Application of the SMED Methodology in the Injection Machine in the Company Avanplast S.A.C. to Reduce Setup Time

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Abstract

It is known that industrial companies are always looking for ways to increase their productivity mainly by eliminating activities that do not add value, this is no different for companies dedicated to the field of plastic products, which usually handle a wide catalog of products, which is why they usually deal with changes on demand, causing high configuration times during working hours. The SMED methodology was applied in the task of mold changing on an injection machine of the company Avanplast S.A.C due to the high configuration times that the mold changes took, this due to the variety of plastic products that are made in the company. In order to reduce the high configuration times, eliminate external tasks and reduce the economic impact, different engineering tools such as Value Stream Mapping, Model A3 and 5s applications were developed. As a result, a 46.3% reduction in configuration time was obtained, the elimination of nine external operations and a saving of $5017.96 per year.

Keywords
Productivity, Smed, 5s and VSM

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