

Implementation of the Single Minute Exchange of Die (SMED) Principles for the Improvement of the Productivity in a Steel Company in Colombia

Lina María Altamar Guerra; Xiomara Noriega Fontalvo; Juan Carlos Cabarcas; Dionicio Neira; Javier Velasquez

Abstract

This study aims to analyze the process conditions for the reference changeover in a pipe forming mill in a metalworking company in Colombia, focusing on the high set-up times of this machine. High set up times in this machine causes, excessive idle time, low productivity, and complains due to tardy orders. Based on the principles of SMED, each of the set-up activities was analyzed. The methodology allowed the reclassification of some activities as external, as well as the identification of deficiencies in personnel formation, housekeeping, lack of tools, and other factors affecting the set-up time. Different actions were implemented with the commitment of directives, operators, production management, and other areas. The discipline showed for all the involved areas allowed to achieve exceptional results.

Keywords

SMED; 5S method; Set-up time; Productivity; Metalworking company