TI Fluid Systems

Global Supplier Requirements Manual

IATF 16949
Customer Specific Requirements

tifluidsystems.com

Summary of Sections with IATF Customer Specific content

INTRODUCTION

Fluid thinking.™

Fluid thinking™ shapes the mindset of TI Fluid Systems. Global automotive manufacturers turn to TI Fluid Systems for insight and focus to develop industry-changing fluid storage, carrying and delivery technology. With more than 123 locations in 29 countries, our strength lies in our ability to creatively meet and exceed the increasing fuel economy and emissions regulations of tomorrow's automotive industry.

TI Fluid Systems cannot be successful in meeting our customer expectations without the partnership and commitment from our many external providers. By combining Quality & Purchasing, we are positioned to implement new global policies and standards that ensure success for our external providers, our customers, and ourselves.

Global Supplier Requirements Manual

Controlled Document No.CP-8-ALL-41

This Global Supplier Requirements Manual replaces all previous versions of what was formerly known as Global Supplier Manual

The purpose of this Manual is to communicate TI Fluid Systems **Customer-Specific Requirements** supplemental to the IATF 16949 Automotive Industry Standard.

The guidelines described in this manual apply to all Global TI Fluid Systems external providers of prototype, production and service components, as well as external providers supplying materials, equipment and services.

This manual and all procedures that support this manual can be downloaded from the TI Fluid Systems Website- Supplier Resource Center.
https://www.tiautomotive.com/supplier-resource-center

OUR CORE VALUES

COMMITMENT TO COMPLIANCE AND ETHICS
The highest levels of integrity are achieved by understanding and embracing our Code of Business Conduct in our day to day work. Expect this of ourselves and others.

FOCUS ON PERFORMANCE
Our future depends on positive financial results. Only profitable businesses are sustainable. Commitment to results through strong work ethic and teamwork.

CUSTOMER FOCUS
Whether internal or external, our customer is why we are here. A positive and mutually beneficial relationship is the foundation for success. Don't miss an opportunity to make the customer's life easier.

COMMUNICATION
Communication is a key to success. Take a 'no surprises' approach to communicating and ensure the right people are informed of both positive and negative news in real time.

INNOVATE & IMPROVE
Keep up with the pace of business and seek out opportunities to improve. Be creative and challenge the norm. Don't miss an opportunity to develop new skills; our future will depend on it.

POSITIVE WORK ENVIRONMENT
Respect your colleagues, value their input and encourage their ideas. We are all responsible for creating an environment that fosters teamwork & results.

Corporate Quality Systems

Global Quality Policy

Quality and integrity, in everything we do, is the foundation for us to achieve customer satisfaction success.

Our guiding principles and behaviours include:

One Global Quality System to ensure our teams comply with mandatory standards.

Risk based data driven methodology to achieve customer commitments.

A standardized approach to problem solving.

Communicating lessons learned and sharing of best practices to ensure the continuous improvement of our people, our products, and our processes.

Through this approach we ensure our products are reliable and comply with all applicable customer, industry, legal and government regulatory requirements.

0.1 General-
No Additional Requirements

0.2 Quality Management Principles
No Additional Requirements

0.3 Process Approach

0.3.1 General
No Additional Requirements

0.3.2 Plan-Do-Check-Act cycle
No Additional Requirements

0.3.3 Risk-based thinking
No Additional Requirements

0.4 Relationship with other management system standards
No Additional Requirements

Quality Management Systems- Requirements

1.0 Scope
No Additional Requirements

1.1 Scope
The IATF 16949 QMS Standard defines the quality management system requirements for the design and development, product and, when relevant, assembly, installation, and services of automotive-related products, including products with embedded software.

This manual applies to all external providers, contractors and vendors to any Division of TI Fluid Systems globally. The expectations defined in this manual apply to all types of external providers including customer directed.

The IATF 16949 Standard and these Customer Specific Requirements should be applied throughout the automotive supply chain.

2.0 Normative References

2.1 Normative References
Annex A (Control Plan) is a normative part of the IATF Automotive QMS standard and TI Fluid Systems requirement.

Annex B (Bibliography- automotive supplemental) is informative, which provides additional information intended to assist the understanding of this Global Quality Systems Requirements IATF 16949 supplement.

2.2 Distribution of Manual
External providers will log onto the TI Fluid Systems website where the latest revision of the Global Supplier Requirements Manual can be viewed and downloaded. **https://www.tiautomotive.com/supplier-resource-center.** Any printed version of this document is an uncontrolled copy and may not accurately define the current requirements of TI Fluid Systems. Logging on and accessing the manual will be considered acknowledgement the supplier has the most current version of this manual.

Any questions should be addressed to TI Fluid Systems Purchasing.

2.3 Revision of Manual

TI Fluid Systems will review the manual on a regular basis and revisions and improvements will be made as needed. When any changes are made to this manual; external providers will be notified and they will be required to update all hard copies and electronic copies with the new revision.

External providers are responsible to check the revision on the TI Fluid Systems web site to ensure they are following the most recent release.

2.4 Supplier Information

TI Fluid Systems must have up to date and accurate information relating to our external providers. External providers are responsible for supplying this information and for providing updates on any changes or corrections to the information. These updates will be provided by completing the TI Fluid Systems Supplier General Information Survey (SGIS) **(CF-8-ALL-4200)** At a minimum; external providers shall provide an update via the SGIS at least once per year or when any change in this information occurs. Following are examples of required supplier information:

- Supplier Plant contact information
- Supplier Minority/Diversity Certification as applicable
- NAFTA (North American Free Trade Agreement) Certificate of Origin Form as applicable (TI Fluid Systems North America)
- Copy of IATF 16949 Registration Certificate
- Copy of ISO 14001 Registration Certificate
- Supplier Key Management Contact List
- Evidence of supplier financial stability
- PPAP/Annual Re-validation
- IMDS/REACH/CAMDS evidence of compliance to environmental regulations and laws
- Change of control or ownership of supplier
- Conflict Minerals as required in U.S. Dodd/Frank Wall Street Reform and Consumer Protection Act
- Supplier Safety Data Sheets (SDS)
- UK Modern Slavery Act

TI Fluid Systems has contracted with Supply On as a service to manage procurement and quality through the supply base.

Suppliers to TIFS shall enroll in the Supply On service to access:

- Business Directory - Manage Master Data and receive critical notifications from TIFS.
- Sourcing – Participate in the sourcing activity with TIFS.
- Problem Solver – To access and manage TIFS supplier complaint responses.
- Visibility and Analytics – Exclusive access to the TIFS Supplier Scorecard.
- Project Management – Manage activity for APQP through PPAP.

Participation in the Supply On service is mandatory for all production material suppliers, nonparticipation will result in:

- An administration charge / fee to overcome the extra manual work incurred by TIFS up to and including connecting the supplier to the Problem Solver and Business directory applications.
- Exclusion of the supplier for nomination for new / future business.

