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Development Of Taguchi Loss Based – Risk Criticality Assessment Model Of Fmea System For Process Industry

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Abstract

This paper presents some drawbacks of decision support system model for criticality assessment of FMECA in process industry whose quality attributes are commonly found as continuous variables. In this paper, instead of using Risk Priority Number as stated in MIL STD 1962A as product of Occurrence of failures (O), Severity of Failures (S), and detect ability of failures (D), the authors proposed quality loss function model as an alternative to the former risk criticality assessment model in MIL STD 1962A. An industrial case study is presented to illustrate the applicability of this newly decision support system in industrial practice.

Keywords: FMECA, RPN, Taguchi Loss, Cement Plant.