

Abstract Details

Title: A Graph Theory Approach To Evaluate The Intensity Of Barriers In A Powder Metallurgy Process

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Abstract: Today In Market, Product Quality, And Cost Of Products Are More Challenging Factor. Now Improving The Quality Of Product By Controlling The Critical Factors. For The Cost Reduction Of Product, Improve The Productive And Minimization The Waste. Now Apply Lean Manufacturing And Minimization The Waste. An Auto Part Industry; Which Manufactures Auto Part By Using Sintered Powdered Metallurgy. It Is Found After Enquiring With The Management That Production Of Some Auto Part Is Very Low And Rejection Was Quite High. Here A Case Study To Investigate The Low Production Of The Specific Auto-Part And High Rejection Rate Will Be Taken To Fix The Real Cause. The Study Will Suggest The Best Possible Measure To Over- Come Both The Problem.

Metrology: This Paper Based On Graph Theory Application. In This Paper Identify The Critical Factors And Subcritical Factors. Develop A Feasible Index Of Transition (Fit) And Rank Different Industry According To Cost And Quality. The Fit Value Obtained From Permanent Function From Enabler Digraph.

Finding: Help Of This Paper; Find The Particular Industry Is Fit For Desire Quality And Optimum Cost.

Practical Implication: The Fit Value Obtained From A Permanent Function Indicates The Influence Of Critical And Sub Critical Factor. Higher The Value Of Fit Engineer Judge To Control This Factor For Desire Quality.

Originality/Value: Classification Of Critical And Subcritical Factors And Their Analysis For A Desire Quality At Optimum Cost.

Key Word: Graph Theory Application, Powder Metallurgy, Barriers, Implementation, And Identification.