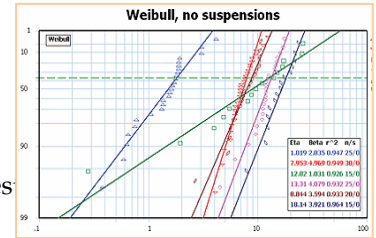


Reliability Test Planning and Evaluation

This 1-day management overview session covers the basic concepts in reliability theory and implementation of the methods for planning tests and evaluations of test results for reliability of the product performance.



WHERE? At your facility (For larger group)

WHEN? At a mutually convenient time.

DETAILS: Please visit for information and registration.

www.Nutek-us.com/wp-sem.html - onsite

WHO SHOULD ATTEND?

- Specialists and managers involved in the design, test and/or analysis of products, and who wish to acquire a better understanding of current reliability concepts

COURSE CONTENT

In today's competitive environment designing and producing reliable and robust products is essential for business survival. A sound reliability program for a manufacturing company can significantly improve its product performance, product longevity, and ultimately its customer satisfaction and profitability. The discipline known as DFR (Design For Reliability) is a vital component of most modern design teams. Achieving a product's reliability goals requires the proper application of both reliability test planning and reliability test evaluation techniques.

This course will focus on applications of the techniques for planning tests and evaluations of the test results. In particular, the technique of *Accelerated Life Testing* for test planning and *Weibull Analysis* for evaluation of test results will be discussed.

Learning Objectives:

- Understand reliability, confidence and life relationships
- Learn to calculate test sample sizes for a given reliability
- Plan reliability demonstration test
- Evaluate failure test data in terms of reliability with confidence level

COURSE CONTENT

Reliability Vocabulary

- Introduction and Purpose
- Basic Reliability expressions
- Distribution Functions

Test Planning

- Theories of Weibull Distribution
 - Test Samples, Reliability, and Confidence Relationship
- Exercises

Test Evaluation

- Introduction and Purpose
- Linear Extrapolations
- Distribution Functions
- Theories of Weibull Distribution
- Life Characteristic Curve (Bath-Tub Curve)
- Steps in Weibull Plots
- Example Test Evaluations
- Exercises
- Appendix

COURSE INSTRUCTOR

This seminar is led by Ranjit K. Roy, Ph.D., P.E., PMP, and Mechanical Engineer. Dr. Roy specializes in the Taguchi approach to quality improvement and engineering quality improvement topics.



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