

Proposal of Innovative Risk Assessment of Ergonomic Factors in the Production of Jet Engines Using AHP (Analytic Hierarchy Process)

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Abstract : Ergonomics is a key factor affecting the operational safety and quality in the aircraft engine manufacturing industry and evidence shows that the lack of attention to it can increase the risk of accidents. In order to emphasize the importance of ergonomics, this paper systematically reviews the critical processes used in the aircraft engine production industry with focus on the ergonomic factors. about the subject to identify key ergonomic factors. Experts validated the factors and used AHP to rank the factors in order of significance. From the six key risk factors identified, the ones with the highest weight are psychological demand followed by understanding of operational side. These factors suggest that measures must be taken to improve ergonomic factors, quality and safety in the manufacturing of aircraft engines.

Keywords : ergonomics, safety, aviation, aircraft engine production

Conference Title : ICIEOM 2016 : International Conference on Industrial Engineering and Operations Management

Conference Location : Paris, France

Conference Dates : October 24-25, 2016