

Measurement System Analysis – Gage R&R

Measurement System Analysis (MSA), is a method to identify the components of variation in the measurement. It is used to quantify the impact of measurement errors and to ensure the integrity of data used for analysis.

Just as a process has inherent variations, the process of measurement has variations too. Therefore, when making decisions that relies on data, it is important to ensure that the systems that collect that data are accurate and precise. Although it may not be possible to totally eliminate measurement errors, the objective of MSA is to ensure that measurement variance is relatively much smaller than the observed variance.

MSA is an important pre-requisite for data analysis. This is because a measurement system that is not accurate and/or precise may lead to wrong decisions being made. For instance, a process plagued with measurement errors may seem incapable and making improvements to the process may make matters worse.

Gage Repeatability & Reproducibility is a statistical tool that measures the amount of variation in the measurement system arising from the measurement device and the people taking the measurement.

This one-day workshop will consist of approximately 2 hours of theory followed by practical exercises.