

# Evaluation of Embroidery Defects and Solution Proposals in Clothing Sector

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## Abstract

Nowadays, it has become more important to follow the latest developments concerning the clothing sector as staying up to date is likely to help us eliminate unnecessary expenditures and increase productivity. In order for companies to continue and expand their activities in ever-changing market conditions compared to their competitors, they need to make their own enterprises compatible with this emerging technology as much as possible by following the developing technology. In this study, the embroidery department of an exporting company was examined. More specifically, the embroidered products were carefully checked and faulty pieces were separated and classified according to the types of defects. The most critical defects were determined by means of Pareto analysis according to defect types and frequencies and an auxiliary apparatus was placed on the embroidery machine to prevent the defect in question. After the placement of the apparatus, the products were checked again. As a result of the calculations, the percentage of the defects in question decreased from 42.41% to 4.6%, and an improvement of 37.81% was achieved with the apparatus developed within the scope of this study.

**Keywords:** Embroidery defects, statistical process control, pareto diagram, fishbone diagram