General Motors
Customer Specific Requirements for Suppliers (Tier$_n$)

Global Supplier Manual - Appendix G

extracted from **General Motors CSR for IATF 16949:2016 – December 15, 2020**
https://www.iatfglobaloversight.org/oem-requirements/customer-specific-requirements/

1 Scope of this document

The scope of this document is to ensure compliance to customer requirement by sub-suppliers of SMP 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 SMP requirements.

2 Responsibility

Suppliers who are supplier for SMP 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.smp-automotive.com
- Ensure availability and awareness of related GM standards and requirements mentioned in this document
- Ensure requirements are met in their supply chain.

3 Record Retention (IATF 16949 section 7.5.3.2.1)

The organization's business records shall be retained as specified in **GMW15920**. PPAP Records – Production Run + 50 years.

4 Customer-Designated Special Characteristics (IATF 16949 sec. 8.2.3.1.2)

The organization shall follow General Motors **Key Characteristic Designation System Process GMW15049**. Key Characteristics shall be applied as per IATF 16949:2016 8.3.3.3 Special Characteristics.

5 Special characteristics (IATF section 8.3.3.3)

The organization shall have a process to identify critical operations within their manufacturing process.

6 Product approval process (IATF section 8.3.4.4)

The organization shall comply with the AIAG Production Part Approval Process (PPAP) manual and GM 1927 03 Quality SOR to meet this requirement.

7 Manufacturing process design output

The organization shall have a method to identify, control, and monitor the high-risk items on those critical operations.

There shall be rapid feedback and feed forward between inspection stations and manufacturing, between departments, and between shifts.

8 Design and development changes – supplemental

All design changes, including those proposed by the organization, shall have written approval by the authorized SMP representative, or a waiver of such approval, prior to production implementation. See also AIAG **Production Part Approval Process** (PPAP) manual.

9 Second-party audits (IATF 16949 section 8.4.2.4.1)

Second-party auditors performing QMS audits must meet the requirements in clause 7.2.4 Second-Party Auditor Compliance in IATF 16949:2016 plus meet these additional requirements:

- The organization must be IATF 16949:2016 certified and not on suspension.
- The Second Party Auditor must be a qualified ISO Lead Auditor, or a qualified internal auditor with evidence of their successful completion of training, and a minimum of five internal IATF 16949: 2016 audits under the supervision of a qualified lead auditor.

The organization may conduct (2nd party) audits of their supplier per their supplier development risk management analysis.

For initial certifications, the first second party audit should use the initial audit days from Table 5.2*. For subsequent second party audits use the recertification days Table 5.2*.

***See Automotive Certification Scheme for IATF 16949, Rules for Achieving and Maintaining IATF Recognition, section 5.2, Table 5.2 Minimum audit days.**

The second party audits shall identify an acceptable passing level and include a scoring or ranking to determine which suppliers have passed. The organization shall have documented evidence that they review and follow up on all non-conformances identified in the second-party audit with the intent to close these non-conformances.

10 Supplier development (IATF 16949 section 8.4.2.5)

When a supplier to an organization is so small as to not have adequate resources to develop a system according to IATF 16949:2016 or ISO 9001:2015, certain specified elements may be waived by the organization.

The organization shall have decision criteria for determining “specially designated small suppliers”. Such decision criteria shall be in writing and applied consistently in the application of this provision. The existence and use of such decision criteria shall be verified by 3rd party auditors.

NOTE 2: “Small” may also refer to volume supplied to automotive.

11 Control plan (IATF section 8.5.1.1)

The organization shall provide measurement, test, and inspection data which demonstrates that control plan requirements, sample sizes, and frequencies are being met when requested.

Sample sizes and frequencies shall be determined based on risk and occurrence of failure modes, and to ensure that the customer is adequately protected from receiving the product represented by the inspection/tests before the results of the inspection/tests are known.

12 Standardized work – operator instructions and visual standards (IATF section 8.5.1.2)

Standardized work should include the what, how, and why tasks are performed. All standardized work shall be followed.

Visual standards throughout the facility shall be common, including between facilities building the same platform/product for global quality.

Visual standards shall be clearly communicated to all team members that are affected and referenced in the standardized work.

Visual standards that differentiate “good” from “bad” shall satisfy customer requirements and be controlled.

13 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.

14 Temporary change of process controls (IATF section 8.5.6.1.1)

The organization shall have a process for both bypass and deviation. The alternative actions identified on the bypass list shall be customer approved and shall be reviewed using the methodology of the PFMEA to identify the risk. This review shall be documented.

15 Monitoring and measurement of manufacturing processes (IATF section 9.1.1.1)

The organization shall have a method for the employee to call or notify for help when an abnormal condition on the equipment or product occurs. A method to call or notify shall be available in all operational areas of the organization.

Sufficient alarm limits shall be established for escalation of abnormal conditions and shall match the reaction plan identified in the product's control plan.

16 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. The layered process audit is led by Management who are competent to conduct the audits.

17 Product audit (IATF 16949 section 9.2.2.4)

The organization shall perform quality focused checks on each shift.

The organization shall have a process for final inspection and/or Customer Acceptance Review & Evaluation (CARE). Early Production Containment (EPC) shall be performed as required during launch and until released by the organization's assigned SQE or designate and per GM 1927 28 Early Production Containment (EPC).

1. Final inspection shall be performed on all finished product prior to shipping. This inspection can be 100% inspection or less based on risk.
2. EPC inspection checks shall be included at an upstream inspection station (final inspection/CARE).
3. Quality checks shall be included in standardized work. Point, touch, listen, and count inspection methods are incorporated.
4. 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.

18 Problem Solving (IATF 16949 section 10.2.3)

The organization's documented problem-solving process shall include:

1. Tracking of issues through closure.
2. Daily review of issues by a multi-disciplined team incl. plant management.
3. Daily reviews are documented.

4. All levels of the organization are included in the problem-solving process.
5. Robust method to identify the verifiable root cause(s) of each issue.
6. Timely closure of corrective action(s) including exit criteria.
7. Initial containment is well documented using a containment worksheet or similar

19 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, otherwise according to the control plan. In the event of error proofing device failure, a reaction plan that includes containment should be included in 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.

20 Continual improvement – supplemental (IATF section 10.3.1)

The organization shall have a process for effective review of PFMEA of all manufacturing parts and processes to occur annually at a minimum. This review shall consider, at a minimum, critical, safety, and high-risk items. The organization shall incorporate tools such as reverse PFMEA or other similar methods to assist in the PFMEA review. PFMEA review output shall include an updated PFMEA, record of the changes made (or record that no changes were made), and identification of the team involved in the review.

Critical, safety, and high-risk items (such as priority from Risk Limiting Method, high RPN or equivalent) shall have an action plan which includes recommended actions, responsibility, and timing.

Reviewing a PFMEA for corrective action process does not meet the requirement of annual review unless there is evidence that critical, safety, and high-risk items are considered in addition to the corrective action issue. A proactive review approach is required.

21 Change log

Revision	Date	Description
1	30.09.2020	first issue
2	01.03.2021	Carry over in B.A.Se
3	30.07.2021	Completely revised
4	02.09.2022	Format adapted