

Accidents Avoidance through Reliability + Maintenance=Functionability

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Although, reliability and maintenance are well-recognised disciplines in their own rights, there was no a body of knowledge for predicting their combined impact on accidents occurrence during in-service life of industrial facilities and buildings.

Thus, the main objective of this presentation is to introduce reliability and maintenance professionals to MIRCE Science¹, a body of knowledge that enables quantitative prediction of the complex interactions between reliability and maintenance issues on in-service performance of industrial facilities and buildings to be done. Hence, by making use of MIRCE Functionability Equation it is possible to perform analytical trade-off between feasible reliability methods and maintenance policies to select the compromising solution that will maximise non-accident operation for a given budget regarding industrial facilities and buildings.

¹ Reference: [1] Knezevic, J., The Origin of MIRCE Science, pp. 232, MIRCE Science, Exeter, UK, 2017, ISBN 978-1-904848-06-6