



ISO 9001 and TS 16949

A quality process driven organization has a consistent standardized process in developing and delivering their products and services. Having this system established, understood and utilized creates a real differentiating factor in the marketplace which delivers projects efficiently with comprehensive quality based documentation, tools and techniques.

ISO 9001 is an internationally developed and recognized process developed by the International Organization for Standards (ISO) to help companies develop, document and ensure their quality business operations is in compliance to the standard. TS 16949 is the specific standard developed by ISO for the automotive industry to ensure the specifics of their industry are address in a standard.

Participants will bring information on specific company projects to be worked on during this training for real application of these concepts, tools and techniques.

- First, the basics of ISO 9001 are discussed to gain a common understanding of the standard practices, tools and techniques that are utilized in multiple industries.
- Next, participants will focus on gaining an understanding the specific TS 16949 standard practices, tools and techniques that are applied to the automotive industry.
- Lastly, participants will apply these tools on specific company projects utilizing ISO 9001 and TS 16949 methodologies, tools and techniques.



Course Syllabus

I IDENTIFYING INFORMATION

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|----------------------|---|
| Course: | ISO 9001 and TS 16949 |
| Prerequisite: | Understanding of the vehicle product development process Understanding of basic product and manufacturing engineering |
| Time Frame: | 40 total contact hours |
| Instructor: | Daryl Patrishkoff, PMP Chief Executive Officer, CPS BS in Vocational Industrial Education MA in Business Management 30 years in the product design engineering profession 20 years managing sales, operations & plant business units |
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II REFERENCE MATERIALS

1. ISO 9001: 2000 Quality Registration Step-by-Step, 3rd Edition by Fred Dobb
2. The ISO/TS 16949 Implementation Guide by Chad Kymal
3. ISO 9000 ISO 9001 100 Success Secrets by Gerard Blokdiik
4. ISO 9000: 2000 An Implementation Guide
5. Advanced Product Quality Planning and Control Plan, 2nd Edition by AIAG
6. Potential Failure Mode and Effects Analysis, 4th Edition by AIAG
7. Production Part Approval Process, 4th Edition by AIAG
8. Measurement Systems Analysis, 3rd Edition by AIAG
9. Statistical Process Control, 2nd Edition by AIAG

III COURSE GOALS AND OBJECTIVES

1. Understanding of ISO 9001 philosophy and methodologies
2. Understanding of the development and implementation of a ISO 9001 system
3. Understanding of TS 16949 philosophy and methodologies
4. Understanding of the development and implementation of a TS 16949 system
5. Application of a ISO 9001 system
6. Application of a TS 16949 system



IV METHODOLOGY

This course is a micro view of the ISO 9001 and TS 16949 standards processes, tools and techniques. We will be dealing with a detailed interpretation of meanings and applications as applied to executing company projects. Each module will introduce new material that will prepare the student for the projects to be completed.

Lectures

Each detailed subject will be presented in a lecture format outlining the theory and standardized accepted methodology. A PDF file of the lecture material will be provided for the student's personal use as reference material. Lecture note outlines will be distributed to the students for each lecture to help the student capture personal notes. A short video showing the concept covered and a discussion regarding application.

Specific Industry Examples

Real life industry examples will be covered that detail out the application of the theory to demonstrate how different companies apply these tools and techniques. This will give the students a clear understanding of how and why these techniques are utilized at different companies and industries in different manners.

In-Class Assignments

Using the theory and industry examples the student will conduct several projects that outline each key principal on in-class projects. These projects will increase in complexity as the students further develop their skills in applying these tools and techniques. The students will present their work to the group for review and discussion.

Specific Company Application

As a summary of the training we will apply these tools and techniques on a specific company project that is currently in development by the students. This will build a standard methodology on how to appropriately apply the ISO 9001 and TS 16949 standards processes and principals at your company.



V COURSE OUTLINE & ASSIGNMENTS

Module 1

Introduction to the ISO 9001 Standard
Industry Examples
In-Class Assignment, ISO 9001
Group Project

PowerPoint lecture
PowerPoint lecture
Complete & present
PowerPoint lecture

Module 2

Introduction to the TS 16949 Standard
Industry Examples
In-Class Assignment, TS 16949

PowerPoint lecture
PowerPoint lecture
Complete & present

Module 3

Developing Your Company ISO 9001 System
In-Class Assignment, company application

PowerPoint lecture
Complete & present

Module 4

Developing Your Company TS 16949 System
In-Class Assignment, company application

PowerPoint lecture
Complete & present