

BRIDGESTONE

BSEMEA

Supplier Quality Manual

Dear valued suppliers and potential vendors,

At Bridgestone we are committed to working with our suppliers to ensure the highest quality products for our customers.

Our philosophy is to develop and maintain a collaborative relationship with suppliers based on excellent communication, transparency and mutual benefit.

The purpose of this manual is to provide BSEMEA's quality assurance expectations to supplier and to create a common level of understanding between BSEMEA and its suppliers. All suppliers are expected to comply with the stated requirements herein.

BSEMEA's quality mission of "Creating Customer Value & Trust" provides guidance for enhancing all aspects of our business, and it is integrated into our company business strategy.

Our suppliers are an essential link in the supply chain that creates value, therefore BSEMEA respects its suppliers and treats them as an extension of our business.

This manual describes the quality system requirements for current and prospective suppliers of parts and materials, and tooling to all manufacturing plants, divisions and subsidiaries of BSEMEA.

This document is part of the commercial terms and conditions in place with the supplier unless specifically exempted by contractual agreement.

We require you to review it and acknowledge it for acceptance within one month from receipt.

If any of the requirements cannot be fulfilled by the supplier, its representative is requested to contact Bridgestone to discuss the issues and in case have exemptions.

The controlled and current version of this document is available on [VENDOR QUALITY ASSURANCE PROCEDURE \(scene7.com\)](https://scene7.com).

Any printed or electronic copies are considered uncontrolled versions and may not be current.

Bridgestone EMEA reserves the right to make updates or revisions to this document as necessary and such changes shall take effect as soon as communicated.

The Supplier acknowledges and represents that it has reviewed the Supplier Quality Manual and expressly agrees to be bound by the terms thereof. Bridgestone shall notify the Supplier of any material amendments to the Supplier Quality Manual as published on Bridgestone's website; the Supplier in any case represents and ensures that it will monitor Bridgestone's website periodically for changes to the Supplier Quality Manual.

Thank you,

Bridgestone Europe, Middle East and Africa

App. B 1 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
-------------------	----------------------	---------------------------	--------------------------	--	---------------------------

Table of Contents

1	SUPPLIER APPROVAL PROCESS	4
1.1	QMS Requirements.....	4
1.2	Quotation Process	4
1.3	Supplier Qualification and Approval	4
1.4	PPAP	4
1.5	Conformity to specification	5
2	BUSINESS REQUIREMENTS	5
2.1	Safety and Environment.....	5
2.2	Business Continuity	6
2.3	Process Capability.....	6
2.4	Lot Traceability.....	6
2.5	Record Retention	7
2.6	Packaging	7
2.7	Sub-tier Supplier Requirements	7
2.8	Product and Process Change Notification.....	7
2.9	Non-conforming Parts.....	8
2.10	Corrective and Preventive Actions.	9
2.11	Continuous Improvement.....	9
2.12	Product safety and conformity representative.....	9
3	MONITORING	10
3.1	Supplier Quality Validation Audits	10
3.2	Supplier Performance Metrics	10
3.3	Low Performing Suppliers	10
4	GLOSSARY & ACRONYMS	11
	CSR/Sustainability requirements for BSEMEA suppliers	1
5	ISO14001 and other environment-related management system.....	1
6	SDS.....	1
7	CHEMICALS STANDARDS AND REGULATIONS	2
7.1	Compliance to local Chemical Regulations	2
7.2	REACH registration	2
7.3	REACH Substances of Very High Concern (SVHC)	2
7.4	Chemicals banned in materials to Bridgestone EMEA.....	3
7.5	Conflict Minerals.....	3

App. B 2 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
-------------------	----------------------	---------------------------	--------------------------	--	---------------------------

<i>BSEMEA QUALITY MANAGEMENT</i>	<i>Incoming Materials</i>	<i>SUPPLIERS QUALITY MANUAL</i>	<i>Q.S. 109</i>
----------------------------------	-------------------------------	-------------------------------------	---------------------

