

Process Capability - The Quality Route to Sustained Growth in Manufacturing (Cp, Cpk)

Date: 20 to 21 April, 2023

Venue: IMTMA Technology Centre, Pune

INTRODUCTION

Control Charts and SPC techniques are used by Quality / Process engineers in the Industry for many years, for process control and calculating process capability. Yet there are few myths which need to be discussed and clarified in every practicing engineer's mind. Often this topic is taught / learnt from the standpoint of a statistician or just as a metric. Engineers fail to understand the reasons and the impact of the process variation on the product in a real life scenario; Particularly because data collection & calculation of performance has been simplified and automated today like never before, many engineers have missed on development of an insight and ability to interpret the numerous data around. Software is used but the assumptions are not understood. All this results in not getting any real benefits.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a classroom programme on Improving Process Capability. This programme is meant for practicing engineers who are already aware and are using control charts and calculating Cp/Cpk and who would like to derive the real benefits from these techniques.

FOCUS AREAS

- Understanding relevance of Process capability, PPM
- Interpreting process capability results
- Various scenarios of Cp ,Cpk, Pp, Ppk
- · Calculating process capability in short runs
- Using Pre Control charts
- Process capability of GD & T tolerances
- · How to use results to improve processes and capability
- Case studies from industries
- Interactive discussion for Questions from Participants
- The programme will be interlaced with interesting real life examples which the participants from various industries will be able to identify with.
- Plotting of Histogram and checking for normality
- Plotting of XBAR & RBAR chart of actual data
- Archiving capabilities of closely tolerated processes
- · Discussion proven capabilities challenges that participants may face

KEY TAKE AWAYS

After undergoing the programme, the participants will be able to -

- Interpret calculation results correctly
- Control the process better
- Improve the process
- Using software for improving process capability of variable and attribute date
- Calculate process capability in situations such as unilateral tolerances, short run process capability, and for GD&T tolerances.

PARTICIPATION FEE

Rs. 9500/-+18% GST IMTMA Members/ Micro Companies/ Individuals/ **Educational Institutions / Students/ IMTMA Non Members/Others**

USD 380/-**Overseas Participants**

Group Concession: 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

FACULTY

This Program will be conducted by Mr.Gautam Doshi.

Mr. Doshi is a B.Tech. (Mech) from IIT, Powai and an industry expert with over 35 years of experience in Machine Tool and Automotive industry. He has conducted several training programmes, seminars & workshops on machine tool related subjects. He is a consultant to reputed companies in the area of Productivity and Quality improvement and Adviser to many companies manufacturing automotive components and Dies & Moulds. Mr. Doshi is former Vice President & Technical Director, PMT Machine Tool Automatics Ltd., Pune and has also served in Tata Motors for over 5 years. He is the author of several IMTMA publications such as 'First Time CNC', Guidelines on Process Capability to name a few.

For Registration Contact

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REGISTRATION: Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of