

Analysis of Particle Reinforced Metal Matrix Composite Crankshaft

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Abstract : Six sigma is a defect reduction strategy enabling modern organizations to achieve business prosperity. The practitioners are in need to select best six sigma project among the available alternatives to achieve customer satisfaction. In this circumstance, this article presents a study in which six sigma project selection is formulated as Multi-Criteria Decision-Making(MCDM) problem and the best project has been found using AHP. Five main governing criteria and 14 sub criteria are being formulated. The decision maker's inputs were gathered and computations were performed. The project with the high values from the set of projects is selected as the best project. Based on calculations, Project "P1" is found to be the best and further deployment actions have been undertaken in the organization.

Keywords : six Sigma, project selection, MCDM, analytic hierarchy process, business prosperity

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