

Appendix D

Specific Conditions for the South America Region - Brazil

For general conditions, please also consult:
“GP - Global Purchasing”

Section	Title
Section 1.0	Introduction
Section 2.0	Organization
Section 3.0	Purchases
Section 4.0	Supplier Performance and Engineering Requirements
Section 5.0	Tools and Equipment
Section 6.0	Logistics
Section 7.0	Packing
Section 8.0	Environmental Health and Safety (Environmental Health and Safety EH&S)
Section 9.0	Corporate Responsibility for the Automotive Supply Chain



Section 1	Introduction	Review Date	Review Letter
1.1 Letter to Suppliers		17/12/2018	B

Dear SUPPLIER,

This Specific Requirements Letter updates and replaces the previous document issued by TENNECO of June 2016.

Clauses within requirement 8.4 Control of externally provided processes, products, and services of IATF 16949 require that an organization shall ensure that the purchased product complies with the specified procurement requirements. The type and extent of control applied to the supplier and the product purchased should depend on the effect of the product on subsequent product realization or on the final product.

The organization shall evaluate and select suppliers based on their ability to deliver products in accordance with the requirements of the organization. Criteria for selection, evaluation and re-evaluation should be established. Records of the results of the evaluations and any necessary actions arising from the evaluation shall be maintained.

Tenneco clarifies that as of August 15, 2018, GSCMM - Global Supply Chain Management Manual has been revised for and is available at:

- (<http://suppliermanual.tenneco.com/>)

This Appendix D is supplementary to the Tenneco Global Manual (GSCMM), all Tenneco Suppliers in Brazil, MUST meet the Requirements described in the two documents.

This document is part of our Tenneco Global Supplier Chain Management Manual and should be used in conjunction with all other relevant sections.

This electronic edition is designed in a format that ensures that all our new, current and potential SUPPLIERS have full and up-to-date access to supply chain requirements.

We encourage our SUPPLIERS to ensure that all appropriate personnel in your organization have access to this document.

This document may be used as evidence of waivers and additions to the Standard / Technical Specification, in compliance with Tenneco.

(Updates and replaces "Appendix D Specific Conditions for the South America Region – Brazil - Revision D of 06/30/2016)

Best Regards

Alexandre Paulino
SCM – América do Sul

André Luiz Monteiro
Manager Quality Ride Performance e Clean Air Brasil



Section 2.0	<u>Organization</u>	Review Date	Review Letter
2.5 South American Original Equipment and Aftermarket Locations	South America Original Equipment Axios, Cotia, Brazil (EL) 55 11 4615 5500 Monroe, Mogi Mirim, Brazil (RC) 55 19 3805 7100 Walker, Mogi Mirim, Brazil (EC) 55 19 3805 7100	06/30/2016	D
Section 3	<u>Purchases</u>	Review Date	Review Letter
3.6 Request for Quotation	Additional to item 3.6 of the Global Manual - GSCMM RFQ's request for quotation and response should be via WEB (e-mail / Titan). It is recommended to use the specific Tenneco "Titan" system.	06/30/2016	D
Section 4	<u>Supplier Performance and Engineering Requirements</u>	Review Date	Review Letter
4.1 Quality System	Tenneco Brasil expects all of its suppliers to develop an environmental management system with the intention of certifying in the latest version of ISO14001, for suppliers where Tenneco's internal requirements require it to be ISO14001 certified, the buyer will be contacted to initiate a certification process by a third party body, if it is in the interest of both parties. Paragraph 2 and the note of the referent item in the Global Supply Chain Management Manual does not apply to Tenneco Brasil.	12/17/2018	E
4.2 APQP	Supplier shall submit the development schedule immediately upon receipt of the Design or Specification delivered by Tenneco. The schedule may be in the vendor's default format, but the vendor must meet the requirements as per the Tenneco standard.	06/30/2016	D
4.2.1 Feasibility	The feasibility of the project will be confirmed with the manufacturability assessments. The feasibility analysis will be applied in cases where the Tenneco Buyer or SQA deems necessary due to the complexity of the product and / or the recognized experience of the supplier. It is recommended to use the C-Folder folder of the TITAN system for filing the form.	06/30/2016	D
4.2.3.1 Launch contention process:	In specific cases, due to specific customer requirements, the retention time period may be different from that reported in the Tenneco Global Manual. In these cases the containment will begin with the first piece shipped and will continue for at least 03 months after the initial shipment and for no less than 10 shipments after the SOP. (CSI form attached)	06/30/2016	D
4.2.4 Capacity Check:	It is the responsibility of the supplier to consult the Tenneco Buyer or SQA about the exemption from the need for Production Capacity Verification. In the event that there is no derogation in writing validity by Tenneco, the Global Manual item applies in its entirety.	06/30/2016	D



