



Global Supplier Manual Appendix E – GM Customer Specific Requirements for Suppliers

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Scope of this Document

The scope of this document is to ensure compliance to customer requirement by sub-suppliers of SMR Automotive who are supplying for any GM project. This document is listing requirements for these suppliers in addition to standard IATF16949 requirements and in addition to standard SMR requirements.

Responsibility

Suppliers who are supplier for SMR of a component for a GM product shall meet all requirements listed in this document during the whole project lifetime. This includes but not limited to:

- Regularly check for updates of this document on www.smr-automotive.com
- Ensure availability and awareness of related GM standards and requirements mentioned in this document
- Ensure requirements are met in their supply chain

1.0 Record Retention (IATF 16949 section 7.5.3.2.1)

PPAP Records – Production Run + 50 years

2.0 Customer-Designated Special Characteristics (IATF 16949 section 8.2.3.1.2)

The organization shall follow General Motors Key Characteristic Designation System Process GMW15049.

3.0 Second-party audits (IATF 16949 section 8.4.2.4.1)

Second-party auditors must meet the requirements in clause 7.2.4 Second-Party Auditor Compliance in IATF16949:2016 plus meet these additional requirements:

1. The organization (2nd party) must be IATF16949:2016 certified and not on probation or suspension.
2. The organization (2nd party) must utilize a qualified ISO Lead Auditor, or a qualified internal auditor with evidence of their successful completion of training, and a minimum of five internal ISO/TS16949:2009 and/or IATF16949:2016 audits under the supervision of a qualified lead auditor.
3. The organization (2nd party) must audit annually each qualifying supplier for whom it has performed a 2nd party assessment, and maintain records of the audit
4. The duration of these audits must conform to the full application of the Audit Day Requirements table of the current edition of Automotive Certification Scheme for IATF16949 Rules for Achieving and Maintaining IATF Recognition.

4.0 Supplier development (IATF 16949 section 8.4.2.5)

The organization shall have documented decision criteria for determining “specially designated small suppliers”.

5.0 Control of Changes (IATF 16949 section 8.5.6.1)

The documented process shall require consideration of a production trial run for every product and process change. Results of the trial run shall be documented

6.0 Manufacturing process audit (IATF 16949 section 9.2.2.3)

The organization shall incorporate an internal layered process audit process to assess compliance to standardized processes, to identify opportunities for continuous improvement, and to provide coaching opportunities.

7.0 Product audit (IATF 16949 section 9.2.2.4)

The organization shall perform quality focused checks on each shift, final inspection on all finished product prior to shipping, GP-12 as required during launch. Successive production/quality checks shall be increased in cases of high risks such as model launch, pass through components and characteristics pass through, major changes, shut down (see clause 8.5.1.4) or customer feedback.

8.0 Problem Solving (IATF 16949 section 10.2.3)

The organization’s documented problem solving process shall include: Daily (documented) review of issues by a multi-disciplined team including plant management.

9.0 Error-proofing (IATF 16949 section 10.2.4)

Error proofing devices shall be tested to failure or simulated failure at the beginning of each shift at a minimum when feasible, otherwise according to the control plan. The organization shall keep a list of all error proofing devices and identify which can be bypassed and which cannot (also see clause 8.5.6.1.1). The bypass determination shall consider safety, severity and overall RPN rating.

10.0 Initial Process Studies

When utilizing X-Bar and R charts, at least twenty-five subgroups (minimum of four pieces per sub-group) are required. When historical data are available or enough initial data exist to plot a control chart (at least 100 individual samples), Cpk can be calculated when the process is stable. For processes with known and predictable special causes and output meeting specifications, Ppk should be used. When not enough data are available (< 100 samples) or there are unknown sources of variation, contact the authorized customer representative to develop a suitable plan.

History of the revision

No.	Cause of modification	Date	Modifier	Approved
1	First issue	16.10.2017	Judith Robertson	Steffen Dehner
2				
3				
4				
5				