8	GLOBAL AUTOMOTIVE DECLARABLE SUSTANCE LIST (GADSL).....	3
9	IMDS DECLARATION.....	4
10	PACKAGING.....	4
10.1	Marking of packaging.....	4
10.2	Packaging design.....	4
11	LABELING.....	5
12	ADDITIONAL REQUIREMENTS FOR ELECTRONIC PRODUCTS/COMPONENTS.....	5
13	SAFETY MANAGEMENT SYSTEMS.....	6
14	VISIT OF BS PERSONNEL AT SUPPLIER’S PREMISES.....	6

<i>App. B 3 of 11</i>	<i>Revision Re-issue</i>	<i>Issue Date Aug 7, 2024</i>	<i>Replaces Feb 22, 2024</i>	<i>Originated by D. Di Gioacchino/P. Calabrese</i>	<i>Approved by D. Casadei</i>
---------------------------	------------------------------	-----------------------------------	----------------------------------	--	-----------------------------------

1 SUPPLIER APPROVAL PROCESS

1.1 QMS Requirements

As minimum the supplier is required to be registered to and compliant with ISO 9001 quality management system.

It is also requested to set up a plan to eventually achieve IATF 16949 third party certification through compliance with customer defined requirement (as MAQMSR) and compliance with IATF 16949 requirements.

Being BSEMEA committed to the protection of human health and environment in all areas of operations, ISO 14001 and ISO 45001 or ILO-OHS-2001 certifications are promoted

The supplier must maintain its certification with an accredited registrar and must furnish copies of its registration certificates. The certificates must bear one of the accreditation mark of a recognized IAF MLA member. The supplier must promptly inform BSEMEA if any of the above certificates are lost.

1.2 Quotation Process

Procurement determines the material/products requirements (demand) for a material/product or a group/class of materials/products. Procurement also advises potential suppliers of volumes, payment and shipping terms, packaging requirements, validity period, and required response date. Quotes will be summarized and counter-offers and/or negotiations will be utilized when applicable.

1.3 Supplier Qualification and Approval

The Qualification and Approval process is divided into two segments:

- 1) Technical/Material approval: Lab Evaluation, testing, volume trial and approval is conducted by Technical Functions . This process ensures that all material/product properties meet the fundamental properties required for the final, finished product and application. This process involve a CFT (Cross Functional Team)
- 2) Supplier Qualification and Approval: BSEMEA QA will assess the supplier's producing location's quality management system (QMS) by means of a combination of documentation, certification and/or on-site audit.

Upon material/product approval by involved CFT (Technical function, QA, EHS, etc..) an official communication is shared with supplier.

In case of material, material development team will send the supplier a specification sign-off form. Final approval occurs when the completed sign-off form is returned.

Additionally, Technical and Quality will jointly review all new proposed suppliers to determine if an audit of the production facility is required prior to final approval. The audit requirement will be determined based on risk assessment: material/product type, supply volume, new technologies, etc.

Upon delivery of parts, product, or material, BSEMEA may request supplier test results and approval or compliance documentation when deemed necessary.

1.4 PPAP

Suppliers shall submit PPAP packages for production-released engineering drawings and/or specifications. Suppliers are expected to maintain and have readily available records of all PPAP documentation submitted including approved PPAP parts.

The purpose of PPAP is to determine that all BSEMEA engineering design records and/or specification requirements are understood and proven capable by the supplier's manufacturing process. Additionally, PPAP will prove the supplier's potential to produce product consistently meeting these requirements during an actual production run.

App. B 4 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
-------------------	----------------------	---------------------------	--------------------------	--	---------------------------

BSEMEA QUALITY MANAGEMENT	Incoming Materials	SUPPLIERS QUALITY MANUAL	Q.S. 109
---------------------------	-----------------------	-----------------------------	-------------

All PPAP submissions shall comply as applicable with VDA 2 (i.e. PPA) and, at a minimum, comply with AIAG's latest manual and apply to internal and external sites supplying production parts, service parts, production materials, or bulk materials.