3.0 Supplier Management Guidelines

3.1 Confidentiality/Intellectual Property

TI Fluid Systems has many innovative and highly technical products and processes. We are constantly working on new ideas; often with a supplier as a partner. We expect our external providers to protect our intellectual property and we require confidentiality for all of our business relations. TI Fluid Systems intellectual property includes without limitation its patents, copyrights, trademarks, business processes, systems, manufacturing processes, technical and marketing information and strategic planning. The applicable TI Fluid Systems Terms and Conditions govern this topic.

3.2 Notification of Supplier Management Changes

All external providers must notify TI Fluid Systems in writing of any changes to key management staff. Key management staff would include but not be limited to; quality, materials, engineering, manufacturing, logistics

and senior managers. In addition, external providers must notify TI Fluid Systems in advance of any expiration of union contracts and of any potential work stoppage. External providers must notify TI Fluid Systems or mergers, acquisitions, plant and changes in plant location. All changes in management shall be communicated to your lead buyer by updating the Supplier General Information Survey (SGIS) form. **(CF-8-ALL-4200)**

3.3 TI Fluid Systems Conflict Minerals Policy

Background

"Conflict Minerals" refer to tin, tantalum, tungsten, and gold (3TG). On August 22, 2012, the U.S. Securities and Exchange Commission adopted final rules to implement reporting and disclosure requirements related to "conflict minerals," as directed by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. The rules seek to dissuade industries from purchasing minerals that were mined under conditions of violence and armed conflict in the Democratic Republic of the Congo and adjoining countries ("conflict region"). They require manufacturers who file certain reports with the SEC to disclose whether the products they manufacture or contract to manufacture contain "conflict minerals" that are "necessary to the functionality or production" of those products.

Policy

TI Fluid Systems supports the SEC legislation to end violence and human rights abuses. We request our external providers disclose the sources of conflict minerals used in their products, utilizing the Electronic Industry Citizenship Coalition (EICC) reporting template and following the automotive industry-wide approach as recommended by the Automotive Industry Action Group (AIAG). TI Fluid Systems will not knowingly procure 3TG or components containing 3TG from the "conflict region" unless confirmed from "conflict free" sources. Our supply chain partners are expected to support this same initiative.

Note: TI Fluid Systems is a public company trading on the London Stock Exchange; we will comply with conflict mineral reporting requests from our many global customers to enable their reporting.

4.0 Context of the Organization

4.1 Understanding the organization and its context

No Additional Requirements

4.2 Understanding the needs and expectations of interested parties

No Additional Requirements

4.3 Determining the scope of the quality management system

No Additional Requirements

4.3.1 Determining the scope of the quality management system- supplemental

No Additional Requirements

4.3.2 Customer Specific Requirements (CSR)

Customer-specific requirements shall be evaluated and included in the scope of the organization's management system. This shall include TI Fluid Systems requirements as well as applicable TI Fluid Systems Customer's specific requirements.

4.4 Quality Management System and its processes

4.4.1 No Additional Requirements

4.4.1.1 Conformance of products and processes

The organization shall ensure conformance of all products and processes, including service parts and those that are outsourced to all applicable customer, statutory, and regulatory requirements. TI Fluid Systems customer specific requirement includes **CW-4-ALL-411 Supplier Mandatory Safety and Regulatory Process.**

4.4.1.2 Product Safety

Most of the products produced by TI Fluid Systems are classified as “safety” products. Suppliers shall adhere to the IATF 16949 requirements as well as all CSR requirements relating to product safety. TI Fluid Systems customer specific requirement includes **CW-4-ALL-411 Supplier Mandatory Safety and Regulatory Process.**

4.4.2 No Additional Requirements

5.0 Leadership

5.1 Leadership and commitment

5.1.1 General

No Additional Requirements

5.1.1.1 Corporate Responsibility

No Additional Requirements

5.1.1.2 Process effectiveness and efficiency

No Additional Requirements

5.1.1.3 Process owners

No Additional Requirements

5.1.2 Customer Focus

No Additional Requirements

5.2 Policy

5.2.1 Establishing the quality policy

No Additional Requirements

5.2.2 Communicating the quality policy

No Additional Requirements

5.3 Organizational roles, responsibilities, and authorities

No Additional Requirements

5.3.1 Organization roles, responsibilities and authorities- supplemental

No Additional Requirements

5.3.2 Responsibility and authority for product requirements and corrective actions

No Additional Requirements

6.0 Planning

6.1 Actions to address risks and opportunities

6.1.1 and 6.1.2

No Additional Requirements

6.1.2.1 Risk Analysis

Suppliers shall perform feasibility analysis as part of quoting new business for TI Fluid Systems. The feasibility study shall be part of the RFQ process.

6.1.2.2 Preventive Action

No Additional Requirements

6.1.2.3 Contingency Plans

Approved suppliers to TI Fluid Systems not certified to IATF 16949 shall develop and implement contingency plans in compliance with clause 6.1.2.3 of IATF 16949.

- The contingency plans shall be designed to protect continuity of supply in the event of any of the following, but not limited to key equipment failures; interruption from externally provided products, processes, and services; recurring natural disasters; fire; pandemics; utility interruptions; cyber-attacks on information technology systems; labor shortages; or infrastructure disruptions.
- Include as a supplement to the contingency plans, a notification process for the extent and duration of any situation impacting TIFS.
- The contingency plan shall be retained as documented information within the supplier's quality management system and be tested periodically for adequacy.

6.2 Quality Objectives and planning to achieve them.

Suppliers shall implement Advanced Product Quality Planning in compliance with CP-8-ALL-48 Supplier Advanced Product Quality Planning. Any deviation from this process must be approved in writing.

6.2.1and 6.2.1 (CP-8-ALL-48 Supplier Advanced Quality Planning)

6.3 Planning of changes

(See section 8.2.4)

7.0 Support

7.2 Resources

No Additional Requirements

7.2.1General

No Additional Requirements

7.2.2People

No Additional Requirements

7.2.3Infrastructure

No Additional Requirements

7.1.3.1 Plant, facility, and equipment planning

No Additional Requirements

7.2.4Environment for the operation of processes

No Additional Requirements

7.1.4.1 Environment for the operation of processes- supplemental

No Additional Requirements

7.2.5Monitoring and measuring resources

No Additional Requirements

7.1.5.1 General

No Additional Requirements

7.2.5.1.1 Measurement systems analysis

No Additional Requirements

7.1.5.2 Measurement Traceability

No Additional Requirements

7.1.5.2.1 Calibration/verification records

No Additional Requirements

7.1.5.3 Laboratory Requirements

7.1.5.3.1 Internal Laboratory
No Additional Requirements

7.1.5.3.2 External Laboratory
No Additional Requirements (NOTE: the change in IATF 16949)

7.1.6 Organizational Knowledge
No Additional Requirement

7.2 Competence
7.2.1 Competence- supplemental
No Additional Requirement

7.2.2 Competence- on-the-job training
No Additional Requirement

7.2.3 Internal auditor competency
No Additional Requirement

7.2.4 Second-party auditor competency
No Additional Requirement

7.3 Awareness
No Additional Requirement

7.3.1 Awareness- supplemental
No Additional Requirement

7.3.2 Employee motivation and empowerment
No Additional Requirement

7.4 Communication
No Additional Requirement

7.5 Documented Information
No Additional Requirement

7.5.1 General
No Additional Requirement

7.5.2 Creating and updating
No Additional Requirement

7.5.3 Control of documented information

7.5.3.1 and 7.5.3.2
No Additional Requirement

7.5.3.2.1 Record Retention
Suppliers must comply with TI Fluid Systems customer specific requirements for record retention. Country specific requirements can be found on the TI Fluid Systems Supplier Resource Center.