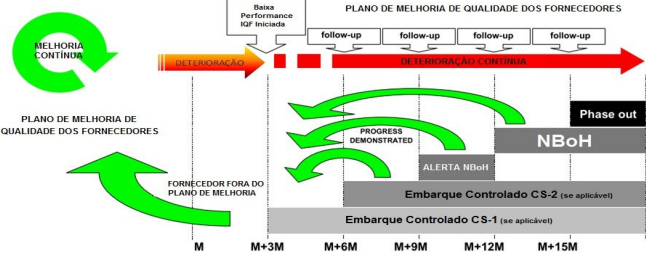
<p>4.3 Production Part Approval Process - PPAP:</p>	<p><u>Deadline for Submission / Resubmission:</u></p> <p>It is the responsibility of the supplier to meet the deadline for submission of PPAP and samples. In case of delay in the submission or rejection of PPAP, the appropriate demerits will be charged (see item 4.12) and indicated in the Scorecard.</p> <p>The level of PPAP to be submitted by the supplier will be agreed with the STA according to the requirements of the end customer. If nothing is agreed upon, PPAP level 3 is maintained by default (according to Global Manual).</p> <p>The need to present the PPAP in the English language is restricted to the items imported / exported, according to the STA request.</p> <p>Every supplier must sign up directly and meet the requirements of the IMDS database on the website: http://www.mdssystem.com</p> <p>The item must be registered in the IMDS system according to the TENNECO supply unit ID before the PPAP submission.</p> <p>TENNECO do Brazil – Cotia Plant – ID 13479 TENNECO do Brazil – Mogi Mirim Plant – ID 10172 (Monroe e Walker)</p>	<p>06/30/2016</p>	<p>D</p>
<p>4.3.2.6 FMEA List of Characteristic</p>	<p>The symbology of characteristics will be as defined by each Tenneco supply plant.</p> <p>The Supplier may use its own symbology in its internal documents, provided that a characteristic correlation table is used, in line with Tenneco requirements.</p>	<p>06/30/2016</p>	<p>D</p>
<p>4.3.2.18 Specific Client Requirement (Tenneco and End User):</p>	<p>The supplier shall maintain evidence of the deployment of the Tenneco requirements and the Tenneco Customer Requirements in the Supply Chain.</p> <p>It is necessary to show that all requirements items have been evaluated and deployed, so it is expected to identify in the methodology used the reference of the Tenneco requirement item versus the correlation of the supplier's internal QMS procedure and status.</p>	<p>12/17/18</p>	<p>E</p>



<p>4.3.2.19 Process Audit Requirements</p>	<p>Contamination audits should be agreed with the STA, being required only for cases where contamination is critical to final manufacturing processes.</p> <p>In addition to the requirements described in item 4.3.2.19 of the Global Manual - GSCMM:</p> <p>The self-assessment is requested from the supplier prior to the on-site evaluation, so the supplier is expected to conduct the self-assessment based on the Tenneco Requirements and standards indicated in the "Reference" field of the form itself. It is mandatory to report the evidence for each item evaluated in the "Observations" field.</p> <p>Suppliers of TENNECO BRASIL that have special processes should conduct audits of CQI's as applicable in a period of 12 months. These audits should be uploaded to the TITAN portal. In the case of a collective holiday, the supplier must carry out audits using the form "P.8.2.2.02.A1 - Check-list for check-out and return of collective vacations" of Tenneco parts. Evidence of the audit should be available on TITAN - PASTA ASSESSMENT.</p>	<p>12/17/18</p>	<p>E</p>
<p>4.4.1 Continuous Quality Requirements / Annual Validation of Parts:</p>	<p>Layout audits performed annually by suppliers may be used as an annual revalidation of the products provided to Tenneco.</p> <p>When a feature is designated as "Security" in the design registry, the supplier must conduct capacity studies and the Safety features must be re-qualified within a maximum period of 6 months. Delays exceeding 6 months must be previously agreed with the responsible Tenneco representative, according to the Security Characteristics Management Assessment Questionnaire.</p>	<p>12/17/18</p>	<p>E</p>



