

**SixSigmaTV.Net**  
THE NETWORK FOR SIX SIGMA

# Six Sigma Green Belt Overview

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# Your Role as a Six Sigma Green Belt

- The Six Sigma Green Belt operates in support of or under the supervision of a Six Sigma Black Belt, analyzes and solves quality problems and is involved in quality improvement projects. A Green Belt is someone with at least two years of work experience who wants to demonstrate his or her knowledge of project management, facilitation, Six Sigma tools and processes.

• Source: ASQ

# Benefits of Six Sigma Green Belts in your organization

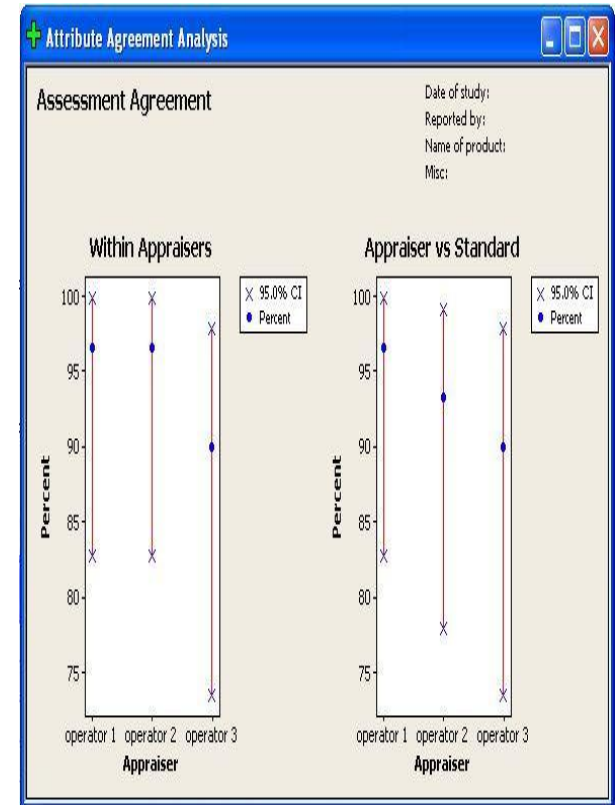
- Organizations wishing to drive out waste, cost and improve processes should have Six Sigma Green Belts within 50% of their organization.
- The Six Sigma Green Belt manages small to medium size improvement projects with savings ranging from \$25,000 to \$500,000.
- Green Belts also help drive the Six Sigma methodology into the DNA of the company.
- The Green Belt serves as a resource for improvement projects that Black Belts or Master Black Belts are leading.
- They are skilled in project management, facilitation, process mapping, data collection and analysis, solution selection and have the ability to monitor, own and sustain long term control of implemented improvements.

# Six Sigma Green Belts Skills and Knowledge: Define Phase

- Project Charter
- MGPP (Multi-Generational Project Planning)
- Cost of Poor Quality / Baseline Metrics of Current State Performance (CPk, DPMO, Sigma Level & Standard Deviation)
- Risk Analysis (Project FMEA), Stakeholder Analysis & Communication Plan
- Current State Process Mapping, NVA Analysis & SIPOC
- Voice of Customer and CTCs Identified

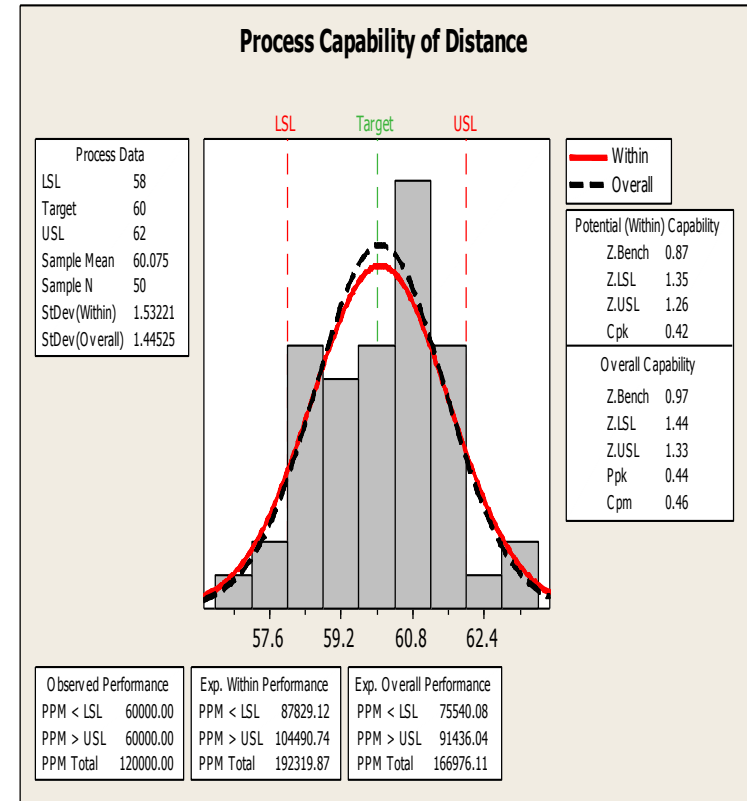
# Six Sigma Green Belts Skills and Knowledge: Measure Phase