Suppliers **are required** to furnish samples along with PPAP/PPA documentation in advance of first production shipments under the following conditions:

- Initial submission
- Change in sub-tier or material source
- Changes to form, fit, or function
- Change in test methods
- Engineering changes
- Replacement or refurbished tooling

BSEMEA will determine the number of samples needed for PPAP submission. Initial samples must be approved in writing prior to shipments of production parts. For automotive and select products as defined by BSEMEA, suppliers are required to utilize the process and forms referenced in the most current revision of the AIAG PPAP manual to demonstrate product and process conformance to BSEMEA product specifications. In such situations, suppliers will be notified in writing of which level PPAP submission is required for approval prior to shipment of production material or components.

Deviations from these requirements shall be approved in writing through the SBU's (Strategic Business Unit) deviation approval procedure.

1.5 Conformity to specification

At each shipment, the supplier shall prove that the product conforms with the applicable specifications by pertinent documentation (e.g. First Article Shipment Inspection, material/product test results, certificate of analysis, etc...)

Parameters and information to be included into documentation accompanying the shipment are communicated by BSEMEA. The documentation shall be sent in advanced by email.

Upon information and agreement with the supplier, additional documentation (e.g. specific test results) may be requested by Engineering team on periodical basis.

The supplier is requested to perform a complete test of all product characteristics in the specification of all materials delivered to BSEMEA (Requalification) at minimum every 3 years. The results must be available for review and must be sent upon request.

2 BUSINESS REQUIREMENTS

2.1 Safety and Environment

BSEMEA expects suppliers to provide a healthy and safe work environment for all employees based on sound safety and health practices and adopt a responsible environmental management system to prevent pollution, manage and control environmental impacts and avoid the depletion of natural resources. Suppliers are expected to be aware of and in compliance with all applicable environmental, health and safety regulations and laws and ensure that they obtain the necessary approvals, permissions and consents related to the environmental impact of their operations.

When visiting or working in BSEMEA facilities, suppliers are expected to follow local site environmental and safety requirements.

App. B 5 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
-------------------	----------------------	---------------------------	--------------------------	--	---------------------------

2.2 Business Continuity

The supplier has to recommend the materials/products' storage conditions and the relevant shelf life from the manufacturing date. The same storage conditions must be respected in suppliers' warehouse and guaranteed during transportation.

BSEMEA requires to receive the materials in plant with at least half of their shelf life available (not applicable for supply of finished product). FEFO (First Expiring, First Out) or FIFO (First In First Out) must be adopted.

BSEMEA requires suppliers to maintain and routinely test comprehensive business continuity plans to ensure appropriate and timely recovery of services to BSEMEA during times of business interruption.

A business continuity plan must address methods to minimize the impact of an event on the health and safety of BSEMEA employees, customers and the community to ensure consistent quality performance and service from suppliers.

A business continuity plan should be reviewed and updated as required by operational needs but in no case less frequently than once per year. Revisions should address changes to technology, functions, procedures, or personnel that could impact the integrity and viability of the recovery plan.

The supplier is responsible for ensuring that its subcontractors and suppliers maintain and test their business continuity plans. Upon request, the supplier must provide its business continuity plan to BSEMEA for review.

2.3 Process Capability

BSEMEA requirement for Critical To Quality Characteristics is a Cpk/Ppk target value of 1.33, with a minimum value of 1.00.

BSEMEA Critical To Quality Characteristics will be identified and communicated to the supplier during the approval process. Depending on the material/ product type, suppliers may be required to submit Cpk/Ppk on a quarterly or otherwise agreed-upon basis timeframe.

Data should be calculated on all production materials sent to BSEMEA.

(NOTE: Cpk/PpK for a supplied material/product type, shall be calculated including all shipments to all BSEMEA Plants occurred on the agreed timeframe).

Characteristics with a CpK < 1.00 must be accompanied with the appropriate corrective action plan to achieve the target and minimum values. If the corrective action plan will not achieve the target or minimum CpKs, then specification changes or modifications must be negotiated with BSEMEA in order to avoid disqualification as a source. Any supplier with CpK<1.33 will be targeted for supplier development for improvement.

When determined to be of value by the BSEMEA business unit for which the material or product is intended, the supplier may be required to submit process capability data on a routine basis. The BSEMEA business unit will communicate the critical to quality characteristics which are to be monitored, the frequencies and details of this monitoring.

