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Remanufacturing Process for Mechanical Transmissions of Commercial Vehicles: Case Study in Automotive Company

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Abstract

The growing need for companies to adapt to a highly competitive market in relation to prices and environmental issues makes them look for alternatives that were previously not needed or well exploited. In this sense, the remanufacturing process has been explored by companies aiming to increase not only profit but also trying to generate a positive ecological impact. The automobile company, for this case study, has had a remanufacturing process for commercial vehicle transmissions for some years, but through commercial indexes, it saw the need to update this process. Indicators of sales losses, prohibitive cost of the remanufactured part and deadlines above the market in delivery of remanufactured transmissions motivated the project in question, which aims to diversify the medium as the company interacts with its target audience. Through a market analysis, preliminary product evaluation and remanufacturing product recall process improvements were studied in the current process. The main improvement implemented was a more detailed analysis and subdivided into levels of repairs guaranteeing greater productivity, lower cost and time in the response to the final customer. The process of communicating with distributors has also been stepped up to better ensure product evaluation and timely delivery. In short, better and more effective processes, communication channels and greater differentiation of products for remanufacturing were the points executed and the results expected in this project.

Keywords: Remanufacturing; sustainable life cycle; Mechanical transmissions; Automotive industry.