



Name : Dave Darshana Kishorbhai

Enrollment No. : 129990919003

Branch : Mechanical Engineering

Title of Thesis : Investigations on driving innovation in small size foundries through the implementation of lean six sigma principles.

Abstract

Six –Sigma has been enabling the organisations, to facilitate to achieve ‘Zero defect manufacturing’. On the other hand, LM has been enabling the organisations, to improve quality and enhanced productivity while producing products by eliminating the wastes. Since these two approaches have been complimentary with each other, researchers brought out LSS concept by knitting both these approaches. Unlike LM and Six-Sigma, LSS has not found broad application in organisations. In a few organisations, in which the LSS has been applied, competitive strength has increased significantly. This observation indicates the need to study the implementation of LSS in sectors in which the implementation of the same has not yet been carried out. Foundry is one such sector in which the implementation of LSS in literature arena is, however, to be reported. In this background, a model facilitating the implementation of LSS in foundries was considered as the secondary problem of the doctoral work reported in this thesis. . In this background, this doctoral work was conducted by claiming that LESSIFOUND model is a valid model for successfully implementing LSS in small size foundries.

List of publications:

1. Dave, D., R. Murugesh , Devdasan, S. (2015) ‘Origin ,principles and applications of lean six –sigma concept :Extractions from literature arena’ , International journal of services and operation management, Vol. 22, No. 2, pp123-142(Scopus and UGC approved journal).
2. Dave,D ., Panchal H.(2018) ‘waste optimization through the implementation of lean six Sigma principles in a sand casting foundry of Gujarat’ , International Journal of Engineering & Science Research, Vol-8, Issue-7,pp 61-67(UGC approved journal).
3. Dave,D ., Panchal H.(2018) ‘Implementation of LSS Model in a sand casting foundry of Gujarat’, International Journal of Research and Analytical Reviews , Vol-5, Issue-3,pp 712-716. .(UGC approved journal).
4. Dave,D ., Panchal H.(2018) ‘Review on Lean, Six Sigma and Lean Six Sigma’ , International Journal for Research in Engineering Application & Management , Vol-4, Issue-6,pp 304-306(UGC approved journal).
5. Dave,D ., Panchal H.(2018) ‘Implementation of lean six sigma principles in a sand casting foundry of Gujarat’, International Journal of Engineering & Science Research,Vol-8, Issue-9,pp 1-5. (UGC approved journal).