

## عنوان مقاله:

Assessment of fuzzy failure mode and effect analysis (FMEA) for reach stacker crane (RST): A case study

## محل انتشار:

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## خلاصه مقاله:

FMEA (Failure Mode and Effect Analysis) refers to a proactive quality tool that enables the identification and prevention of the potential failure modes of a product or process. However, in executing traditional FMEA, the difficulties such as vague information, relative importance ratings, decisions on same ratings, and opinion difference among experts arise which reduce the validity of the results. This paper presents a fuzzy logic based FMEA depending on fuzzy IF-THEN rules over traditional FMEA to make it precise and give proper maintenance decision. Here, the Risk Priority Number (RPN) is calculated and compared to the Fuzzy Risk Priority Number (FRPN) to give maintenance decision. Furthermore, the FMEA of Reach Stacker Crane (RST) is presented to demonstrate the proposed Fuzzy FMEA.

## کلمات کلیدی:

Failure mode and effect analysis (FMEA), Risk priority number, Fuzzy theory, Fuzzy FMEA, IF-THEN rules

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1180904>