7.5.3.2.2 Engineering Specifications
No Additional Requirements

8.0 Operation
8.1 Operational planning and control
No Additional Requirements

Operational planning and control- supplemental
No Additional Requirements

8.2 Requirements for products and services

8.2.1 Customer Communication
Purchase Order releases will be communicated with each supplier via EDI and each supplier shall implement EDI/ASN capability.

8.2.1.1 Customer Communication- supplemental
The default business language for TI Fluid Systems shall be “English”. All documentation, including PPAP documents, corrective action reports, etc. shall be in English with dual local language as required.

8.2.2 Determining the requirements for products and services
No Additional Requirements

8.2.2.1 Determining the requirements for products and services- supplemental
No Additional Requirements

8.2.3 Review of the requirements for products and services

8.2.3.1 No Additional Requirements

8.2.3.1.1 Review of the requirements for products and services- supplemental
The organization shall retain documented evidence of a customer-authorized waiver for the requirements stated in ISO 9001, Section 8.2.3.1, for a formal review. TI Fluid Systems requires an approved Supplier Request for Change Approval (SRCA) as evidence of authorization. **(CF-8-ALL-4500)**

8.2.3.1.2 Customer-designated special characteristics
Suppliers of S/R products shall comply with TI Fluid Systems product identification requirements as defined in **CW-4-ALL-411 Supplier Mandatory Safety and Regulatory Process.**

8.2.3.1.3 Organization manufacturing feasibility
No Additional Requirements

8.2.3.2 No Additional Requirements

8.2.4 Changes to requirements for products and services
Prior to any supplier changes being implemented, a request for change form must be submitted to TI Fluid Systems Purchasing for authorization. **(CP-8-ALL-45 Supplier Change Management)** Forms must be submitted for changes to existing production parts including but not limited to changes in manufacturing location (additions, closures, change of ownership, etc.), change in manufacturing equipment/process, change in design intent of part, change in material or any other change that affects fit, form, or function. External providers are only authorized to make the requested changes after the appropriate approvals have been given by TI Fluid Systems Purchasing and must comply fully with the requirements for approval before implementation and shipment. The form TI Fluid Systems uses is the Supplier Request for Engineering Change form. **(CF-8-ALL-4500 Supplier SRCA Form)** External providers can get copies of the form and learn more about the process by contacting TI Fluid Systems Purchasing.

8.3 Design and development of products and services
No Additional Requirements

8.3.1 General
No Additional Requirements

8.3.1.1 Design and development of products and services- supplemental
No Additional Requirements

8.3.2 Design and development planning

No Additional Requirements

8.3.2.1 Design and development planning- supplemental
No Additional Requirements

8.3.2.2 Product design skills
No Additional Requirements

8.3.2.3 Development of products with embedded software
Suppliers of product that utilizes embedded software shall develop and qualify the product to the Automotive SPICE guidelines.

8.3.3 Design and development inputs
No Additional Requirements

8.3.3.1 Product design input
No Additional Requirements

8.3.3.2 Manufacturing process design input
No Additional Requirements

8.3.3.3 Special Characteristics
Suppliers of S/R/F products shall comply with TI Fluid Systems product identification requirements as defined in **CW-4-ALL-411 Supplier Mandatory Safety and Regulatory and Functional Process**.

8.3.4 Design and development controls
No Additional Requirements

8.3.4.1 Monitoring
No Additional Requirements

8.3.4.2 Design and development validation
No Additional Requirements

8.3.4.3 Prototype Program
No Additional Requirements

8.3.4.4 Production Part Approval Process

All PPAP packages SHALL be submitted in ENGLISH. We are a global company and the product may be used in various countries. The package can also include native language but all required information has to be written in English.

TI Automotive has provided a procedure, workbook checklist and a series of TIFS reference forms to guide and support PPAP to ensure many of the critical and required documents and APQP activities have been considered and included in the PPAP package **(CW-8-ALL-500 PPAP Submission Review and Approval).** The checklists reflect the basic requirements defined in the AIAG reference document, TI Automotive Specific requirements, and OEM specific requirements where applicable, regional and governmental laws, and regulation requirements. With the exception of the TIFS PSW format the use of the TIFS reference forms is recommended, alternative templates may be used considering that the data and results requested are equally documented. External providers are fully responsible for the content and accuracy of the PPAP packages and the checklists are intended as reference and are not all-inclusive.

Unless otherwise directed by TI Fluid Systems, the supplier shall complete each of the checklists fully noting each item as either included or not included and submit the checklists with applicable evidence in the PPAP submission package. In some cases, the requirement may not be applicable for a specific submission and the checklist will be marked to reflect N/A. (NOTE: TI Fluid Systems concurrence is required for any requirement to be N/A)
External providers cannot supply production materials to TI Fluid Systems without formal PPAP approval.

Yearly Re-Certification / Re-Qualification

External providers are expected to maintain the same process and quality levels approved during the original PPAP submission throughout the life cycle of the product. Based on TIFS and their customers specific requirements external providers must be able to provide evidence, when requested, demonstrating their product and process continues to meet the standards established at PPAP.

Examples of the level of evidence TI Fluid Systems might request:
Level 1- Warrant Only
Level 4- Warrant and other documents as defined by TI Fluid Systems
Level 3- Full submission

8.3.5 Design and development outputs
No Additional Requirements

8.3.5.1 Design and development outputs- supplemental
No Additional Requirements

8.3.5.2 Manufacturing process design output
No Additional Requirements

8.3.6 Design and development changes
No Additional Requirements

8.3.6.1 Design and development changes- supplemental
No Additional Requirements

8.4 Control of externally provided processes, products and services
No Additional Requirements

8.4.1 General
No Additional Requirements

8.4.1.1 General- supplemental
No Additional Requirements

8.4.1.2 Supplier Selection Process
No Additional Requirements

8.4.1.3 Customer-directed sources (also known as “Directed-Buy”)
No Additional Requirements

8.4.2 Type and extent of control
No Additional Requirements

8.4.2.1 Type and extend of control- supplemental
No Additional Requirements

8.4.2.2 Statutory and Regulatory requirements
Suppliers of S/R/F products shall comply with TI Fluid Systems product identification requirements as defined in **CW-4-ALL-411 Supplier Mandatory Safety and Regulatory Process**.

8.4.2.3 Supplier quality management system development
No Additional Requirements
NOTE: TI Fluid Systems reserves the right to conduct audits as required in the IATF 16949 standard.

8.4.2.3.1 Automotive product-related software or automotive products with embedded software.
No Additional Requirements

8.4.2.4 Supplier Monitoring
No Additional Requirements

8.4.2.4.1 Second-party audits

Second party audits of suppliers can be conducted on site or remotely at the direction of TI Fluid Systems.
Suppliers must ensure access to virtual auditing tools when needed to facilitate remote audit requests e.g., MS Hololens or similar.
NOTE: TI Fluid Systems reserves the right to conduct audits as required in the IATF 16949 standard.

