peening
- AC7117/2 Nadcap Audit Criteria for Automated Peening
- AC7117/3 Nadcap Audit Criteria for Peen Forming
- AC7117/4 Nadcap Audit Criteria for Flapper Peening
- AC7117/5 Nadcap Audit Criteria for Manual Peening

The criteria for equipment and processes listed in the catalogues must be fulfilled in order to obtain Nadcap certification in the field of surface enhancement by shot peening. The questionnaires are divided according to the peening processes applied in the company and partly include manufacturer-specific requirements.

## Systematic approach

Experienced experts for aviation-specific applications, such as from engine manufacturers, accompany your team from the very beginning. For a successful Nadcap audit, a three-step approach to audit preparation has proven to be very successful. First, we determine the training needs of your employees at different operational levels, from the machine operator to the process planner to the quality manager, and implement appropriate training measures.



The core of the preparation is the processing of the questionnaires relevant to your processes and the identification of a catalogue of measures to fulfil all requirements. One focus is on the practical implementation of the measures. These serve to successfully carry out so-called job audits, which are an elementary component of the Nadcap criteria. As part of our support, we advise how to integrate the measures in your internal quality management in order to optimise it.



In the third step, we arrange for another experienced shot peening expert to conduct a pre-audit as a final check before the actual Nadcap audit.

Our trainers place great emphasis on the practical optimisation of operational process and quality management in shot peening in order to achieve a substantial and sustainable improvement of your processes and products. Within the scope of our support, we put particular emphasis on process development, process

control and process assurance, machine and measuring equipment calibration, maintenance programmes for machines and tools, as well as on a proper documentation. Index-compliant documentation is elementary for the fulfilment of quality standards and certification by Nadcap. Particular attention must be paid to the importance of documentation for the traceability of processes and the recording of process deviations.



Our concept aims to make the benefits of the audit recognisable for all participants and to show practical ways to implement new quality standards.

