

# DaimlerChrysler(Chrysler Group) Customer-Specific Requirements

## For Use With ISO/TS 16949(First Edition)

September, 2003

### 1. Scope

**ISO/TS 16949** and this document define fundamental quality system requirements for suppliers (see Definitions 3.9), as an alternative to **QS-9000, Quality System Requirements**. These requirements shall be included in any scope of registration/certification to **ISO/TS 16949** issued by an IATF-recognized and IATF-contracted certification body in order for the **ISO/TS 16949** certificate to be recognized as satisfying DaimlerChrysler supplier criteria for third party registration/certification. (See **ISO/TS 16949** Foreword, Remarks for certification).

ISO/TS 16949 is also applicable to assemblers of production parts or materials and to Vehicle Assembly Plants.

Service parts and materials applicability does not include aftermarket (See Definitions 3.2) parts or suppliers.

All **ISO/TS 16949** requirements and the requirements of this document shall be documented in the supplier's quality system.

The English language version of **ISO/TS 16949** and this document shall be the official version for purposes of third party registration. Translations of ISO/TS 16949 published by SMMT (British), VDA (German), AFNOR (French), ANFIA (Italian) AND AENOR (Spanish) are acceptable for purposes of third party registration.

Sanctioned translations of this document shall:

- be for reference only,
- reference the English version as the official language, and
- include DaimlerChrysler in the copyright statement.

Any other translations are not authorized.

Copies of this document are available from AIAG.

### 2. References

- 2.1 Chrysler, Ford, General Motors **QS-9000, Quality System Requirements, Third Edition**, March, 1998.
- 2.2 DaimlerChrysler, Ford General Motors **Production Part Approval Process (PPAP), Third Edition** Sept, 1999. (Does not apply to Vehicle Assembly Plants)
- 2.3 Chrysler, Ford, General Motors **Statistical Process Control (SPC)** reference manual, First Edition, 1992.

2.4 **ISO/IEC Guide 62:1996**

2.5 International Accreditation Forum **Application of ISO/IEC Guide 62**, Issue 2, dated 4 December 2001

Copies of **QS-9000**, **PPAP**, **SPC** and other related manuals are available from AIAG at 01-248-358-3003, and Carwin Continuous at 44-1708-861333.

Additional references are listed as requirements in section 4.

### **3. Definitions**

Where inconsistent terminology exists between **ISO/TS 16949** and this document, this document shall take precedence. Otherwise the definitions from **ISO/TS 16949** apply to this document.

#### **3.1 Active Part**

An active part is one currently being supplied to the customer for original equipment or service applications. The part remains active until tooling scrap authorization is given by the appropriate customer activity. For parts with no customer-owned tooling or situations where multiple parts are made from the same tool, written confirmation from the appropriate customer activity is required to deactivate a part.

#### **3.2 Aftermarket Parts**

Replacement parts not procured or released by OEM for service part applications, which may or may not be produced to original equipment specifications.

#### **3.3 Consulting**

For the purpose of ISO/TS 16949 and supporting documents, consulting is the provision of training, documentation development, or assistance with implementation of quality systems to a specific customer. If these activities are open to the public, advertised, and not customer specific, they are considered training rather than consulting. Other products, processes or services may be offered directly or indirectly, provided they do not compromise confidentiality or the objectivity or impartiality of its certification process or decisions [refer to IAF Guidance on the **Application of ISO/IEC Guide 62**, Issue 1, dated 2 June 1997 to **ISO/IEC Guide 62:1996**.]

#### **3.4 Customer**

For the purposes of **ISO/TS 16949** references to “customer” in this document shall be interpreted as DaimlerChrysler for suppliers pursuing third party registration to **ISO/TS 16949**.

#### **3.5 Initial Process Study**

Initial Process Studies are short-term studies conducted to obtain early information on the performance of new or revised processes relative to internal or customer requirements. In many cases, initial process studies should be conducted at several points in the evolution of new processes (e.g. at the equipment or tooling subcontractor’s plant, after installation at the supplier’s plant). These studies should be based on variables data evaluated using control

charts. See **Production Part Approval Process** manual.

### 3.6 PPM (Part Per Million quality metrics)

PPM is a method of stating the performance of a process in terms of actual nonconforming material. PPM data can be used to prioritize corrective actions. Definition of defective units varies with customer (e.g. all sorted, only those found to be wrong, all in box).

### 3.7 Quality Indices

See Chrysler, Ford, General Motors **Statistical Process Control** reference manual.

### 3.8 Site

NOTE: Includes Vehicle Assembly Plants

### 3.9 Supplier

Suppliers are defined as providers of: a) production materials, b) production or service parts, or c) heat treating, plating, painting or other finishing services, directly to DaimlerChrysler, Ford, General Motors or other customers subscribing to this document.