2.4 Lot Traceability

Suppliers must plan for traceability of product. Suppliers must identify product by suitable means through the manufacturing process and in all inventory locations.

Suitable means may include (but not limited to) cards, tags, signs, lot numbers, or bar codes. The status of the product must be identified throughout the manufacturing process to mitigate the risk of suspect, nonconforming, or unapproved product being used or shipped.

Suppliers shall have an effective system of traceability that ensures delivered product can be traced from a finished product in the customer application back to specific lots, sub-components, parts, and raw material. The depth of traceability required must be considered for each part and the amount of detail recorded must be related to the risk.

In addition to product traceability, the system must be capable of providing the production history of a lot or serial number. This history must include test records, process parameters, and machine settings influencing conformance.

App. B 6 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
-------------------	----------------------	---------------------------	--------------------------	--	---------------------------

<i>BSEMEA QUALITY MANAGEMENT</i>	<i>Incoming Materials</i>	<i>SUPPLIERS QUALITY MANUAL</i>	<i>Q.S. 109</i>
----------------------------------	---------------------------	---------------------------------	-----------------

The supplier will also specify how components will be marked with serial or lot numbers and date codes if required, or how containers will be identified with lot numbers or date codes if component marking is not required.

2.5 Record Retention

The supplier shall maintain all quality records (example: test results, traceability, capability, quality indices) for the manufacture of product for a time period of 3 years (5 years for electronic products).

Records must be available for review upon request.

Records can be retained in digital format.

2.6 Packaging

Packaging requirements are addressed during the quotation process. If there are any changes during supply, the supplier is to review and obtain approval with Procurement at least one month in advance.

No wooden packaging is allowed when delivering to a BSEMEA manufacturing plant, unless specifically agreed with BSEMEA plant.

2.7 Sub-tier Supplier Requirements

Suppliers to BSEMEA are encouraged to utilize sub-tier suppliers that are certified to ISO 9001, ISO 14001, ISO 45001 or ILO-OHS-2001 and ISO 50001 latest version through recognized 3rd party Certification Body. At minimum, sub-tiers throughout the supply chain shall be compliant to the aforementioned quality management system. The sub-tier supplier shall have systems in place for evaluating, selecting, and monitoring their sub-tier suppliers to ensure compliance and supply continuity throughout the supply chain. Additionally, the supplier shall ensure all sub-tier suppliers are capable of meeting BSEMEA quality objectives. BSEMEA reserves the right to audit sub-tier supplier facilities on an as-needed basis and upon agreement with supplier.

2.8 Product and Process Change Notification

In an effort to ensure the quality of finished products, any changes to a part or product, its specification, or the process by which it is manufactured must be approved by BSEMEA. These changes may materially impact the form, fit, function, durability, or performance requirements of the product. Respective BSEMEA business units are required to provide the supplier appropriate contacts for change notification.

To receive approval for the change, the supplier must submit a request to the appropriate BSEMEA contact at least 3 months in advance.

BSEMEA will notify the supplier if evaluation for the change is necessary.

The supplier must not implement the process change until approval is granted by BSEMEA. While implementing the change, the supplier is required to maintain sufficient production for the current product.

Examples of changes may include, but are not limited to:

<i>App. B 7 of 11</i>	<i>Revision Re-issue</i>	<i>Issue Date Aug 7, 2024</i>	<i>Replaces Feb 22, 2024</i>	<i>Originated by D. Di Gioacchino/P. Calabrese</i>	<i>Approved by D. Casadei</i>
---------------------------	------------------------------	-----------------------------------	----------------------------------	--	-----------------------------------

CHANGES	TYPE of CHANGE
Machine	<ul style="list-style-type: none"> a) New Machines b) Machine Modifications c) Initial transfer of an existing process to different type of processing equipment d) Tooling changes e) Equipment relocation within same plant or outside plant
Material	<ul style="list-style-type: none"> a) New raw materials b) Software (SW) and hardware (HW) c) New in-process materials d) Specification e) Manufacturing location f) New supplier of any materials/components, SW/HW
Method	<ul style="list-style-type: none"> a) New operating methods b) Revised operating procedures c) New assurance methods
Transportation/ Packaging	<ul style="list-style-type: none"> a) Delivery method b) Packaging or containers c) Identification
Inspection Method	<ul style="list-style-type: none"> a) Inspection equipment b) Testing method

Once the requirements have been fulfilled and approval is given, the supplier is permitted to ship the product. BSEMEA must be notified of the first product delivery after corresponding process change. The supplier confirms the product conforms to all quality requirements before shipping. Change records and confirmation data must be retained by the supplier and may be requested by BSEMEA.

