Cost Reduction in Case of Forklift's Tire Replacement using VA/VE Technique

Noppadol Sriputtha

Production Engineering Program, Faculty of Engineering Thai-Nichi Institute of Technology Bangkok 10250, Thailand noppadol@tni.ac.th

Boonsin Nadondu

Facility and Layout Section
Nissan Trading (Thailand) Co., Ltd.
Chonburi, Thailand.
somsin.nad@gmail.com

Abstract

The aim of this research is to study the feasibility of reducing cost of forklift's tire replacement. According to the gathering data, the new tire replacement cost from January to June 2018 is 617,280 THB which seems very high. In order to reduce this cost, the VA/VE technique is chosen to analyze the data due to its accomplishment in an automotive industry. A comparison between the new OEMs tire and retreading tire in 1,000 working hours has been analyzed based on this concept. Its implementation and details of a feasibility ranking table are clearly demonstrated and discussed. The results shown that the replacement cost of the retreading tires are only 288,560 THB which is lower than the new OEM tire by 53.25%.

Keywords

VA/VE, retreading tire, OEM's tire

Biographies

Noppadol Sriputtha is a lecturer in Production Engineering Program, Faculty of Engineering at the Thai-Nichi Institute of Technology, Bangkok, Thailand. He earned Bachelor of Industrial Technology in Production Technology from King Mongkut's Institute of Technology North Bangkok, Thailand, Master of Engineering in Industrial Management Engineering from King Mongkut's Institute of Technology North Bangkok, Thailand and Master of Engineering in Industrial Engineering from Chulalongkorn University, Bangkok, Thailand. He has been recognized as a senior management with over 20 years of experience in working with automotive parts industry

Boonsin Nadondu is a facility and layout engineers of Nissan Trading (Thailand) Co., Ltd. He earned B.Tech. Ed. in Industrial Engineering from King Mongkut's University of Technology Thonburi, Bangkok, Thailand, Master of Engineering in Industrial Engineering from Burapha University, Chonburi, Thailand. He has many experience with various industry over 10 years.