PLATO RFMEA (Reverse FMEA)

PLATO RFMEA is moving in reverse the PFMEA analysis at the shop floor. The logical ideal top-down analysis is to start with FMEA, build a Control Plan, produce work instructions and eventually arrive at the shop floor – in reality. Whilst PFMEA reflects reality by a top-down approach, RFMEA is validating the reality by a bottom-up approach. RFMEA is a method for lessons learned and keeping PFMEAs up-to-date.
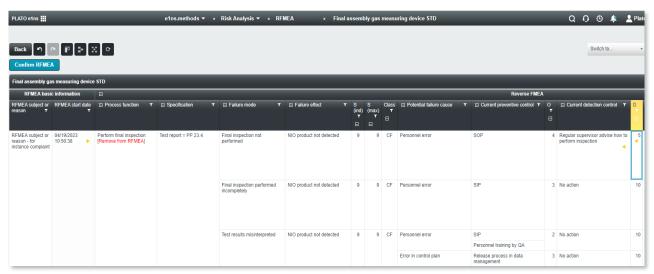

Fig.: The RFMEA is started and completed in a form sheet – synchronized with PFMEA content
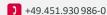
Applications and Use

- RFMEA is needed in any phase of a production process and triggered by a complaint, any process change or regular review. Process and product assumptions are documented in a PFMEA.
- RFMEA serves as identification of gaps between PFMEA and the reality at the shop floor.
- RFMEA serves as confirmation of the PFMEA maturity and timeliness.
- RFMEA is synchronized with PFMEA.
- RFMEA provides a decision report for a transparent traceability.

PLATO e1ns Database

The RMFEA uses data from PFMEA and previous system analyses through the central PLATO e1ns database. RFMEA is synchronized with PFMEA and any updates from RFMEA are indicated by a trace information. This integration ensures effective and efficient teamwork throughout all departments – revisions and the need to maintain more than one database are eliminated.

Primary Focus and Functions

Synchronization between PFMEA and RFMEA

Process functions from PFMEA are selected and loaded with related data such as failure modes, failure effects, controls and recommended actions in the RFMEA working form sheet. Before a user did not confirm RFMEA as completed, the data are in real-time synchronized between RFMEA and PFMEA. PFMEA data which are edited or created in RFMEA are marked with a trace to highlight the changes for PFMEA and RFMEA team likewise.

Consistent, up-to-date, and easily available data

Changes and updates generated from RFMEA are automatically propagated to PFMEA and related data (process flow chart, control plan etc.). Traces are indicating the changes in PFMEA which offer also an easy navigation from PFMEA to RFMEA decision report. Once the validated or updated PFMEA data are confirmed by RFMEA, the life data are archived in RFMEA decision report. RFMEA decision report is the working history and read-only.

PLATO RFMEA is part of the e1ns family and a web application, which means no local installation is necessary. Employees from all corporate divisions have easy access – from anywhere in the world.

RFMEA key result report for making your success transparent

PLATO RFMEA key result report collects data from the RFMEA decision report.

It is a summary of changes and updates, showing number of new / changed PFMEA content as a RFMEA result. It also proves, if work instructions were up-to-date.

RFMEA report for presenting the result to other parties

RFMEA results from RFMEA decision report and key result report can be exported as a PDF output. The output can also be configured individually depending on which documents are needed for projects, customers, or archiving purposes.

Branches and Standards

PLATO RFMEA is used for production processes in industry, assembly processes, quality management processes, services, etc.

CSR standards from various OEM's are requesting RFMEA's from suppliers.