

Measurement System Analysis (MSA)

Training Overview:

This Measurement Systems Analysis (MSA) course equips participants with the skills to evaluate and improve the accuracy and reliability of measurement systems. Participants learn how to ensure data used for decision-making is trustworthy and supports effective process control.

Through hands-on exercises and real-world application, participants perform key MSA studies and interpret results to identify measurement variation. The course emphasizes measurable impact, including reduced scrap and rework, improved quality, and stronger data-driven decision-making.

Training Objectives:

- Define MSA and its role in quality assurance
- Understand the importance of accurate and reliable data
- Perform Gage R&R studies for variable and attribute data
- Evaluate bias, linearity, and stability of measurement systems
- Identify sources of measurement variation
- Determine acceptability of measurement systems
- Quantify savings from improved measurement accuracy
- Connect MSA results to quality and process performance
- Support SPC and problem-solving with reliable data
- Maintain ongoing measurement system verification