

Tenneco[®] Automotive drives up first pass yield metrics thanks to WinSPC



Background

Tenneco Automotive [NYSE: TEN] is a \$3.5 B manufacturer of exhaust and suspension systems for OEMs and after-market parts suppliers. Tenneco's Milan, Ohio plant manufactures bushings for control arms, engine mounts and shocks. Tenneco has gained significant benefits using WinSPC.

Challenge

Tenneco's Milan, Ohio plant makes a variety of rubber bushings for suspension systems and engine mounts. Accommodating each customer's applications, Milan's plant must monitor and control over 200 active compound formulations. Tenneco was experiencing an unacceptable rate of first pass defects and set a goal to increase their first pass yield metrics.

Using Six Sigma methodology, Tenneco pinpointed critical variations that are essential to improving and maintaining quality and increasing first pass yields. But significant challenges still remained:

- Tenneco discovered that their measurement system was inadequate to provide the data they required to analyze and refine their processes
- Tenneco also wanted to ensure that all the benefits achieved through Six Sigma efforts would be sustained through reliable control methodologies.

Implementation

Tenneco chose WinSPC for the following reasons:

- WinSPC supports Tenneco's Six Sigma programs with essential data collection, analysis, measurement and control tools
- With WinSPC, Tenneco is able to display control plans for each new mixture that come through the line ensuring operator accuracy
- WinSPC offers a plant-wide monitor that allows supervisors to monitor multiple batches throughout the plant in real time.

Results

WinSPC supports Tenneco's Six Sigma program by providing essential tools and ensuring success in the final control stage of the DMAIC cycle. WinSPC is also making vital process information and instructions instantly available to operators and supervisors.

Benefits

Tenneco specifically cited the following benefits achieved with WinSPC:

- Increased first pass yields from 81% to more than 95%
- Attained ROI in less than 3 months
- Reduced rework and scrap
- Sustained Six Sigma improvements through ongoing control

"By using WinSPC's trending capabilities we were able to adjust our process to keep it in control and centered. WinSPC's plant monitoring capabilities helps us to detect problems as they happen rather than waiting for a paper trail."

**Brian Keyser
Six Sigma Black Belt
Tenneco Automotive**