ROOT CAUSE DETERMINATION FOR SHORTMOLD DEFECT IN PRESS ON TIRES

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ABSTRACT

Rework cost is a main wastage in the solid tire manufacturing industry. This wastage was conducted due to some failures that happened during the process of flow defects. This research was conducted to find ways that make high rework cost and determine root causes for main defects. Here the research conducted in Camso Loadstar Ekala tire Division II. This location produces three types of solid tires. They are press on the tire, cured on the tire, and resilient tires. According to the data analysis done using histograms, a short mold defect was found as the major defect in the company. Then re-analyzed defected tire data according to the tire type. Press-on tires have shown the highest short mold defect rate than other tires, according to the 80:20 principle, 80% of problems is done by 20% of cases. Then make a brainstorming session to find causes that will affect this defect through the industrial specialists. The brainstorm session is given more various factors that may affect this defect. Here we discuss the practices that can be used to minimize those factors. Problem-solving tools (Ishikawa/ Fish Bone Diagram) are used to find the root causes. Then used the quality tool method (3why tool) to found the root of this case. Corrective actions were discussed and arranged. Then analyzed tire production data after taking corrective actions the result were analyzed. According to corrective action, we able to minimize some levels of short mold defects from the press on tires in Ekala Tire Division II. Minimize the rework cost by 13.3% at the end.

Keywords: Brainstorm, Fish Bone Diagram, quality tool method (3 why) unitrack line, corrective actions, rework cost.