## SAE AS13100 AESQ Quality Management System Requirements for Aero Engine Design and Production Organizations

## **Defect Prevention** Key Quality Tools for Zero Defects We must focus on defect prevention nspection is never 100% effective DESIGN RISK ANALYSIS PROCESS FAILURE MODE CONTROL PLAN **INSPECTION CAPABILITY** e.g. DESIGN FMEA PRODUCT DESIGN & EFFECTS ANALYSIS to RM13004 to RM13003 to RM13004 to RM13004 POTENTIAL DESIGN RISKS PROCESS DESIGN Variable gauge repeatability & reproducibility ATTRIBUTE MISTAKE PROOFING AGREEMENT ANALYSIS ..... B to RM13003 SPC IDENTIFIED . UNDERSTOOL RISKS IDENTIFIED . UNDERSTOOD SPECTION & TARGET SETT $\bigcirc$ Accurate and CUSTOMER MEETING reliable inspectior AUDIT INITIAL PROCESS CAPABILITY to RM13006 & MITIGATED & MITIGATED Design meets MANUFACTURING Process Capability rocess can make CPK fect free parts CONTROLS DESIGN TO REQUIREMENT TO RM13008 8D PROBLEM SOLVING TO RM13000 AESQ QUALITY STANDARDS 8 REFERENCE ERFORMANCE MANUAL Ø DEFECT HUMAN PREVENTION **FACTORS** RM13010 SUPPLIER MANAGEMENT QUALITY AUDIT TO RM13005 TO RM1300 HOWMET Honeywell

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## VISION

To establish, deploy, and maintain a common set of Quality **Requirements that** enable the Global Aerospace Engine Supply Chain to be truly competitive through lean, capable processes, and a culture of Continuous Improvement.