8.4.2.5 Supplier Development

No Additional Requirements

8.4.3 Information for external providers

Supplier performance will be monitored and reported to suppliers monthly via email distribution of the TI Fluid Systems Supplier Performance Scorecard.

TIFS reserves the right to contact supplier's registrar in the event a supplier remains red on the TIFS scorecard system >90 days to ask for their assistance in getting the supplier's quality systems under control.

8.5 Production and service provision

No Additional Requirements

8.5.1 Control of production and service provision

No Additional Requirements

8.5.2 Identification and Traceability

External providers shall have a formal process to identify product, which enables tracking of the product throughout the process beginning with incoming raw materials and subcomponents all the way to the TI Fluid Systems using plant. The process will ensure the ability of the supplier to quickly identify and quantify product by lot, manufacturing date, raw material or subcomponent batches/lots and key process variables.

The supplier must be able to quickly identify and segregate individual lots of product based off specific lot number or label information provided by TI Fluid Systems and/or dates when the material was received by TI Fluid Systems if that is all information that is available.

TI Fluid Systems expects external providers to be able to respond with full traceability information including ship dates, quantities, quality and test status, and where used within 4 hours of request by TI Fluid Systems.

Lot sizes must be determined based on analytical analysis of risk using tools such as PFMEA and preventative maintenance metrics. Lot control and traceability should be ensured anywhere risk is identified in the process. Lot size must be based on the ability of the supplier to detect and prevent shipment of potential suspect product and on the supplier's ability to manage any replacement needs and costs associated with the replacement. The RPN values in the supplier PFMEA and DFMEA must be utilized when developing lot control and traceability plans.

External providers shall ensure Tier N external providers also maintain fast, accurate and effective lot control/traceability systems.

8.5.3 Property belonging to customers or external providers

No Additional Requirements

8.5.4 Preservation

No Additional Requirements

8.5.5 Post-delivery activities

No Additional Requirements

8.5.6 Control of changes

Product and Process changes can occur for a variety of reasons including to facilitate continuous improvement and to support corrective actions. A process change is defined as any modification of the process, method, materials, location, equipment, measurement and test equipment or sub-contractor changes from when the process utilized during PPAP approval. TI Fluid Systems must be

notified and must approve any/all process changes prior to implementation. External providers are not authorized to make the requested changes until the appropriate approvals have been provided by TI Fluid Systems Purchasing. The form TI Fluid Systems uses is the Supplier Request for Engineering Change form. (SRCA) External providers must understand the cost to TI Fluid Systems for processing any changes since they may be charged back for those costs. Failure to comply with this requirement could result in serious actions from TI Fluid Systems including loss of business. **(CP-8-ALL-45 Supplier Change Management)**

8.6 Release of products and services
No Additional Requirements

8.6.1 Release of products and services- supplemental
No Additional Requirements

8.6.2 Layout inspection and functional testing
See 8.3.4.4 Product Approval Process- Yearly Re-Certification

8.6.3 Appearance items
No Additional Requirements

8.6.4 Verification and acceptance of conformity of externally provided products and services
No Additional Requirements

8.6.5 Statutory and regulatory conformity
Suppliers of S/R products shall comply with TI Fluid Systems product identification requirements as defined in **CW-4-ALL-411 Supplier Mandatory Safety and Regulatory Process.**

8.6.6 Acceptance Criteria
No Additional Requirements

8.7 Control of nonconforming outputs
8.7.1

8.7.1.1 Customer Authorization for concession

8.7.1.2 Control of nonconforming product- customer specific process
In the event a supplier causes a quality or delivery concern, they will be issued a **Supplier Non-Conformance Report (SNCR)** by the TI Fluid Systems staff member initiating the concern. This format may also be used to notify external providers of other types of failures such as warranty, delivery concerns, PPAP or other required documentation rejections. In many cases especially at times when response time and containment are critical TI Fluid Systems will also contact the supplier via telephone or other more direct communication.

The SNCR will define the concern; detail the quantity of parts identified for concern and will define the response action required by TI Fluid Systems. There are several classifications for the concern that will be used to define the action required:

Formal Concern: Any concern sent to the supplier where TI Fluid Systems is requesting immediate formal corrective actions in the 8D format.

Critical Concern: *A formal concern is considered "critical" when it results in risk related to the product safety, liability/reliability, design, environment, customer designated high severity, customer sanction and/or field action. An SNCR can also be classified as critical if there is a high concern related to warranty and future risk.*
***Safety* Concerns:** TI Fluid Systems produces safety products, which must comply with laws and regulations and must ensure safe operation for our customers. If a supplier is involved with a Safety/Regulatory or Functional issue (S/R/F), they must ensure early communications, awareness and escalation of customer critical issues involving product safety and potential field action or recall. For returned part analysis, confirm team expertise and prompt robust problem solving assignment with proactive communication and customer involvement.

Informal Concern: A potential concern that does not require formal corrective action from the supplier. These are typically concerns where the risk is either minimal or the situation is controlled by TI Fluid Systems. Informal complaints may not require a formal corrective action but in all cases must be addressed in a way to drive preventative actions and continual improvements. In some cases; external providers will be notified of an informal concern via telephone or email but an SNCR may not be issued. TI Fluid Systems will still have a record of these concerns in our SNCR database and any repeat issues will likely result in more formal actions required.

Response/Timing Requirements

First 24 hours- External providers must complete the first three (3) steps of the corrective action report which includes containment and full traceability and lot control and initial root cause analysis including review of the process(s) where the issue could have occurred. External providers are also expected to have at least interim corrective action in place at this time. External providers must report status to the TI Fluid Systems plant quality department via the initial 8D report and telephone.
Within 14 days- External providers must complete the formal corrective action report (8D), have permanent action identified, verified, validated and implemented where possible. If permanent action is not implemented interim corrective actions must be validated and approved by TI Fluid Systems and in place until permanent corrective action is complete and must include why made and why shipped root cause/corrective actions.

Escalation Process

The supplier shall have a defined escalation process, which is to be used for notification to an appropriate level of the organization – SR related items shall always be escalated to the senior level of the organization.

8.7.1.3 Control of suspect product

No Additional Requirements

8.7.1.4 Control of reworked product

No Additional Requirements

8.7.1.5 Control of repaired product

No Additional Requirements

8.7.1.6 Customer Notification

No Additional Requirements

8.7.1.7 Nonconforming product disposition

Controlled Shipping Level 1 and Level 2 (CSL-1/CSL-2)

Occasionally, supplier response may not be adequate to prevent recurrence or to effectively contain suspect product and safeguard TI Fluid Systems and our customer from potential field issues or production stoppage. Should this occur TI Fluid Systems would have external providers implement special measures such as a Controlled Shipping Level process to help reduce the risk. TI Fluid Systems will inform the supplier in writing defining the controls we have chosen and where those controls should be implemented.

