

Kort sammanfattning av föredragen

Software System Testing – A Challenge in Practice
Ingvar Nordström

Testing is not natural science. There is no absolute solution to how it must be done; in fact there are many different schools and convictions for the approach to testing. As a professional tester you need to face the real world with missing and ambiguous requirements, late deliveries, and poor quality into testing, staffing and competence problems; and yet deliver a result on time, showing the quality of the product or system. This presentation will give examples of some of the challenges to face.

Tolerancing and Inspection Point Preparation in Automotive Industry
Kristina Wärmefjord

The talk will illustrate how Monte Carlo based simulation software can be used in automotive industry to predict the outcome in critical dimensions. How the number of inspection points, used to monitor the production process, can be reduced without losing very much information by using cluster analysis will also be discussed.

A Statistician's Perspective on Specification Limits and Their Relationship to Aims
Geoff Vining

Product and process specifications are vital to the supplier – customer relationship, whether the customers are internal or external to the organization. At their heart, specifications define what constitutes acceptable product, often with full legal implications. The determination of proper specifications is strictly a non-statistical matter; however, once specified, these specifications often have statistical consequences. This talk discusses how organizations often establish specifications. It then explores the statistical consequences for process monitoring and process capability. This talk then discusses how organizations should set specifications and how such specifications should relate to the organization's aims and aspirations.

Process Capability Plots – A Graphical Tool to Keep Your Process within Specifications
Kerstin Vännman

After the specifications are set it is important to keep the process within specifications to have a capable process. To assess the capability of a manufacturing process, using a random sample, it is common to apply confidence intervals or hypothesis tests for a process capability index. Alternatively, an estimated process capability plot or safety region in a process capability plot can be used as a graphical decision tool. This talk gives an overview over such graphical methods and also discusses how the process capability plots could be used together with control charts to enhance the behaviour of the studied quality characteristic.