Proceedings of the 3rd Annual World Conference of the Society for Industrial and Systems Engineering, San Antonio, Texas, USA October 19-22, 2014

DFMA Applied for Improvement of Fitness Apparatus Used in Outdoor Gyms

A. Noriega, L. Guillén, L. M. Vidal, V. A. Torres, and S. A. Noriega-Morales

Departamento de Ingeniería Industrial y Manufactura Universidad Autónoma de Ciudad Juárez, México

Corresponding author's Email: lguillen@uacj.mx

Abstract: The project is about the redesign of five fitness equipment apparatus used in outdoor gyms. These are rugged built, with high gauge materials to provide robustness; however their design can be improved using appropriate techniques with the additional purpose of reducing the production cost. The objective of this project it the development of an alternative and competitive industrial design and its manufacturing process, which would translate into an easier, faster and more cost efficient process, as well the use of more appropriate materials and a less complicated and safer assembly. To achieve the objective DFMA methodology is applied.

Keywords: Product Design, DFMA, Gym Apparatus