

GENERAL DYNAMICS

Ordnance and Tactical Systems

Weapons Systems Supplier Quality Requirements Site 21-Quality – Williston VT / Saco ME

Quality Clause	Revision	Phase In Date
Q72	0	04/02/2019

Q72–KPC I

Requirements

Variation management of key characteristics in accordance with AS9103 shall be performed on key characteristics or processes. The AS9103 specification with applicable forms can be found at www.sae.org. Forms provided in AS9103 or equivalent shall be used to document the results, for each part or assembly produced, of key characteristics and manufacturing process elements that influence variation in key characteristics as well as the control techniques and measurement methods. Any dimensional documentation must be in the same unit of measurement as specified in the technical data package. Copies of the AS9103 report for each lot of product produced shall be submitted to the GD-OTS SQE on a quarterly basis via SharePoint.

Key product characteristics and processes (KPC) plan: The supplier and/or sub-tier supplier shall utilize key product characteristics to designate and identify those part or assembly features/interfaces where variation from nominal has significant effect on fit, performance, or service life of the product. The supplier and/or sub-tier supplier shall execute a plan designed to minimize KPC variation from nominal. The supplier and/or sub-tier supplier shall produce a detailed description of the system design that includes identification of KPCs and identification of key production processes. The supplier and/or sub-tier supplier shall balance key product design requirements with production process capabilities, and identify key process parameters and verification methods. The supplier and/or sub-tier supplier shall implement SPC or other control measures to ensure KPCs meet a minimum Cpk of 1.33 if using SPC or a 99.9934% yield (64 ppm defective) if using other control measures. The supplier and/or sub-tier supplier shall implement a documented control plan for the KPCs identified. The control plan shall describe how KPCs are to be controlled during the manufacturing process. The supplier and/or sub-tier supplier shall document action plans for improvement to processes not meeting the minimum capability requirements. This shall include process monitoring of KPCs or may consist of the monitoring of other appropriate characteristics. A PowerPoint training module is available from your SQE to provide further details.