

## Adoption of aerospace industry Process Failure Mode and Effects Analysis (PFMEA) and Control Plans standard

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**NTS Number:** 420  
**Issue:** 1  
**Date:** 22<sup>nd</sup> January 2018

### For the attention of the Managing Director and Quality Manager

Dear Sir or Madam,

#### Scope/Applicability:

All suppliers to Rolls-Royce aerospace supply chain.

#### Introduction:

We recognise the importance of effective process risk identification, assessment, mitigation and prevention throughout the life cycle of a product and have been actively working to define an industry standard for process risk mitigation as part of the SAE G-22 AESQ (Aero Engine Supplier Quality Group) Committee.

#### Background:

Following on from the release of NTS402, on the 28<sup>th</sup> August 2017 the SAE G-22 AESQ Committee published a new PFMEA and Control Plan standard – AS13004. The purpose of this standard is to define the requirements for the identification, assessment, mitigation, and prevention of risk in the manufacturing process through the application of Process Flow Diagrams, PFMEAs and Control Plans across the aero engine supply chain.

Formed in 2013, the AESQ Committee is an industry body whose membership includes engine manufacturers as well as major suppliers. Companies represented include Rolls-Royce, GE, GKN, Honeywell, MTU, PCC, Pratt & Whitney and Snecma. Its mission is to improve the quality capability of the aero engine supply chain and eliminate waste. The group aims to harmonise its current supplier quality management requirements using the following key principles:

- Create simple, prescriptive requirements
- Establish clear acceptance criteria
- Create a common language for quality
- Build on existing industry best practice, where it exists

The new PFMEA and Control Plans standard adopts best-practice from other industries and the new standard describes the product feature based approach to process risk identification, assessment, mitigation and prevention. Rolls-Royce is now mandating the application of this standard.

**Action Required:**

- Obtain a copy of the PFMEA and Control Plans standard (AS13004) from the [SAE website](#) and build the requirements in to your own quality system.
- Increase the capability of your staff in order to improve the effectiveness of your adoption of this standard and approach to process risk mitigation.
- Define your deployment plans to cover the requirements of the standard for Rolls-Royce products (as defined within the standard).
- We strongly encourage the deployment of product feature based PFMEAs on all products supplied to Rolls-Royce as part of a robust quality management approach.
- Fully transition to the requirements defined within AS13004 by end March 2018, unless contractually defined for immediate application in new product introduction and source and method changes.

**NTS Category:**

Quality

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