

Study and Improvement of the Quality of a Production Line

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Abstract : The automotive market is a dynamic market that continues to grow. That's why several companies belonging to this sector adopt a quality improvement approach. Wanting to be competitive and successful in the environment in which they operate, these companies are dedicated to establishing a system of quality management to ensure the achievement of the objective quality, improving the products and process as well as the satisfaction of the customers. In this paper, the management of the quality and the improvement of a production line in an industrial company is presented. In fact, the project is divided into two essential parts: the creation of the technical line documentation and the quality assurance documentation and the resolution of defects at the line, as well as those claimed by the customer. The creation of the documents has required a deep understanding of the manufacturing process. The analysis and problem solving were done through the implementation of PDCA (Plan Do Check Act) and FTA (Fault Tree Analysis). As perspective, in order to better optimize production and improve the efficiency of the production line, a study on the problems associated with the supply of raw materials should be made to solve the problems of stock-outs which cause delays penalizing for the industrial company.

Keywords : quality management, documentary system, Plan Do Check Act (PDCA), fault tree analysis (FTA) method

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