### 3.10 Subcontractor

Subcontractors are defined as providers of production materials, or production or service parts, directly to a supplier to DaimlerChrysler, Ford, General Motors or other customers subscribing to this document. Also included are providers of heat-treating, painting, plating or other finishing services.

## **4. Requirements**

### **4.1 ISO/TS Section I Related Requirements**

#### **4.1.1 Tooling Management (ISO/TS 16949 cl. 4.2.6)**

NOTE: Tooling management is not required of warehouse or distributors.

#### **4.1.2 Records Retention (ISO/TS 16949 cl. 4.16.2)**

Production part approvals, tooling records, purchase orders and amendments shall be maintained for the length of time that the part (or family of parts) is active (see 3.1 Definitions) for

production and service requirements plus one calendar year unless otherwise specified by the customer.

**NOTE:** All customer purchase orders/amendments are included in this requirement. Supplier purchase orders/amendments for customer-owned tooling are included in this requirement.

Quality performance records (e.g. control charts, inspection and test results) shall be retained for one calendar year after the year in which they were created.

Records of internal quality system audits and management review shall be retained for three years.

Retention periods longer than those specified above may be specified by a supplier in their procedures. The supplier shall eventually dispose of records.

These requirements do not supersede any regulatory requirements. All specified retention periods shall be considered "minimums".

#### **4.1.3 Special Characteristics** (ISO/TS 16949 cl. 4.2.4.7, 4.9.1.4)

The supplier shall use **Key Characteristic Designation System** definitions and symbology to comply with **ISO/TS 16949** special characteristics.

#### **4.1.4 Design Changes** (ISO/TS 16949 cl. 4.4.9.1)

All design changes, including those proposed by subcontractors, shall have written customer approval, or waiver of such approval, prior to production implementation. See **ISO/TS 16949** cl. 4.4.9.1 and the **Production Part Approval Process** manual.

For proprietary designs, impact on form, fit, function, performance, and/or durability shall be determined with the customer so that all effects can be properly evaluated.

#### **4.1.5 Subcontractor Development** (ISO/TS 16949 cl. 4.6.2.2)

The supplier shall perform subcontractor quality system development with a goal of compliance to either **ISO/TS 16949** or **QS-9000** (See **ISO/TS 16949** cl. 4.6.2.2). Subcontractors should be compliant to **ISO/TS 16949** and the requirements of this document.

#### **4.1.6 Production Part Approval Process** (ISO/TS 16949 cl. 4.2.4.11)

The supplier shall comply with the DaimlerChrysler, Ford, & GM **Production Part Approval Process (PPAP)** manual to comply with **ISO/TS 16949**, cl. 4.2.4.11. (Does not apply to Vehicle Assembly Plants who use the Pilot Vehicle Process)

#### **4.1.7 Regulations (ISO/TS 16949 cl. 4.1.7.2)**

**NOTE:** A "procedure" may replace "process" in cl. 4.1.7.2

#### **4.1.8 Certification Body/Registrar Notification**

A supplier shall notify their certification body/registrar in writing within five (5) working days when a customer places the site in the "Needs Improvement" category.

## **4.2 ISO/TS 16949 Related Requirements**

### **4.2.1 DaimlerChrysler - Specific Requirements**

#### **Third-Party Registration Requirements**

All Production and Service Part suppliers to DaimlerChrysler shall be Third-Party Registered to **TS 16949, VDA 6.1 or QS-9000**.

#### ***Product Creation Process***

DaimlerChrysler has a documented method of **Product Assurance Planning (PAP)**. This method combined with the team's dedication and knowledge is the tool used throughout the product creation process to consistently develop and produce products that will satisfy the customer. All team members including suppliers shall participate in producing products using DaimlerChrysler's PAP method. On occasions when DaimlerChrysler's PAP method is not required, products shall be developed according to the **Advanced Product Quality Planning (APQP) Process**. The applicable version of **PAP** shall be used.

#### **Special Characteristics Not Identified with Symbols**

Those product or process characteristics chosen by DaimlerChrysler or the organization that affect fit, form, function or appearance which are not identified with a symbol. Suppliers (if applicable) should be knowledgeable of the following standards: PS-9336<H>, PS-10125<T>, and AS-10119<A>.

#### **The Shield <S>; also <E>**

The Shield identifies Special Characteristics that require special due diligence since the consequence of a likely assembly or manufacturing variation may cause a non-conformance to safety and regulatory product requirements. Suppliers (if applicable) shall be knowledgeable of the following standards: PF-SAFETY<S>, PF-Emissions<E>. <S> designates product safety/regulatory requirements. <E> designates government regulated vehicle emissions requirements.