2.9 Non-conforming Parts

Suppliers are fully responsible for their products; this is including any work completed by sub-contractors. They are responsible for ensuring that their products and materials meet BSEMEA and all its subsidiaries' standards, current specifications, drawings, and any other agreed upon standard. Suppliers must ensure that all data provided to BSEMEA is accurate.

For all suppliers, zero defects and 0 ppm of defective material are the expectation, but if a non-conformance is discovered through receiving inspection, incoming material testing, review of certificate of analysis, use, consumption, assembly, packaging, or if a customer complaint is confirmed to be the fault of the supplier, the supplier will be notified by BSEMEA personnel with a QPR/claim document.

The supplier is supposed to reply using an 8D format within the requested timeframe.

The claim shall be closed within maximum one month, unless specific action requires longer time. BSEMEA encourages the use of standard quality tools including Ishikawa, 5 Why, 8D etc.

If a supplier discovers a suspected non-conformance, the supplier shall report the non-conformance to the BSEMEA plant's Quality Manager and Procurement Manager within 24 hours of discovery.

The preferred communication method shall be made by both email and phone.

The supplier must have a system and process for containment, reporting, and verification, to ensure that all suspect products/materials are identified and quarantined to prevent introduction into the production streams.

App. B 8 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
-------------------	----------------------	---------------------------	--------------------------	--	---------------------------

When a non-conforming material/product has possibly been shipped to BSEMEA facilities, a containment plan must be formulated by the supplier and communicated to all affected BSEMEA plants and corporate personnel within 24 hours of initial receipt. Containment includes material at the supplier's locations, product/material in transit to customers, in transit to BSEMEA plants, and held at off-site warehouses. The supplier will be responsible for managing outside sources for sorting when requested. The supplier will also be responsible for scrap and waste costs, related to non-conforming material. Any rework or repair of any material/product, where allowed, must meet the original specifications.

2.10 Corrective and Preventive Actions.

When it has been determined by either the supplier or BSEMEA that nonconforming materials or parts have been shipped to a BSEMEA facility, a Corrective and Preventative Action Plan (CAPA) must be submitted based on the root cause analysis to prevent reoccurrences. The CAPA is a component of the QPR as described in section 2.7 (Non-Conforming Parts). BSEMEA encourages the use of standard quality tools including Ishikawa, 5 Why, 8D etc. Submitted CAPAs will be reviewed by issuing plant and QA. Evidence regarding suitable measures can be requested and must be submitted within a fixed period (e.g. cpk indices, work instructions, changes in the production control plan, project plans, etc.). The supplier will be notified if the CAPA is accepted or rejected. If rejected, the responsible personnel will communicate the reason and advise a revised response due date.

2.11 Continuous Improvement

Supporting BSEMEA's goal of Dan-Totsu (the absolute and clear leader in all aspects of business), all suppliers are expected to have measures and methodologies in place that can be used to identify opportunities for improvement, monitor performance levels, identify sources of variation and quantify the effects of continuous improvement activity. Listed below are some of the more common techniques used in industry to monitor processes and product performance. They can be instrumental in continuous improvement of the process/product:

- A. Capability Indexes
- B. Control Charts
- C. Cumulative Sum Charting
- D. Design of Experiments
- E. Evolutionary Operation of Processes
- F. Cost of Quality
- G. Parts Per Million Analysis
- H. Value Analysis
- I. Benchmarking
- J. Mistake Proofing
- K. Internal Audits

Additionally, suppliers are expected to make effective use of quality performance data provided by BSEMEA supplier QPRs, supplier quality audits or reviews, and process capability data supplied to BSEMEA in the establishment and prioritization of continuous improvement activities.