Controlled Shipping Level 1 (CSL-1)

CLS-1 typically includes a problem solving process as well as redundant inspection process. The CSL-1 is implemented at the manufacturing location and utilizes in-house staff for the process. The primary goal is to ensure that NO defects can leave the production facility and that all corrective actions and controls implemented are effective. CSL-1 is often referred to as the “Manager’s Containment” because in most cases, it requires a sign-off and formal control by someone on the management staff.

Controlled Shipping Level 2 (CSL-2)

CSL-2 includes the same processes as CSL-1 with additional inspection and auditing performed by a third party representing the customer’s interests specific to the containment activity. Normally the third party is selected by the customer, approved by the customer, but paid for by the party under controlled shipping. CSL-2 can be implemented at several locations in the supply chain depending on where the action will be most effective. (Manufacturing plant, Customer Plant, off site, etc.…)

Data must be collected for either level of containment to ensure the effectiveness of the containment, lot control and traceability of all suspect or "controlled" product and to demonstrate the permanent corrective actions are effective. In some cases, the controlled shipping may verify "interim actions".

Supplier Critical/Supplier Safety Concerns (SRF)

(Safety, Regulatory, Functional) SRF

In certain instances, the quality issue may be deemed an **SRF** concern in which case TI Fluid Systems will require the supplier to present its root cause and correctives actions following the 8D methodologies and in the form of a standardized executive summary format we will supply to the supplier declaring the actions taken to prevent the issue from occurring again. This review will be face to face and mandatory if notified or we may choose to use other virtual methods agreed between TI Fluid Systems and the supplier.
Suppliers must ensure access to virtual auditing tools when needed to facilitate remote audit / review requests e.g., MS Hololens or similar.
The Supplier's top management will be required to attend and present. This must include the plant manager and quality manager at a minimum.

Closure

Formal closure of any SNCR requires approval from the TI Fluid Systems plant quality team that initiated the concern. To receive that approval the supplier must have completed the corrective action report (8), verified/validated all corrective actions and demonstrated effective and permanent corrective actions were implemented. External providers must provide evidence they have completed a robust "lessons learned" and "read across" of the concern to ensure the problem will not occur anywhere else and must provide evidence all appropriate APQP documents such as DFMEA, PFMEA and Control Plan have been update as required.

COPQ/ Supplier Charge Back

All costs incurred by TI Fluid Systems that are due to a supplier not adhering to TI Fluid Systems quality and delivery requirements may be charged back to the responsible supplier. This includes, but is not limited to, customer issues, scrap or other in-process waste, warranty and other any process fall out.

Examples of events associated with supplier caused COPQ which may be charged back:
Rework, sort and disposition of suspect and non-conforming product
Premium freight (outbound and inbound) due to supplier's failure to meet TI Fluid Systems' delivery or quality requirements
Down time/ over time/ line speed reductions of TI Fluid Systems' operations
Increased inspection due to supplier quality issues or supplier's failure to contain a quality issue
Shipping errors
Additional manpower required to sort materials required to address a supplier quality issue
Product or equipment damage caused by supplier's failure to meet TI Fluid Systems' quality requirements
Replacement materials/costs
Repeated PPAP rejection/s caused by incomplete or incorrect PPAP documentation submittal by supplier may result in administrative charges
Special audits outside of the regular certificate audit due to supplier's failure to meet TI Fluid Systems' quality and delivery requirements
Warranty Costs (Actual costs plus any technical factors)

A Supplier Non-Conforming Report (SNCR) will be issued to the supplier. This report will describe the problem in detail, the associated costs in detail and the COPQ to be reimbursed by the supplier. In most cases, TI Fluid Systems may also include an "administration" cost to address the costs for TI Fluid Systems to administer and manage the concerns. The administration charge will vary depending on the location of the plant and the labor costs for the people involved. TI Fluid Systems will only charge actual costs when recovering COPQ.

8.7.2 No Additional Requirements

9.0 Performance Evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

9.1.1.1 Monitoring, measuring of manufacturing processes
See 8.3.4.4 Product Approval Process- Yearly Re-Certification / Re-Qualification

9.1.1.2 Identification of statistical tools
No Additional Requirements

9.1.1.3 Application of statistical concepts
No Additional Requirements

9.1.2 Customer satisfaction
No Additional Requirements

9.1.2.1 Customer satisfaction- supplemental

9.1.3 Analysis and evaluation
No Additional Requirements

9.1.3.1 Prioritization
No Additional Requirements

9.2 Internal Audit
No Additional Requirements

9.2.1 & 9.2.2 No Additional Requirements

9.2.2.1 Internal Audit Program
No Additional Requirements

9.2.2.2 Quality management system audit
No Additional Requirements

9.2.2.3 Manufacturing process audit
No Additional Requirements

9.2.2.4 Product audit
No Additional Requirements

9.3 Management Review
No Additional Requirements

9.3.1 General
No Additional Requirements

9.3.1.1 Management review- supplemental
No Additional Requirements

9.3.2 Management review inputs
No Additional Requirements

9.3.2.1 Management review inputs- supplemental
No Additional Requirements

9.3.3 Management review outputs
No Additional Requirements

9.3.3.1 Management review outputs- supplemental
No Additional Requirements

10.0 Improvement

10.1 General

10.2 Nonconformity and corrective action
No Additional Requirements

10.2.1 and 10.2.2 No additional Requirements

10.2.3 Problem solving
No Additional Requirements

10.2.4 Error proofing
No Additional Requirements

10.2.5 Warranty management systems
No Additional Requirements

10.2.6 Customer complaints and field test analysis
Suppliers of S/R products shall comply with TI Fluid Systems product identification requirements as defined in CW-4-ALL-411 Supplier Mandatory Safety and Regulatory Process.

10.3 Continual Improvement

10.3.1 Continual improvement- supplemental
No Additional Requirements

11.0 Annex (1)

11.1 Regulatory/Environmental Management

TI Fluid Systems works diligently to comply with all governmental, regional and local regulatory and environmental standards. External providers to TI Fluid Systems shall have the same commitment. Examples of such standards:

11.1.1 International Material Data System (IMDS)

All external providers are required to provide material data in electronic format per the requirements defined in the International Material Data System (IMDS). For specifics and further information relating to this requirement, visit **http://www.mdsystem.com**. External providers of components are also responsible for the on-time provision of all IMDS relevant material data for their products and the products of their external providers. PPAP packages will not be approved without this evidence.

11.1.2 REACH

External providers to TI Fluid Systems must comply with European Union Regulation **R**egistration **E**valuation **A**uthorization and Restriction of **CH**emicals (REACH) and any/all amendments. This applies to external providers that provide substances on their own, in preparations or in articles. For information about how to comply with this requirement and you can also obtain information from the following web site: **www.echa.europa.eu.** A written confirmation by the companies REACH responsible must be sent to the TI Fluid Systems Purchasing department. PPAP packages will not be approved without this evidence.