<p>4.6 Supplier Performance Requirements:</p>	<p>TENNECO requires 100% of deliveries and defect-free materials from its suppliers.</p> <p>IQF PERFORMANCE ANALYSIS = Supplier Quality Score</p> <p>The Supplier Quality Score is obtained by the weighted sum of the Valuation Rates, namely:</p> <p>IQF = 0,5 IGQ + 0,4 IGL + 0,1 IGC – (IS)+(Bonus IGA)</p> <p>IGQ = General Quality Index</p> <table border="0"> <tr><td>8D issued</td><td>(peso 25%)</td></tr> <tr><td>Performance PPM</td><td>(peso 20%)</td></tr> <tr><td>Delayed responses 8Ds</td><td>(peso 20%)</td></tr> <tr><td>Controlled boarding</td><td>(peso 15%)</td></tr> <tr><td>Status PPAP</td><td>(peso 10%)</td></tr> <tr><td>Audit note QA</td><td>(peso 5%)</td></tr> <tr><td>Certification</td><td>(peso 5%)</td></tr> </table> <p>IGL (40%) = General Logistics Index</p> <table border="0"> <tr><td>IAF - Supplier Attendance Index</td><td>(peso 50%)</td></tr> <tr><td>Failures ASN</td><td>(peso 30%)</td></tr> <tr><td>Special Freight Qty</td><td>(peso 20%)</td></tr> </table> <p>IGC (10%) = General Business Index</p> <p>General Purchasing Concept</p> <p>IS = Índice de Satisfação Tenneco - (Tenneco Satisfaction Index IQF)</p> <p>Tenneco Impact, Final Customer, distributor returns, warranty, field actions and recalls (peso 0 a 50%)</p> <p>Tenneco Satisfaction (peso 0 a 50%)</p>	8D issued	(peso 25%)	Performance PPM	(peso 20%)	Delayed responses 8Ds	(peso 20%)	Controlled boarding	(peso 15%)	Status PPAP	(peso 10%)	Audit note QA	(peso 5%)	Certification	(peso 5%)	IAF - Supplier Attendance Index	(peso 50%)	Failures ASN	(peso 30%)	Special Freight Qty	(peso 20%)	<p>12/17/18</p>	<p>E</p>
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<p>4.6.2 Delivery Performance:</p>	<p>Non-conformities with the delivery requirement may be handled with 8D's or similar documents and must be answered by the suppliers following the criteria stated in the nonconformity agreement.</p>	<p>06/30/16</p>	<p>D</p>																				
<p>4.9.2 Corrective Action Coordination of Deadlines:</p>	<p>Containment Action: The supplier must send a Quality Alert document with the signatures of those involved, within 24 hours (1 day).</p> <p>Response Time for Corrective Action: Reply within 5 business days from the date of issue of 8D.</p> <p>Evidence: Submit all evidence of the implementation of the actions. It is necessary for your organization to manage this step and in case of change the Tenneco quality representative must be informed.</p>	<p>06/30/16</p>	<p>D</p>																				

