## **GBMP Six Sigma Measurement Systems Analysis ~ "Gage R & R" ~**





"IF YOU DON'T MEASURE IT YOU WON'T IMPROVE IT !!" THIS IS ONE OF THE BASIC MANTRAS OF ANY SIX SIGMA CONTINUOUS IMPROVEMENT PROGRAM. CLEARLY, THEN, RELIABLE MEASUREMENT SYSTEMS ARE KEY TO ANY CI EFFORT. THIS ONE-DAY COURSE FOCUSES ON ONE OF THE MOST IMPORTANT TOOLS IN THE SIX SIGMA "TOOL BOX".

**Overview:** Measurement Systems Repeatability & Reproducibility (Gage R&R): All data is a composite of true process variation and measurement system error. The trick is knowing their relationship to customer requirements and process parameters. In view of this, Gage R & R becomes one of the corner stones for establishing process capability, improving performance or setting up successful Statistical Process Control (SPC) systems. Class exercises as well as instruction are included and attendees are encouraged to bring measurement system examples from their own work life as objects for these "tacit learning" exercises. This course takes a "road map" approach with well defined steps and tools that are applicable to a wide variety of measurement system types. Special cases such as destructive measurement systems, "attributes" measurement systems, etc. are explored as well.

How do your measurement system's "stack up"?

## After taking this class attendees will be able to:

- ✓ Quantify your measurement error in comparison to product specifications
- ✓ Define the impact of measurement error on your process capability
- ✓ Avoid unnecessary "Over Control" by not reacting to false "signals" in SPC
- ✓ Evaluate measurement system variation for both variables and attributes
- ✓ Adapt classic Gage R & R methods for many types of measurement systems
- ✓ Gain confidence in your data

**Who should attend?** This one-day course is appropriate for all levels and disciplines within the organization. It is especially relevant for employees in a manufacturing environment but is appropriate for all (including service and transactional disciplines) who take a "six sigma" continuous improvement approach to problem solving.

Time Commitment? 8 hours



617-710-7033



JMillman@gbmp.org www.gbmp.org



60 Austin Street Newton, MA 02460