11.1.3 CAMDS

China Automotive Material Data System (CAMDS) is a product data management platform for implementing the “Recycling and Reutilization Policy of Automotive Product”, carrying out the certification of recoverability rate and prohibited/restricted substance and improving the recoverability rate of China automotive material. It will help the auto manufacturers to conduct information management of various products and links in their supply chain. Several of the OEMs in China are requiring adherence to this requirement. Therefore, any product shipped to TI Fluid Systems for use in the China market may be required to satisfy this requirement. More information can be found at the following website: **http://www.camds.org/camds_en/**

11.1.4 Containerization/Pallet Requirements

Some regions where TI Fluid Systems ships product have regulations relating to containerization and packaging. External providers to TI Fluid Systems must adhere to these regulations. Examples of this type of regulation are:

USDA Restrictions of Wood Pallets - The US requires TI Fluid Systems and its external providers to utilize pallets that have been certified as having been constructed from wood that has been treated/ fumigated. The pallets will need to bear a seal, showing certification.
For more information, visit the following websites:
For the United States: **http://www.aphis.usda.gov/**
For Mexico: **http://www.semarnat.gob.mx**

EU legislation: Wood packaging material Introduction
The EU has laid down phytosanitary (plant health) requirements in order to prevent the introduction of organisms harmful to plants and plant products, and their spread within the EU. Wood packaging material (e.g. packing cases, boxes, crates, drums, pallets, box pallets) or dunnage (wood used to wedge and support non-wood cargo) are pathways for the introduction and spread of pests. The EU directive specifies the protective measures. It prohibits the presence of certain identified harmful organisms on plants or plant products, provides for phytosanitary checks and certificates for plant and plant products moving within EU Member States and imported from non-EU countries, including from developing countries.

11.1.5 Customs/Exports Regulations

Some OEM customers require compliance to CT-PAT which is a joint initiative of U.S. Customs and Border Protection and the trade community. TI Fluid Systems is required to communicate with its supply chain business partners regarding the C-TPAT Security Criteria and to determine whether each partner is a member of C-TPAT or meets the C-TPAT Security Criteria. TI Fluid Systems requires that all external providers adhere to C-TPAT requirements in accordance with the criteria identified on www.cbp.gov , for importers.

11.2 Country or Region Specific Requirements

TI Fluid Systems is a global company and is required to comply with country and region specific laws and regulations. TI Fluid Systems external providers shall also comply with these laws and regulations. Examples of country or region specific laws are:

11.2.1 NAFTA (For external providers to North America only)

All external providers must comply with US, Canada and Mexico Customs regulations and requirements including completion of annual NAFTA Certificate of Origin for all parts supplied to North America. Issuing a Certificate of Origin carries legal consequences; so external providers that are not certain about how this applies to product they supply should either contact the U.S. Customs NAFTA FACTS line ((972) 57401582 or the Mexico Customs (011-52-211-3545) CTPAT and AOE requirements may also apply to product being shipped across U.S. borders
External providers can also obtain information at the following website: **www.customs.gov**

11.2.2 Certificates of Origin

Canada, Mexico and the United States established a uniform Certificate of Origin to certify that goods imported into their territories qualify for the preferential tariff treatment accorded by the NAFTA. The Certificate of Origin must be completed and signed by the exporter of the goods. Where the exporter is not the producer, the exporter may complete the Certificate on the basis of:

- knowledge that the good originates;
- reasonable reliance on the producer's written representation that the good originates; or a completed and signed Certificate of Origin for the good voluntarily provided

11.2.3 Chinese Compulsory Certification (CCC)

The **China Compulsory Certificate mark**, commonly known as **CCC Mark**, is a compulsory safety mark for many products sold on the Chinese market. It became effective on May 1, 2002. It is the result of the integration of China's two old compulsory inspection systems, namely "CCIB" (Safety Mark, introduced in 1989 and required for products in 47 product categories) and "CCEE" (also known as "Great Wall" Mark, for electrical commodities in 7 product categories), into a single procedure.

TI Fluid Systems external providers that produce product for usage in China may be required to comply with this regulation. External providers can obtain information relating to this requirement at the following internet site: **http://www.cqc.com.cn**

12.0 Glossary/Acronyms

8D **(8 Discipline Problem Solving Report)** Corrective action process typical to the Automotive Industry that requires a specific process and 8 specific steps be followed.

AIAG **(Automotive Industry Action Group)** AIAG is an organization of component external providers and automotive manufacturers, which look at ways to standardize processes and procedures for the industry and between groups.

ANFIA **(Associazione Nazionale Fra Industrie Automobilistiche) (National Association of the Automobile Industry)** Italian auto industry standard

APQP **(Advanced Product Quality Planning)** A quality tool used for product planning and defining controls.

ASL **(Approved Supplier List)** List of external providers that are approved to supply product

ASN **(Advanced Shipping Notice)** An EDI transaction that contains various information regarding the shipment of parts and materials. (Typically referred to as an 856)

CAD **(Computer Aided Design)** The use of computer technology to aid in the design of products; real or virtual

CSL **(Controlled Shipping Level)** Special measures required when shipping product that has had quality concerns.

COPQ ***(Cost Of Poor Quality)*** *Metric used to quantify and track the cost of mistakes or poor quality. This metric* is not just used for product but for any areas where waste or problems can have cost.

CQI **(Continuous Quality Improvement)** Process and philosophy for driving continuous analysis, review and improvement.

CT-PAT **(Customs Trade Partnership Against Terrorism)** C-TPAT is a U.S. government-business initiative to build cooperative relationships that strengthen and improve overall international supply chain and U.S. border security.

Cpk **(Process Capability Index)** Statistical tool used to estimate/calculate the capability of a process to meet drawing requirements or specifications.

DFMEA **(Design Failure Mode and Effects Analysis)** Analytical method for evaluating the risks associated with the design of a product and for measuring the effectiveness of improvement actions.

EDI **(Electronic Data Interchange)** Method of communicating information between companies by using computers to transmit and interpret coded data.

EU **(European Union)** An economic and political union between 27 member countries primarily located in Europe. Committed to regional integration.

FAO **(Food and Agriculture Organization)** FAO is a United Nations specialized agency accountable to the FAO Conference of member governments. FAO participates in the United Nations Economic and Social Council (ECOSOC) which coordinates economic, social and related work of the 14 UN specialized agencies as well as regional commissions.

GD&T **(Geometric Dimensioning and Tolerancing)** The purpose of GD&T is defined as describing the geometric requirements for part and assembly geometry. Proper application of GD&T will ensure that the allowable part and assembly geometry defined on the drawing leads to parts that have the desired form and fit (within limits) and function as intended.

GR&R **(Gauge Repeatability and Reliability)** Statistical tool used to verify the effectiveness of a gauge to accurately and consistently measure a product. It also defines the variability of the gauge in relation to the tolerance of the feature.

IATF **(International Automotive Task Force)** The IATF is an "ad hoc" group of automotive manufacturers and their respective trade associations, formed to provide improved quality products to automotive customers worldwide. **IATF** members include the following vehicle manufacturers: BMW Group, Chrysler LLC, Daimler AG, Fiat Group Automobiles, Ford Motor Company, General Motors Corporation (including Opel Vauxhall), PSA Peugeot-Citroen, Renault, Volkswagen AG and the vehicle manufacturer's respective trade associations - AIAG (U.S.), ANFIA (Italy), FIEV (France), SMMT (U.K.) and VDA (Germany).