- Data Collection Plan (Xs impacting Y)
- Sampling Strategy
- Prioritization Matrix
- Attribute Measurement System Analysis (MSA)
- Gage R&R (Variable Data)
- Measurement System Evaluation (MSE)



# Six Sigma Green Belts Skills and Knowledge: Analyze Phase

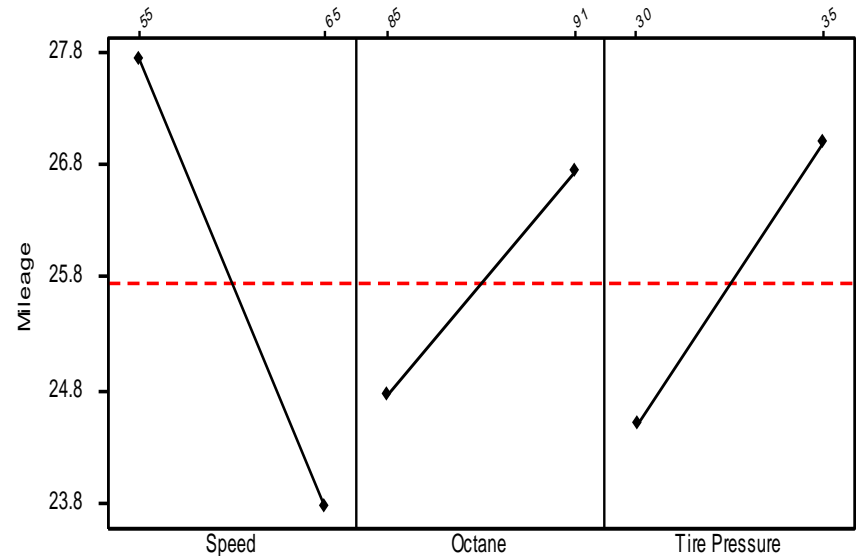
- Types of Variation (Common vs Special)
- Statistical Software
- Normality Testing / Central Limit Theorem
- Graphical Analysis of Data
- Statistical Analysis of Data
- Hypothesis Testing
- Correlation / Regression Analysis
- Identify and Validate Root Causes



# Six Sigma Green Belts Skills and Knowledge: Improve Phase

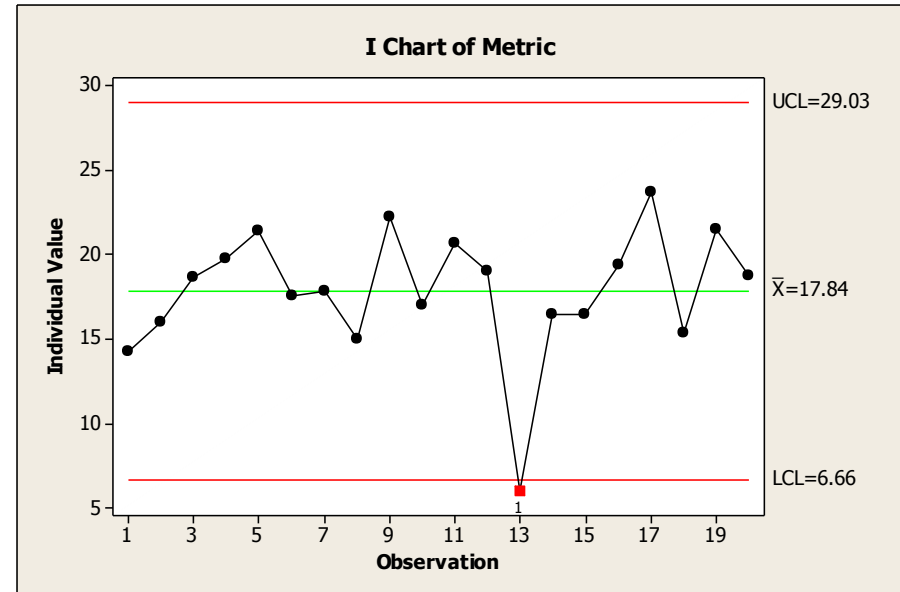
- Solution Selection  
 (Benchmarking, Brainstorming, Poka-Yoke / Mistake-Proofing, TRIZ & Design of Experiment / DOE)
- Pay-off Matrix
- Factorial Design
- Main Effects
- Risk Analysis (FMEA)

Main Effects Plot (data means) for Mileage



# Six Sigma Green Belts Skills and Knowledge: Control Phase

- Develop Control Plan
- Pilot and Validate Solution
- Statistical Process control (SPC)
- Implementation Plan
- Improved Process
- Cost Benefit Analysis
- Celebrate!





# Six Sigma Green Belt Summary

- If you want to have a successful Six Sigma program train at least 50% of your work force and create an army of leaders.
- Spread the knowledge, include senior managers to front line associates.
- Following this strategy will drive process improvements in all aspects of your organization and make you a leader within your industry.
- Continue to watch SixSigmaTV.Net for all of the information you need to drive Six Sigma into the DNA of your organization.
- For help, contact us at SixSigmaTV.Net

# Contact Us

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