

# **APPLICATION OF VALUE ENGINEERING: A CASE STUDY OF FLOOR CRANE**

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Mode of Study : F. Time

## **ABSTRACT**

Value engineering is a systematic method to improve the "value" of goods or products and services by using an examination of function. Company is engaged with the various types of the different cranes. Case study has been carried out in industrial elevators manufacturing company and main purpose reduce the cost of floor crane with the help of value engineering and applied the VEJP (Value Engineering Job Plan), the design of floor crane change with the help of ANSYS (American Simulation Software). The objective of this study to conduct cost reduction in floor crane with the application of value engineering. The company engaged with various types of manufacturing facilities such as design department, fabrication shop, sheet metal shop, paint shop and final inspection. Case study of „floor crane“ was selected due to their initial high cost of material along with their sub-parts. The value engineering along with ANSYS are used to examine the problem and reducing cost. Two designs were proposed to replace the previous model of floor crane , the results showed decreased cost 11.97% in first case and decrease the cost 12.53% in second case.