



## INTRODUCTION

Measurement Systems Analysis (MSA) originated with the automotive industry is eventually becoming the defacto standard of the manufacturing industry. Just as processes that produce a product may vary, the process of obtaining accurate measurements and data may also have variations and can produce defects. MSA is a holistic approach to ensure the integrity of data used for analysis and evaluates the entire process of obtaining measurements, i.e test methods, measuring instruments, operations, procedures, software and personnel that affect the assignment of a value to a measurement and to understand the implications of the measurement error. MSA is an important element of Six Sigma methodology and other quality management systems.

Keeping this in view, IMTMA is organizing an online training programme on Measurement Systems Analysis.

## FOCUS AREAS

- Review of basic terms - Accuracy, Precision, Bias, Measurement Uncertainty, etc.
- Definition and purpose of MSA
- Difference between calibration and MSA components of a measurement system
- Study of R&R - Range method and ANOVA method
- Relation between MSA and SPC methods
- Gauge performance for attribute measurements
- Measurement study preparation
- Acceptance criteria
- Case studies and examples of MSA for specific components
- Sample exercises for calculations of R&R and plotting SPC charts

## KEY TAKE AWAYS

1. Describe the purpose of MSA and its benefits to manufacturing organisations
2. Understand the 5 elements of MSA and their evaluation methods
3. Learn how to conduct MSA study in manufacturing units
4. Understand acceptance criteria of Gauges used in production shop

## FEE PER PARTICIPANT (PER LOGIN)

**Rs. 10625/-**

+18% GST

**IMTMA Members/ Micro Companies/ Individuals/  
Educational Institutions / Students/ IMTMA Non  
Members/ Others**

**USD 425/-**

**Overseas Participants**

## FACULTY

This programme will be conducted by **Mr. Pankaj Aggarwal**,

**Mr. Pankaj Aggarwal**, is the Founder & Promoter of Simply Dhruv which is into corporate training and consultancy field. He is a mechanical engineer and carries about 34+ years of rich experience. He has been awarded as one of the "Most Talented Training & Development Leaders" by "World HRD Congress and CHRO Asia in year 2017.

He is an acclaimed professional corporate trainer, consultant, advisor, motivator, creative thinker and life coach. Before coming into this field he has worked for Eicher Tractors for 10 long years & for Motherson Sumi System Limited for around 3 years. For some time, he was also on the panel of CII Confederation of Indian Industries (CII).

He has trained, advised and counselled 5000+ professionals, students and people in general. His extensive experience in handling and grooming diversified audiences such as children, students, families, workers, workers union, junior, middle, senior and executive / leadership level professional lends a very practical orientation to his session. He believes in a practical approach with focus on fundamental building.

He is a versatile trainer who has conducted soft skill programs such as Leadership, IPR, Team Building, Train the Trainer, Creativity, Campus to Corporate etc and also the technical programs such as ISO 9001, lean manufacturing, Kaizen, 5-S, Quality Circle, War on waste, Value Engineering, SPC, MSA, FMEA, Systematic Problem Solving, DOE (Shanin Techniques), TRIZ etc. He is the author of the book, 'Structured Problem Solving.

He has facilitated culture building, change management, resolution management-workmen conflicts, productivity, quality & service improvements, quality system developments, waste reduction and employee moral boosting in different organizations

### For Registration Contact

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