

Session 1:

Introduction to AS9102 and Net Inspect

Welcome and Introduction

Welcome to Session 1 of the AS9102 First Article Inspection Training. In this session, we will provide you with a comprehensive introduction to AS9102 and the Net Inspect software. Our goal is to equip you with the knowledge and skills necessary to conduct effective first article inspections in compliance with industry standards.

Overview of AS9102 Standard

AS9102 is a standard developed by the Society of Automotive Engineers (SAE) specifically for the aerospace industry. It defines the requirements and guidelines for conducting first article inspections to ensure that manufactured parts meet the specified engineering requirements. We will delve into the key components of AS9102, including the purpose of first article inspections, the documentation requirements, and the different forms used in the inspection process.

Understanding the Importance of First Article Inspections

First Article Inspections (FAIs) play a crucial role in the aerospace industry by verifying the manufacturing process's capability to produce parts that meet quality standards. By conducting thorough inspections at the outset of production, potential issues can be identified and addressed early, minimizing the risk of defects, rework, and product non-conformities. We will discuss real-world examples and case studies to illustrate the importance of FAIs and their impact on product quality and reliability.

Introduction to Net Inspect Software

Net Inspect is a powerful web-based software tool designed to streamline the first article inspection process. It offers a wide range of features and functionalities, including the creation of inspection plans, documentation of inspection results, and generation of comprehensive inspection reports. During this session, we will provide a hands-on demonstration of Net Inspect, guiding you through the software interface and showcasing its capabilities. You will learn how to navigate the various modules, input inspection data, and generate inspection reports efficiently.

Q&A and Wrap-up

As we conclude Session 1, we encourage you to ask any questions or seek clarification on any topics covered during the session. Your understanding and engagement are essential to your success in conducting first article inspections effectively. Thank you for your participation, and we look forward to continuing our training journey together in Session 2.

Session 2:

AS9102 Forms and Ballooned Drawings

Recap from Session 1

We will begin by briefly reviewing the key concepts and information covered in Session 1 to ensure everyone is up to speed and ready to delve deeper into AS9102 forms and ballooned drawings.

Deep Dive into AS9102 Form 1: Part Number Accountability

In this segment, we will focus on AS9102 Form 1, which deals with part number accountability. We will explore the specific fields and requirements of this form, including part number identification, revision levels, and part name definitions. Through examples and interactive exercises, you will gain a comprehensive understanding of how to properly complete Form 1.

Exploring AS9102 Form 2: Product Accountability

AS9102 Form 2 focuses on product accountability and addresses materials, special processes, and functional testing associated with the part, ensuring thorough documentation and traceability throughout the inspection process. We will delve into each section of Form 2, highlighting its significance and providing practical guidance for accurate completion.

Understanding AS9102 Form 3: Characteristics Accountability

Form 3 of AS9102 focuses on characteristics accountability, detailing the specific characteristics and requirements for each part or assembly. We will dissect the various elements of Form 3, including characteristic identification, drawing references, and inspection results recording. Through case studies and examples, you will learn how to effectively document characteristics and ensure compliance with industry standards.

Reviewing Ballooned Drawings and Their Significance

Ballooned drawings are essential for first article inspections as they provide a visual representation of the parts and characteristics being inspected. We will review the process of ballooning drawings, including how to identify characteristics, assign inspection points, and correlate them with AS9102 forms. You will gain practical insights into interpreting ballooned drawings and their role in the inspection process.

Q&A and Wrap-up

We will conclude Session 2 with a dedicated Q&A session to address any lingering questions or concerns you may have regarding AS9102 forms and ballooned drawings. Your active participation is crucial to maximizing the value of this training session. Thank you for your engagement, and we look forward to continuing our exploration of first article inspections in Session 3.

Session 3:

Practical Application and Examples

Recap from Session 2

Before diving into the practical application of first article inspections, we will briefly recap the key concepts and insights covered in Session 2. This review will ensure that everyone is prepared to apply their knowledge effectively in real-world scenarios.

Approving and Disapproving Examples in AS9102

During this segment, we will focus on practical examples of approving and disapproving first article inspections using AS9102 forms. You will have the opportunity to analyze sample inspection reports, identify potential non-conformances, and make informed decisions regarding part acceptance or rejection. Through interactive exercises, you will enhance your ability to evaluate inspection results and uphold quality standards.

Handling Non-Conformances and Special Customer Requirements

Non-conformances are inevitable in manufacturing processes, but how they are addressed can significantly impact product quality and customer satisfaction. We will discuss best practices for identifying and documenting non-conformances during first article inspections, as well as strategies for communicating with customers and addressing their specific requirements. Real-life case studies will illustrate effective approaches to managing non-conformances and maintaining compliance with industry standards.

Practice Exercises and Case Studies

In this interactive segment, you will have the opportunity to apply your knowledge and skills in realistic scenarios through practice exercises and case studies. These exercises will challenge you to navigate various inspection challenges, make critical decisions, and document inspection results accurately. By actively participating in these activities, you will further reinforce your understanding of first article inspection principles and build confidence in your ability to perform inspections effectively.

Q&A, Feedback, and Conclusion

As we wrap up Session 3, we will open the floor for a final Q&A session to address any remaining questions or concerns you may have. Additionally, we welcome your feedback on the training program and any suggestions for improvement. Your input is invaluable as we strive to provide high-quality training experiences tailored to your needs. Thank you for your active participation throughout this training journey, and we wish you continued success in your first article inspection endeavors.