Lean Manufacturing Implementation in Management of Residues in Recycling Industry

Mercedes Estefanía Pérez-Naranjo and Sonia Valeria Avilés-Sacoto

Universidad San Francisco de Quito,
USFQ, Quito, Ecuador

Corresponding author's Email: mperez1@estud.usfq.edu.ec, svaviless@usfq.edu.ec

Abstract: Lean Manufacturing is a system that improves the processes using principles and tools to reduce several types of waste. This system has been applied to a wide number of areas and activities in different companies. Having said that, still there are certain companies operating in the recycling industry, which do not consider waste processes as a problem. It is here where a controversy is born: when a recycling company treating waste from other industries, has "waste" in its processes. Lean Manufacturing Techniques tackle this problem by reducing or eliminating the waste. This is the case presented in this study, the Ecuadorian company AV. CORP., which experienced an improvement in its activities to treat waste materials coming from an automotive industry due to the application of Lean Manufacturing Tools. All that has been done following the DMAIC Methodology. Many benefits were obtained, such as the reduction in the occupied space in the plant, the reduction in movements of workers and others. An improvement of seventeen percent was achieved.

Keywords: Waste, recycling-industry, lean, efficiency, automotive