

Projects: Reduce warranty costs by \$100K by improving process capability among 7 assembly lines and 2 machining lines at Cummins Turbo Plant, Ladson, South Carolina
Internship: Cummins Inc, Quality Engineer



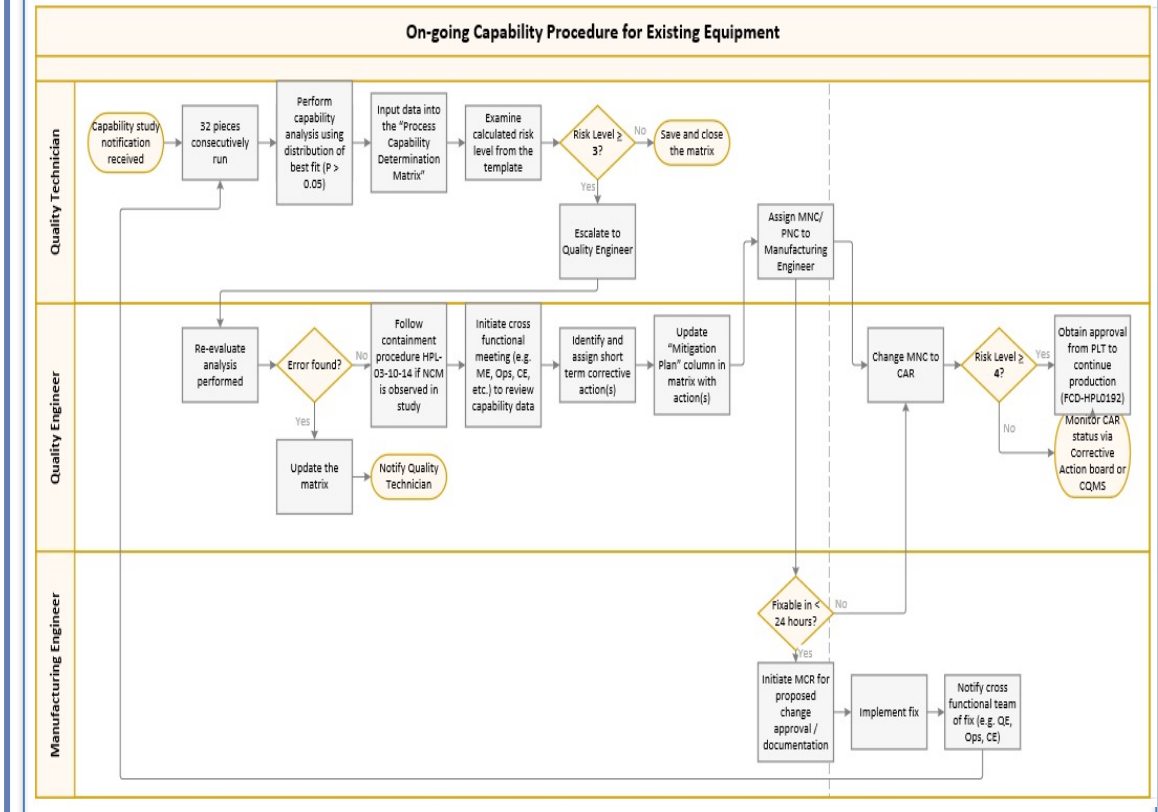
Project(s) Undertaken

AIAG and IATF enforces to conduct an ongoing process capability studies for all processes. Apart from that Cummins incurs a huge warranty loss failing to do. There are close to 7 assembly lines and 2 machining lines consisting of 900 different processes. The problem is there is no common process of analysis followed by each line. All the processes are not digitalized. The outcomes of the project is 1. Clarify the Process Map and RACI for the Capability determination Process. 2. Make the whole process in standards of Industry 4.0. 3. Automate the flow so that the process is sustained

Industry 4.0



Process Flow Chart



Lessons Learned

1. Team working skills (by brainstorming with the cross functional team)
2. In depth understanding of process capability analysis
3. Industry 4.0 helps the current automotive industry to develop rapidly
4. In depth knowledge of Minitab software

Useful Tools, Skillset(s)

1. Statistical analysis using Minitab
2. Data visualization using Power BI
3. Automation with the help of Power Automate
4. Certification in conducting process capability studies