It is requested to perform an annual self or third party-audit according to VDA 6.3 and an annual product audit according to VDA 6.5 or equivalent procedure. The results must be available for BSEMEA review and must be sent upon request.

2.12 Product safety and conformity representative

The supplier is requested to appoint a Product Safety and Conformity Representative (PSCR) according to the guidelines given by VDA. It is requested the attendance to the pertinent course and to send a copy of the qualification certificate to Bridgestone to show the evidence.

App. B 9 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
-------------------	----------------------	---------------------------	--------------------------	--	---------------------------

3 MONITORING

3.1 Supplier Quality Validation Audits

BSEMEA Supplier Quality Teammates may conduct on-site audits in the event of:

- New Supplier Qualification – quality system assessment
- Quality Events – review of root cause analysis and countermeasures
- Low Supplier Quality Index (SQI) performance – chronic, recurring quality events
- Surveillance Audits – verification of countermeasures and effectiveness

ISO/IATF based audits will be used to confirm and evaluate QMS.

VDA 6.3 based audits will be used to confirm and evaluate processes and process controls.

BSEMEA reserves the right to conduct audits with its customers upon their request and agreement with supplier.

3.2 Supplier Performance Metrics

Performance metrics are judged using BSEMEA’s Supplier Quality Index (SQI) process. SQI scores are mathematically calculated using the Risk Priority Number (RPN) assigned to each QPR issued to the supplier.

The RPN calculation is Detectability x Severity x Recurrence. Definitions for each component is based on AIAG’s guidelines. Should a suppliers SQI score fall below or equal 70, or incidents with a high Severity rating, the supplier will be notified by Supplier Quality and a comprehensive improvement plan must be submitted. Suppliers are expected to maintain an SQI above 70. Failure to improve a score below the target may result in reduced allocation or disqualification.

Supplier are also evaluated according to PPM level (defective part per million parts supplied in weight). The target for all suppliers is ppm=0.

Depending on type of supply, alternative metrics may be implemented, such as: product quality, BOM accuracy and timeliness, supplier cooperation and communication, supplier proactiveness for continuous improvement, cost reduction and the enhancement of the supply chain, on-time delivery, production data transfer (DIS) etc..

3.3 Low Performing Suppliers

A disqualification process may be initiated when supplier shows low performance. This can be triggered by the periodical performance review and/or in the event of chronic product quality issues. Additional reference criteria to initiate the supplier disqualification process are:

- Where applicable, a supplier fails to maintain ISO 9001 or ISO/IATF registration.
- Supplier fails to respond to claims with root cause analysis and CAPAs.
- The occurrence of severe product quality issue (e.g. safety related, affecting product compliance to applicable regulations)
- Changes performed not in line with requirements stated into paragraph 2.8

The above criteria may be used in conjunction with criteria of other corporate and business departments to consider the need to disapprove a supplier.

If performances are found unsatisfactory, the supplier may not be eligible for new business (NBH process).

App. B 10 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
--------------------	----------------------	---------------------------	--------------------------	--	---------------------------

4 GLOSSARY & ACRONYMS

AIAG – Automotive Industry Action Group – a not-for-profit association created to develop recommendations and framework for the improvement of quality in the North American automotive industry

BOM – Bill of Materials - it includes all materials needed to make a product, such as raw materials, assemblies, standard components, and sub-assemblies. The BOM data is an important element of manufacturing processes because it helps the company to organize material requirements and supply chain as well as plan and track the production process.

CB – Certification Body – an organization accredited by a recognized accrediting body for its competence to audit and issue certification confirming that an organization meets the requirements of a standard

Direct Material - Material used in production, which becomes part of the end product

BSEMEA- Bridgestone Europe, Middle East, India and Africa

FEFO – First Expiring First Out

FIFO – First In First Out

Ishikawa - causal diagrams that show the potential causes of a specific event

NBH – New Business Hold

Non-conforming Part - Part or material that does not meet specified BSEMEA requirements.

QMS – Quality Management System - A formalized system that documents processes, procedures, and responsibilities for achieving quality goals and objectives, meeting customer requirements and improving efficiency and effectiveness on a continuous basis.

