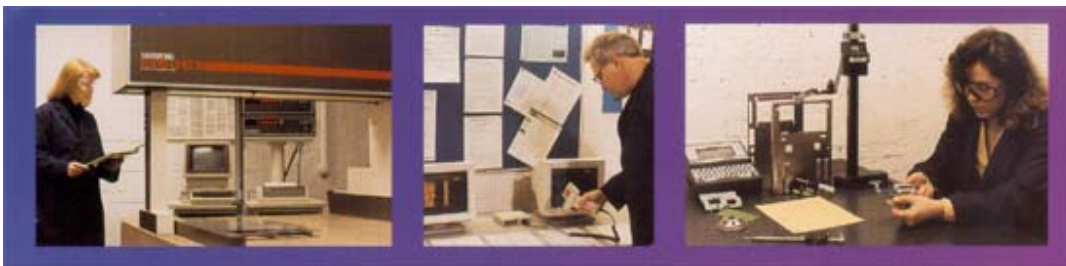


zero defect manufacturing zero defect manufacturing

Two days in-house Training



Somewhere in the world, there is a quality professional who can get me products and services with no problems and no defects in them. I sure would like it to be you...

- Philip B Crosby

Introduction to Zero Defects

To grow or even sustain the business in today's extremely competitive market is to continuously produce and deliver fault free products, e.g. Zero Defect products To achieve ZD manufacturing, the people element is most meaningful

The right People

The right Organization and Methods



The right Process and Technology

The defects cannot be compromised either on ground or in the sky. The defect even cannot be accepted in the Operation Theater or while at war.

Course Contents

Basics : Concept of Variation, Data Types, Normal, Measures of central tendency – Mean, Median, Mode, Measures of dispersion – Range, Standard deviation, Variance, Central Limit Theorem

Capability Studies Process Capability: Cp, Cpk, Pp, Ppk ,Advanced Statistics: Sampling distribution, Estimation, Hypothesis Testing, ANOVA, Correlation Process

Statistical Analysis: Analysis Stage Data Analysis: common and special causes of variation, Control charts, Xbar and Range Chart, Individual and Moving Range Chart, Histogram, p-chart, c-chart, Pareto analysis •Cause and Effect diagram, Pre-control charts and Paired comparison • Design of Experiments (DoE): Multi-Vari chart, Fractional Factorial designs, Full Factorial designs

Problem solving Techniques Lean Enterprise • Lean Thinking • 3M, Seven Types of Wastes • Heijunka • Kanban • Takt Time • Value Stream Mapping • 5 S • TPM • Continuous Flow Manufacturing • Cycle Time Reduction

RADAR
etc

What is zero defect manufacturing

Zero Defects, pioneered by Philip Crosby, is a business practice which aims to reduce and minimize the number of defects and errors in a process and to do things right the first time. The ultimate aim will be to reduce the level of defects to zero. However, this may not be possible and in practice and what it means is that everything possible will be done to eliminate the likelihood of errors or defects occurring. The overall effect of achieving zero defects is the maximization of profitability.



The Zero defect is more scientific than just management. The various approach like TQM itself can lead to this. However with time something or the other new approaches will keep surfacing like Six Sigma etc. The aim is to kill the defects and theyby ensure higher levels of safety. Qsys has a unuque and easy approach to attain this looks to be imposiible goal.

How can it be used ?

The concept of zero defects can be practically utilised in any situation to improve quality and reduce cost. However it doesn't just happen, as the right conditions have to be established to allow this to take place. A process, system or method of working has to be established which allows for the achievement of zero defects. If this process and the associated conditions are not created then it will not be possible for anyone involved in the process to achieve the desired objective of zero defects.

In such a process it will be possible to measure the cost of none conformance in terms of wasted materials and wasted time.

Any process that is to be designed to include this concept must be clear on its customer expectations and desires. The ideal is to aim for a process and finished article that conforms to customer requirements and does not fall short of or exceed these requirements. For example, in recent years many financial organizations have made claims regarding how quickly they can process a home loan application. But what they may have failed to realise is that in spending a great deal of time and money reducing processing time they are exceeding customer requirements (even if they believe that they know them). In these cases they have exceeded the cost of conformance when it was not necessary to do so.

Advantages and disadvantages

Advantages

- It does everything for you, you ask what not?
- Cost reduction caused by a decrease in waste. This waste could be both wasted materials and wasted time due to unnecessary rework
- Cost reduction due to the fact that time is now being spent on only producing goods or services that are produced according to the requirements of consumers.
- Building and delivering a finished article that conforms to consumer requirements at all times will result in increased customer satisfaction, improved customer retention and increased profitability.
- Possible to measure the cost of quality
- Sustainable business and hence happy customer and stake holders

Disadvantages

- You list out