### **The Diamond <D>**

The Diamond identifies Characteristics of a component, material, assembly or vehicle assembly operation that are designated by DaimlerChrysler as key to the function and customer acceptance of the finished product. Diamonds also highlight important characteristics on fixtures and gauging procedures during design verification, product validation, or revalidation. The Symbol <D> identifies key but non-Safety/non-regulatory product characteristics or processes that may be susceptible to manufacturing variation and require additional controls to assure conformance to specifications and customer satisfaction. A Diamond <D> requires that a process control plan be developed for that characteristic. (The use of a Diamond as specified in PS-7300 does not automatically require the use of SPC as other methods of control such as error/mistake-proofing may be more able to prevent or detect non-conformances and processes that demonstrate a high degree of capability (Cpk > 3.0, for example) for an extended period of time may require a less frequent method of control. The exact method to be used must be determined in advance and agreed to by the DaimlerChrysler Commodity Quality Specialist and Product Engineer.) Presence of a Diamond does not affect the significance to a Shield(s) on the same document. For further detail, organizations shall refer to PS-7300.

### **Significant Characteristics**

Significant Characteristics are Special Characteristics selected by the supplier through knowledge of the product and process.

### **Annual Layout**

To ensure continuing conformance to all DaimlerChrysler requirements, a complete annual layout inspection, including all sub-components, shall be required for all parts.

### **Design Verification (DV) and Production Validation (PV)**

Design Verification are tests, inspections, and procedures that must be accomplished before production starts to verify design intent. Production Validation are tests validating the production tooling, methods, and processes used to manufacture a component. Refer to PF-8500 and to the DaimlerChrysler "Product Assurance Testing" manual. Design Verification and Production Validation must be satisfactorily completed before PSO can be completed.

**NOTE:** Per PF 8500, Production Validation must be performed at least once every model year. (Unless waived in writing by DaimlerChrysler)

### **Continuing Conformance**

Continuing Conformance Inspection/Tests shall be performed during the model year to assure production items or products continue to meet specified requirements and tolerances. Refer to PF-8500 and to the DaimlerChrysler "Product Assurance Testing" manual. (Unless waived in writing by DaimlerChrysler)

### **Internal Quality Audits**

The supplier shall conduct an internal quality audit at least once per year.

### **Corrective Action Plan**

A written corrective action plan following the "DaimlerChrysler 7-Step Corrective Action Process" format shall be submitted to the DaimlerChrysler Supplier Quality Specialist, as requested, for those issues not already included in the on-line PRISM system.

### **PRISM**

An organization shall have at least two individuals at each of their locations that have completed all DaimlerChrysler Corporation PRISM training. These individuals shall regularly access the system. The organization shall incorporate DCC procedure PSFD0270 into their quality system to the degree necessary to effectively respond to all PRISM issues.

### **Appearance Masters**

Appearance masters for color, gloss and texture shall be approved by DaimlerChrysler's Design Office.

### **Packaging, Shipping and Labeling**

Suppliers shall be familiar and comply with DaimlerChrysler Packaging, Shipping and Labeling Instructions.

### **Process Approval**

A systematic and sequential review of the organization's process shall be completed through a Process Sign-Off (PSO) performed by the Product Team. The purpose is to verify the organization's process readiness and to assure understanding of complete program requirements, prior to a PPAP submittal.

A DaimlerChrysler-led Process Sign-Off shall be performed for parts that have a high or medium initial risk evaluation as identified by the Product Team. Low risk parts shall have an organization-led PSO to establish production readiness. Parts that have been out of production for 12 months or more, shall have an organization led PSO unless otherwise determined by the Product Team.

PSO should be completed prior to providing SØ level parts to DaimlerChrysler. The PSO shall be completed prior to S1 build. PSO shall be completely approved prior to a PPAP submission.

### **Control Plans**

Control plans are required for prototype, pre-launch, and production phases. A DaimlerChrysler representative's signature is not required on Control Plans, unless specifically requested by the Buyer or Quality Specialist.

### **"Forever" Requirements-Extended Enterprise™**

The role of the supplier in the Extended Enterprise™ network: The supplier shall proactively communicate with DaimlerChrysler regarding changes that may impact product quality. Specifically, notification to the Supplier Quality Manager and Purchasing Agent shall be completed verbally with written follow up before any of the following can be implemented at the supplier's location or any sub-supplier location:

- Proposed Material Changes
- Proposed Process Changes
- Proposed Manufacturing Location Changes

The supplier shall notify the Supplier Quality Manager and Purchasing Agent when they become aware of:

- Sub-supplier Issues
- Potential Supply or Capacity Issues

### **Electronic Communication (SPIN Connection)**

The organization shall establish a connection for electronic communication with DaimlerChrysler through the Global Supplier Portal. The Global Supplier Portal can be accessed at <http://daimlerchrysler.covisint.com>. Instructions for registering for the portal can also be found at this site. Assistance is available by calling the Covisint help desk at 866.273.5038. Note that the Global Supplier Portal has replaced the Extended Enterprise Network.