<p>4.11.3 Process of Repeal Tenneco:</p>	<p>NBH – NEW BUSINESS HOLD TENNECO SUPPLIERS who fail to meet Quality and / or Service requirements will be subject to actions to prevent the development of new products, according to management's critical analysis based on performance indicators (Graph below);</p> <p>The TENNECO SUPPLIERS Development Base will send the notice of impediment (NBH) and will request the inclusion of the SUPPLIER in controlled shipment status. As a Quality Improvement Plan, the supplier will undergo analysis for indication to the SIP. The SUPPLIER who demonstrates satisfactory results for all requirements may be re-admitted and have their status as NBH suspended.</p> 	<p>06/30/16</p>	<p>D</p>
<p>4.14 Record Keeping:</p>	<p>PPAP and documents: 03 years after product life Super Critical Feature (REPORT) / Safety: 15 years</p> <p>Note: Consider comprehensiveness of reporting feature management requirements Other features and all documents used in the quality management system - 03 years minimum Where retention requirements are not detailed, shall be agreed with Tenneco officials.</p>	<p>06/30/16</p>	<p>D</p>



Section 5	Tools and Equipment	Review Date	Review Letter
5.3 Payment Terms and Conditions related to Tenneco Property Tooling:	Each Tenneco Brazil unit will send its own requirement of specifications for tooling and equipment conditions, not being informed the supplier must use the "VENDOR TOOLING REGISTRATION" form.	12/17/18	E

Section 6	Logistics (According to GSCMM)	Review Date	Review Letter
6.2 Logistics and Materials Protocol:	As a Logistic Protocol, the supplier must consider the information of the Supply Contract defined with the Procurement Department, but preferably, the Logistics Protocol according to GSCMM - Global Supply Chain Management Manual should be used.	06/30/16	D

Section 7	Packing	Review Date	Review Date
7.1 Supplier Responsibility:	The supplier should consult the buyer of your commodity and request the packaging pattern of the Tenneco unit that will receive the material. Evidence of the packaging standard should be submitted together with the PPAP documentation, with proper approval. It is recommended to make it available in the folder C-Folder of the Titan system.	06/30/16	D
7.6 Labeling and Identification:	Preferably, bar code identification labels should be used. Specific cases should be dealt with the Tenneco buyer or quality representative.	06/30/16	D

Section 8	<u>Health, safety and environment</u>	Review Date	Review Letter
8.1 Policy of EH&S:	The supplier must make available and keep up-to-date copy of the current Titan Operating License in the C-folder. It is up to the supplier to keep this document up to date with the State Competent Body.	06/30/16	A

Section 9	<u>Corporate Responsibility for the Automotive Supply Chain</u>	Review Date	Review Letter
9.1 Guidance Statements of Global Working Conditions:	<p>Responsibility Legal: The Tenneco supplier is included in the supply chain of the world's largest automakers, and will legally respond to the quality of the component or service provided to Tenneco. The supplier's responsibility for the component or service provided to Tenneco shall be extended to the final consumer, subject to the application of applicable laws.</p> <p>Civil responsibility: As Tenneco manufactures components and semi-components that are supplied to assemblers worldwide, it must meet the requirements of Brazilian and international automakers called "Automotive Product Liability." This requirement also applies to your entire supply chain. Regarding the products that Tenneco manufactures, it has civil liability, and for the components acquired by Tenneco, the responsibility of the supplier of the item, being the responsibility of the legal and civil liabilities in case of anomaly in the operation of the component, have a civil representative for product safety (PSB-Produktsicherheitsbeauftragten) the certificate must be kept and updated by the supplier in the TITAN-PASTA "CONTACT INFORMATION" database.</p>	12/17/18	E

Responsible	History of revisions	Review Date	Review Letter
José Maria G Souza	Tenneco Global Manual Deployment in place of the "Suppliers Quality Manual - MQF" Rev. 8	01/03/2014	-
José Maria G Souza	Items reviewed: 1.1;3.1;3.2;4.4;4.5;4.6;4.7;4.8;4.9;4.10;4.11 e 5.1	06/26/2014	A
José Maria G Souza	Items reviewed: 4.6 e 4.9	07/07/2014	B
Wagner G. S. Muniz	Change in the identification letter of the appendix from "C" to "D" and add the name of "Brazil" in the title.	07/23/2014	C
André Luiz Monteiro	General review	06/30/2016	D
Everton Faria José Maria G Souza Luciano A de Oliveira Maércio L. Leonello Wagner G. S. Muniz	Items reviewed:1.1; 4.1; 4.3.2.18; 4.3.2.19; 4.4.1; 4.6; 5.3; 9.1	12/17/2018	E