IMDS **(International Material Data System)** The International Material Data System (IMDS) is a collective, computer-based material data system used by automotive OEMS to manage environmentally relevant aspects of the different parts used in vehicles. Through this system, the automotive industry is able to reconstruct the complete material flow.

MSA **(Measurement Systems Analysis)** MSA, is a specially designed experiment that seeks to identify the components of variation in the measurement.

NAFTA **(North American Free Trade Act)** The North American Free Trade Agreement (NAFTA) is a trade agreement among the United States, Canada, and Mexico that liberalizes restrictions on trade among the three countries. The agreement includes processes to manage tariff rates.

NIST **(National Institute of Standards and Technology)** NIST is the U.S. federal technology agency that works with industry to develop and apply technology, measurements, and standards.

OEM **(Original Equipment Manufacturers)** For the purpose of this manual the OEM's are the global manufacturers of original equipment; primarily automobiles; that TI Fluid Systems supplies.

OSHA **(Occupational Safety and Health Administration)** OSHA is the main U.S. federal agency charged with the enforcement of safety and health legislation.

OHSAS **(Occupational Health and Safety Assessment Series)** OHSAS 18001 is an *Occupation Health and Safety Assessment Series* for health and safety management systems.

PFMEA **(Process Failure Mode and Effects Analysis)** Analytical method for evaluating the risks associated with the process used to produce a product and for measuring the effectiveness of improvement actions.

PO **(Purchase Order)** A purchase order (PO) is a commercial document issued by a buyer to a seller, indicating types, quantities, and agreed prices for products or services the seller will provide to the buyer. Sending a PO to a supplier constitutes a legal offer to buy products or services. Acceptance of a PO by a seller usually forms a one-off contract between the buyer and seller so no contract exists until the PO is accepted

PPAP **(Production Part Approval Process)** PPAP defines generic requirements for product part approval including production and bulk materials. The purpose of PPAP is to determine if all customer engineering design record and specifications are properly understood by the supplier and that the process has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.

Ppk **(Potential Process Capability Index)** Statistical tool used to estimate/calculate the "provisional" capability of a process to meet drawing requirements or specifications.

PSO **(Process Sign Off)** Process Sign-Off is a method to verify that a Supplier's quality planning processes have been successfully executed and that its production processes are capable of producing quality parts in sufficient quantity for production.

REACH **(Registration, Evaluation, Authorization, and restriction of Chemical substances)** European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with the **R**egistration, **E**valuation, **A**uthorization and Restriction of **Ch**emical substances.

RFQ **(Request For Quote)** A request for quotation is a standard business process whose purpose is to invite external providers into a bidding process to bid on specific products or services.

RMS **(Reliability, Maintainability and Supportability Analysis)** Analytical tool used to evaluated and quantify risk.

RPN **(Risk Potential Number)** RPN is a measure used when assessing risk to help identify critical failure modes associated with your design or process.

SNCR **(Supplier Non-conforming Report)** Notification sent to external providers defining a concern. The SNCR contains information defining the problem, the suspect quantities and other relevant information needed to conduct problem solving. The SNCR is also the format used by TI Fluid Systems for tracking and recording supplier concerns.

SPC **(Statistical Process Control)** SPC is the application of statistical methods to the monitoring and control of a process to ensure that it operates at its full potential to produce conforming product.

SRCA **(Supplier Request for Change Authorization)** SRCA is the form and the process that TI Fluid Systems uses to manage process and product changes proposed by external providers. This is the only acceptable format TI will accept.

S/R/F **(Safety/Regulatory/Functional)** Quality issues that can affect product safety, compliance to regulatory requirements or that can affect proper function of the safety products we produce.

USDA **(United States Department of Agriculture)** United States federal executive department responsible for developing and executing U.S. federal government policy on farming, agriculture, and food

VA/VE **(Value Analysis/Value Engineering)** is a systematic method to improve the "value" of goods or products and services by using an examination of function. Value, as defined, is the ratio of function to cost.

VDA **(Verband der Automobilindustrie)** German Auto Industry Standard

13.0 References

IATF- ISO/IATF 16949 Technical Standards

Obtain IATF Sanctioned Interpretations and FAQ, s at:
http://www.iatfglobaloversight.org/content.aspx?page=ISO/TS16949:2009

Customer Specific Requirements/ Addendums to ISO/IATF 16949

The customer specific requirements to IATF 16949 documents can be found under the following link on the IATF page:
http://www.iatfglobaloversight.org/

AIAG

APQP- Advanced Product Quality Planning and Control Plan
FMEA- Failure Mode and Effect Analysis
MSA- Measurement System Analysis
PPAP- Production Part Approval Process
SPC- Statistical Process Control

Obtain AIAG documents and training materials at:
http://www.aiag.org/scriptcontent/index.cfm

Associazione Nazionale Fra Industrie Automoilistiche (ANFIA/Italy)

Obtain ANFIA documents and information at:
http://www.anfia.it

Comite des Constructeurs Francais d'Automobiles (CCFA/France)

Obtain CCFA documents and information at:
http://www.ccfa.fr/

DIN EN ISO 9000 Quality Management Systems- Fundamentals and Vocabulary
DIN EN ISO 9001 Quality Management Systems- Requirements

Obtain information for ISO 9000 and ISO 9001 at:
http://www.iso.org/iso/iso_catalogue/management_standards.htm

Society of Motor Manufacturers and Traders (SMMT/UK)

Obtain information for SMMT at:
http://www.smmt.co.uk/home.cfm

TI Fluid Systems Specific References (Can be found at Supplier Resource Center)

TI Fluid Systems Terms and Conditions (T&C)

CF-8-ALL-4200	**Supplier General Information Survey**
CF-8-ALL-4500	**Supplier SRCA Form**
CP-06-ALL-10	**Code of Business Conduct**
CP-8-ALL-45	**Supplier Change Management**
CP-8-ALL-48	**Supplier Advanced Product Quality Planning**
CW-4-ALL-411	**Mandatory Supplier Safety, Regulatory and Functional Requirements**
CW-8-ALL-500	**PPAP Submission Review and Approval**
C 600.019.0021.00	**General Requirements for Injection Molded Quick Connector Bodies and Adaptors**
GP-5-ALL-2	**Environmental Policy**
GP-5-ALL-6	**Global TI Fluid Systems Sustainable Purchases Policy**
GP-5-ALL-8	**Occupational Health and Safety Policy**
	Human Rights Policy

