

Streamline Risk Management with Jama Connect® for Automotive's VDA AIAG FMEA Template

Many automotive engineering teams still rely on static spreadsheets to manage complex FMEA analyses, a method that often leads to fragmented data and version control nightmares. This disconnect makes it nearly impossible to understand how a change in one subsystem impacts the entire vehicle, increasing the likelihood of errors. Without a live connection between design elements and potential failure modes and failure effects, ensuring compliance becomes a slow process that wastes engineering time.

Jama Connect for Automotive transforms this labor-intensive process with a template based on the Failure Modes and Effects Analysis (FMEA) methodology developed by the German Association of the Automotive Industry (VDA) in collaboration with the Automotive Industry Action Group (AIAG). Use of the VDA AIAG FMEA template saves time and improves quality by replacing isolated documents with a dynamic data model that links failure modes directly to requirements and validation tests. By centralizing this information, teams gain immediate clarity on potential risks and can manage multi-level FMEAs — from the vehicle level down to the smallest component, ensuring that safety and compliance are baked into the design process from day one.

KEY BENEFITS

Prioritize Critical Actions

Utilizing the Action Priority (AP) field instead of traditional Risk Priority Numbers (RPNs) allows teams to categorize risks as High, Medium, or Low, ensuring immediate attention goes to the most pressing safety concerns.

Achieve Complete Visibility

The Traceability Information Model™ enables engineers to cascade FMEAs across vehicle, system, and subsystem levels, providing a clear view of how risks correlate across the entire product architecture.

Automate Change Management

Live Traceability™ instantly flags how modifications to requirements impact associated failure modes and test cases, reducing manual review time and preventing design inconsistencies.

Accelerate Deployment

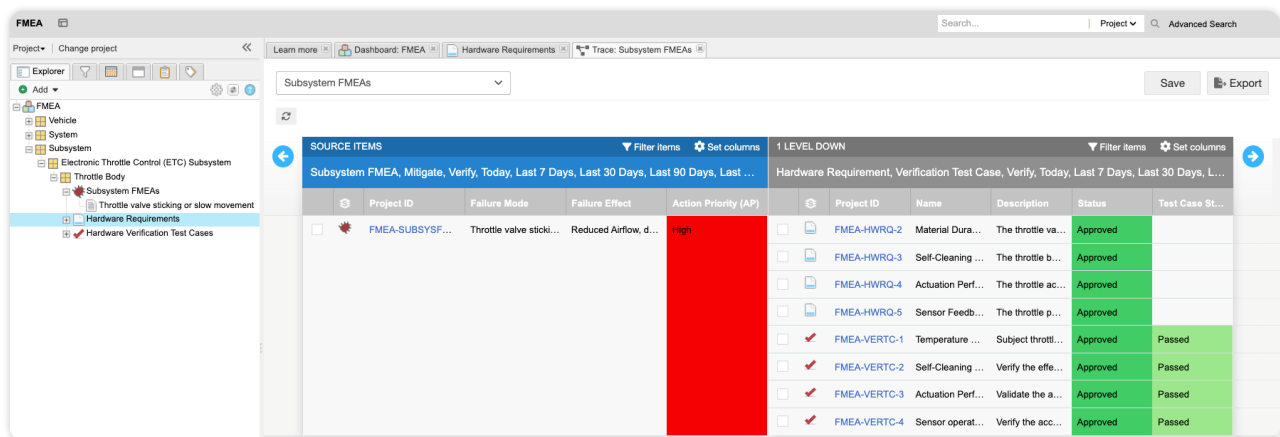
Pre-configured item types, calculated risk assessment fields, and templates allow teams to adopt industry best practices quickly while retaining flexibility to customize fields for specific project needs.

How Jama Connect for Automotive's VDA AIAG FMEA Template Works

Jama Connect for Automotive provides a VDA AIAG FMEA template that establishes a structured framework where users are guided through a systematic process to define attributes like severity, occurrence, and detection for populating the Action Priority (AP) Matrix. This matrix enhances collaboration across multidisciplinary teams by providing a visual tool in a centralized platform with synchronized data that enables teams to see relationships, identify bottlenecks, and agree on risk priorities and mitigation strategies. Administrators can tailor the configuration to enforce consistency across teams, defining specific item types for different system elements.

Once data is entered, the system's Live Traceability feature actively monitors relationships between artifacts. If a user modifies a high-level requirement, the software automatically highlights linked failure modes and test cases, prompting the team to review and verify that the safety case remains valid. In addition to identifying potential gaps or inconsistencies in the design, it simplifies audits and reviews by providing a clear, real-time traceability path for greater accountability and project efficiency.

Sample Trace View - Subsystem FMEA using Action Priority Lookup



SOURCE ITEMS				1 LEVEL DOWN				
Project ID	Failure Mode	Failure Effect	Action Priority (AP)	Project ID	Name	Description	Status	Test Case St...
FMEA-SUBSYSF...	Throttle valve sticki...	Reduced Airflow, d...	High	FMEA-HWRQ-2	Material Dura...	The throttle va...	Approved	
				FMEA-HWRQ-3	Self-Cleaning ...	The throttle b...	Approved	
				FMEA-HWRQ-4	Actuation Perf...	The throttle ac...	Approved	
				FMEA-HWRQ-5	Sensor Feedb...	The throttle p...	Approved	
				FMEA-VERTC-1	Temperature ...	Subject throttl...	Approved	Passed
				FMEA-VERTC-2	Self-Cleaning ...	Verify the effe...	Approved	Passed
				FMEA-VERTC-3	Actuation Perf...	Validate the a...	Approved	Passed
				FMEA-VERTC-4	Sensor operat...	Verify the acc...	Approved	Passed



Jama Connect is suitably validated by TUV SUD for safety-related development



Jama Connect is TISAX Level 2 certified, ensuring secure automotive industry compliance



Jama Software codes with OWASP best practices



Jama Connect is SOC2 Type 2 certified in both the server and application



Jama Software ensures strong privacy management practices



Transport Layer Security (TLS) ensures data transferred is secured and encrypted in Jama Connect

To learn more about how Jama Connect for Automotive's VDA AIAG FMEA template can simplify and supercharge risk management for your product development, visit www.jamasoftware.com



Jama Software® is focused on maximizing innovation success in multidisciplinary engineering organizations. Numerous firsts for humanity in fields such as fuel cells, electrification, space, software-defined vehicles, surgical robotics, and more all rely on Jama Connect® requirements management software to minimize the risk of defects, rework, cost overruns, and recalls. Using Jama Connect, engineering organizations can now intelligently manage the development process by leveraging Live Traceability™ across best-of-breed tools to measurably improve outcomes. Our rapidly growing customer base spans the automotive, medical device, life sciences, semiconductor, aerospace & defense, industrial manufacturing, consumer electronics, financial services, and insurance industries. To learn more, visit us at: jamasoftware.com.