QPR- Quality Problem Report – A method for documenting, reporting, and requesting corrective action, and the follow-up of those corrective actions for each nonconforming condition that has originated from the Supplier.

PSCR – German acronym for Product Safety and Conformity Representative.

Process Capability - The measured inherent variation of a material or product produced by a stable process.

PPAP - Production Part Approval Process – a standardized process that aids in communication and approval of production designs and processes before, during, and after manufacture (AIAG).

PPA – Production process and Product Approval – a standardized procedure in the supply chain to minimize friction loss at the interfaces between suppliers and customers by means of cooperative partnership.

App. B 11 of 11	Revision Re-issue	Issue Date Aug 7, 2024	Replaces Feb 22, 2024	Originated by D. Di Gioacchino/P. Calabrese	Approved by D. Casadei
--------------------	----------------------	---------------------------	--------------------------	--	---------------------------

<i>BSEMEA QUALITY MANAGEMENT</i>	<i>Incoming Materials</i>	<i>SUPPLIERS QUALITY MANUAL</i>	<i>Q.S. 109</i>
----------------------------------	---------------------------	---------------------------------	-----------------

PPM - parts per million.

RPN – Risk Priority Number – Product of occurrence, severity and detection and gives assessment of risk in a process.

SQI – Supplier Quality Index – A BSEMEA performance metric assigned to a supplier based upon calculation of RPN for each QPR issued to a Supplier.

VDA – Verband Der Automobilindustrie – A German Quality Management System Standard.

5 Why – a problem solving technique for identifying the root cause of a problem.

8D – a problem solving approach focused on product and process improvement through identification of root cause and corrective action to eliminate reoccurrence.

<i>App. B 12 of 11</i>	<i>Revision Re-issue</i>	<i>Issue Date Aug 7, 2024</i>	<i>Replaces Feb 22, 2024</i>	<i>Originated by D. Di Gioacchino/P. Calabrese</i>	<i>Approved by D. Casadei</i>
----------------------------	------------------------------	-----------------------------------	----------------------------------	--	-----------------------------------

BSEMEA QUALITY MANAGEMENT	Incoming Materials	SUPPLIERS QUALITY MANUAL	Q.S. 109
---------------------------	--------------------	--------------------------	----------

CSR/Sustainability requirements for BSEMEA suppliers

The Bridgestone Group released publicly its Global Sustainable Procurement Policy in February 2018, available for consultation in 12 languages at the below corporate website:

<https://www.bridgestone.com/responsibilities/procurement/>

With respect to the products and/or services provided to Bridgestone EMEA, supplier warrants and agrees that they comply with all relevant national, regional and local laws, regulations and standards in the countries or regions in which they operate.

Adherence with the Policy requires that Suppliers adopt the following foundational elements to guide the inclusion of Bridgestone's requirements and Preferred Practices into their businesses:

1. Transparency
2. Compliance
3. QCD (Quality, Cost, Delivery) & Innovation
4. Sustainable Procurement Practices

Suppliers are required to meet at least the Minimum Requirements defined in the above mentioned Policy to do business with Bridgestone. In addition, Suppliers are encouraged to meet Preferred Practices. These are aspirations that Bridgestone believes will enhance its various supply chains.

Direct Suppliers are **encouraged** to extend/share this Policy with their own suppliers, with the aim of reaching into the supply chain, back to the Point of Origin, if possible.

In order to verify the above policy adherence Bridgestone Europe NV/SA reserves the right to perform on site audit and/or 3rd party Sustainability/CSR assessment.

5 ISO14001 and other environment-related management system

Bridgestone promotes the achievement of ISO14001 or EMAS and ISO 50001 certification amongst its suppliers. In case of supply of materials/ components and services please send to Bridgestone TCE Tire Materials Development, TCEMATERIALS@bridgestone.eu, a copy of your certificate. Renewals shall also be sent within 2 months after the certificate expiry date. Supplier shall notify BSEMEA in case of change of certification status.

Bridgestone Europe will evaluate positively the implementation by the Supplier of energy efficiency management systems such as ISO50001.