Changes/Document History

Date	Revision	Rev. Level	Approved By
7th March 2018	New Release- IATF Supplement	A	Global Director Corporate Quality Systems
30th November 2018	Added note on Introduction page for downloading documents from the Supplier Resource Center 2.2- Updated link to Supplier Resource Center 6.2- Added Quality objectives and planning to achieve them section. 6.3- Added section and note for planning changes 7.5.3.2.1- Change reference to Supplier Resource Center 8.2.4- Added reference to CP-8-ALL-45 8.3.4.4- Added reference to CP-8-ALL-47 8.4.3- Added note for TI Fluid Systems Supplier Performance Scorecard. 13- References- Added note about Supplier Resource Center. Added list of all documents referenced in the manual: CF-8-ALL-4200 Supplier General Information Survey CF-8-ALL-4500 Supplier SRCA FORM CP-8-ALL-45 Supplier Change Management CP-8-ALL-47 Supplier Production Part Approval Process (PPAP CP-8-ALL-48 Supplier Advanced Product Quality Planning CW-4-ALL-411 Mandatory Supplier Safety, Regulatory and Functional Work Instruction CW-8-ALL-470 Supplier PPAP Guidelines	B	Global Director Corporate Quality Systems
9th April 2019	8.3.4.4- Removed all references to CP-8-ALL-47 Supplier PPAP procedure. Replaced with CW-8-ALL-500 PPAP Submission Review and Approval	C	Global Director Corporate Quality Systems
1st July 2020	TI Fluid Systems Logo added to front page and header. TI Fluid Systems was TI Automotive 109 locations 8.3.4.4 Paragraph 2 updated to allow the use of alternate formats for evidence of measurements and data in support of PPAP submission. 8.4.3 Information for External Providers: added TIFS reserves the right to contact supplier's registrar in the event a supplier remains red on the TIFS scorecard system >90 days to ask for	D	Global Director Corporate Quality Systems

	their assistance in getting the supplier's quality systems under control. 8.7.1.2 Added: **Formal Concern:** Any concern sent to the supplier where TI Fluid Systems is requesting immediate formal corrective actions in the 8D format. First 24 Hours – Added: Must include why made and why shipped root cause/corrective actions 8.7.1.7 Nonconforming product disposition: Supplier Critical/Supplier Safety Concerns SRF – Added: In certain instances, the quality issue may be deemed an **SRF** concern in which case TI Fluid Systems will require the supplier to present its root cause and correctives actions following the 8D methodologies and in the form of a standardized executive summary format we will supply to the supplier declaring the actions taken to prevent the issue from occurring again. This review will be face to face and mandatory if notified or we may choose to use other virtual methods agreed between TI Fluid Systems and the supplier. The Supplier's top management will be required to attend and present. This must include the plant manager and quality manager at a minimum. Updated: **Examples of events associated with supplier caused COPQ which may be charged back:** Rework, sort and disposition of suspect and non-conforming product Premium freight (outbound and inbound) due to supplier's failure to meet TI Fluid Systems' delivery or quality requirements Down time/ over time/ line speed reductions of TI Fluid Systems' operations Increased inspection due to supplier quality issues or supplier's failure to contain a quality issue Shipping errors Additional manpower required to sort materials required to address a supplier quality issue Product or equipment damage caused by supplier's failure to meet TI Fluid Systems' quality requirements Replacement materials/costs PPAP rejection caused by supplier quality issue that is beyond an initial PPAP rejection may result in administrative charges Special audits outside of the regular certificate audit due to supplier's failure to meet TI Fluid Systems' quality and delivery requirements Warranty Costs (Actual costs plus any technical factors)		
2nd April 2021	8.4.2.4.1 Added: Second party audits of suppliers can be conducted on site or remotely at the direction of TI Fluid Systems. Suppliers must ensure access to virtual auditing tools when needed to facilitate remote audit requests e.g., MS Hololens or similar 8.6.2: Corrected reference to 8.3.4.4 Production Part Approval Process 8.7.1.7 Paragraph Supplier Critical/Supplier Safety Concerns (SRF) – Added: Suppliers must ensure access to virtual auditing tools when needed to facilitate remote audit / review requests e.g., MS Hololens or similar.	E	Global Director Corporate Quality Systems
16th June 2021	3.1 Paragraph 1 added: and are committed to ensuring compliance with all applicable competition laws. 3.2 Paragraph 1 added: ensure that workers working conditions preserve human dignity and is committed to ensuring compliance with rules relating to the prohibition of forced labour and child labour, workplace safety, working time, treatment of discrimination and harassment in the workplace, renumeration, freedom of association and collective bargaining. 3.2 Last sentence of paragraph added: employees and workers and human rights 3.3 Added: TI Fluid Systems expects all external providers as part of their ISO 14001 management system to contribute to the protection of the environment by planning to reduce the consumption of raw materials, GHG (greenhouse gases) and air emissions, energy, and water, and to optimize natural resources and reduce waste discharges during the design,	F	Global Director Corporate Quality Systems

	manufacture, distribution, and use, and to pass these sustainability requirements on to their own suppliers.		
9th September 2021	Clause 8.2.1 - Purchase Order releases will be communicated with each supplier via EDI and each supplier shall implement EDI/ASN capability was No Additional Requirements Clause 8.2.1.1 – "shall be in English with dual local language as required" was "shall be in English (can also be in local language as well)"	G	Global Director Corporate Quality Systems
9th February 2022	Clause 8.3.4.4 – Updated blue text: **Yearly Re-Certification / Re-Qualification** External providers are expected to maintain the same process and quality levels approved during the original PPAP submission throughout the life cycle of the product. **Based on TIFS and their customers specific requirements** external providers must be able to provide evidence, **when requested**, demonstrating their product and process **continues to meet** the standards established at PPAP. Clause 9.1.1.1 – Added: See 8.3.4.4 Product Approval Process- Yearly Re-Certification / Re-Qualification	H	Director Corporate Quality Systems
7th April 2022	Section 13.0 References – Added General requirements for injection molded parts C 600.019.0021.00	I	Director Corporate Quality Systems
15th July 2022	Section 13.0 - C 600.019.0021.00 General Requirements for Injection Molded Quick Connector Bodies and Adaptors, was, General requirements for injection molded parts	J	Director Corporate Quality Systems
21st September 2022	Updated Global Quality Policy – Page 8	K	Director Corporate Quality Systems
23rd March 2023	Section 3.0: Removed 3.1 Business Conduct: External Providers, Contractors, and Vendors Removed 3.2 Human Rights, Employment and Child Labor Removed 3.3 Environmental Policy Section 3.1 Confidentiality / Intellectual Property was 3.4 rev K Section 3.2 Notification of Supplier Changes was 3.5 rev K Section 3.3 TI Fluid Systems Conflict Minerals Policy was 3.6 Rev K Section 13 Added reference GP-5-ALL-6 Global TI Fluid Systems Sustainable Purchases Policy	L	Director Corporate Quality Systems
3rd August 2023	Clause 2.4: Supplier Information – Added Supply On service requirements. Clause 6.1.2.3 Contingency Plans - Added: Approved suppliers to TI Fluid Systems not certified to IATF 16949 shall develop and implement contingency plans in compliance with clause 6.1.2.3 of IATF 16949. • The contingency plans shall be designed to protect continuity of supply in the event of any of the following, but not limited to key equipment failures; interruption from externally provided products, processes, and services; recurring natural disasters; fire; pandemics; utility interruptions; cyber-attacks on information technology systems; labor shortages; or infrastructure disruptions. • Include as a supplement to the contingency plans, a notification process for the extent and duration of any situation impacting TIFS. • The contingency plan shall be retained as documented information within the supplier's quality management system and be tested periodically for adequacy. Section 13 References - Added: **CP-06-ALL-10 Code of Business Conduct** **GP-5-ALL-2 Environmental Policy** **GP-5-ALL-8 Occupational Health and Safety Policy** **Human Rights Policy**	M	Director Corporate Quality Systems