6 SDS

Safety data sheets (SDS) pertinent to your materials shall be compliant with the relevant legislation of the country where the Bridgestone plant receiving the good is located and written in the local language.

For deliveries to Bridgestone EU locations, SDS shall be compliant to art. 31 and Annex II of REACh (Regulation (EC) No 1907/2006) and to all the other EU Directives therein cited.

SDS shall be not older than 5 years.

App. C 1 of 6	Revision Re-issue	Issue Date Feb 22, 2024	Replaces Dec 21, 2022	Originated by S. Roccatagliata/C. Journet	Approved by A, Delli Colli/F. Paletta
------------------	----------------------	----------------------------	--------------------------	--	--

BSEMEA QUALITY MANAGEMENT	Incoming Materials	SUPPLIERS QUALITY MANUAL	Q.S. 109
---------------------------	-----------------------	-----------------------------	-------------

Any new or updated SDS must be sent at the latest together with the first shipment of your material and in case the shipment occurred in the preceding 12 months, to the following recipients, in English language and in the official language(s) of the country(ies) where the material is delivered to:

- Bridgestone Tire Materials Development by e-mail at the address TCEMATERIALS@bridgestone.eu;
- Bridgestone receiving plant(s).

For deliveries in Bridgestone EU locations of materials for which an SDS is not required, suppliers shall provide the following information, according to the art. 32 of REACh (Regulation (EC) No 1907/2006):

- List of substances subject to the Authorization List or Restriction List. Any other available and relevant information about the substances that is necessary to take appropriate risk management measures.
- registration number of the substances if available.

7 CHEMICALS STANDARDS AND REGULATIONS

7.1 Compliance to local Chemical Regulations

Suppliers shall assure that each substance constituting or contained in products (including packaging) sold or made available, whether in return for payment or free of charge, to Bridgestone EMEA, is compliant to any local applicable chemical regulation where products are delivered.

7.2 REACh registration

Suppliers shall assure that each substance constituting or contained in products (including packaging) sold or made available, whether in return for payment or free of charge to Bridgestone, is registered if required under Regulation (EC) No 1907/2006 (“REACh”).

In those cases where Bridgestone is responsible for the import of material into the European Economic Area (EEA), supplier shall provide in due time to Bridgestone the evidence from the product manufacturers’ Only Representative (OR) that the volumes of the imported substances are covered by registration, thus relieving Bridgestone from any further obligation under REACh Title I requirements.

7.3 REACh Substances of Very High Concern (SVHC)

Supplier shall monitor the publication by the European Chemicals Agency of the list of substances meeting the criteria for authorization under REACh (the so-called “candidate list” <https://echa.europa.eu/candidate-list-table>) and, as soon as they have information, notify Bridgestone about the identity of the product supplied containing a substance officially proposed for listing on the candidate list. Supplier shall provide Bridgestone with the name of the substance as well as with sufficient information to allow Bridgestone to safely use the products and/or fulfill their own obligations under REACh.

Bridgestone reserves the right to ask suppliers to carry out test analysis to check SVHC absence.

App. C 2 of 6	Revision Re-issue	Issue Date Feb 22, 2024	Replaces Dec 21, 2022	Originated by S. Roccatagliata/C. Journet	Approved by A, Delli Colli/F. Paletta
------------------	----------------------	----------------------------	--------------------------	--	--

BSEMEA QUALITY MANAGEMENT	Incoming Materials	SUPPLIERS QUALITY MANUAL	Q.S. 109
---------------------------	--------------------	--------------------------	----------

7.4 Chemicals banned in materials to Bridgestone EMEA

Supplier shall ensure that materials supplied to Bridgestone do not contain, even in the packaging, (unless expressly agreed otherwise by Bridgestone Europe in writing):

- (1) precursors of carcinogenic N-nitrosamines as listed in Annex 2 Table 3 and Annex 4 Table 1 of German standard TRGS 552:2018 and following amendments (see: <http://www.baua.de/de/Themen-von-A-Z/Gefahrstoffe/TRGS/TRGS.html>);
- (2) asbestos, benzene, polychlorinated biphenyls (PCBs), and (as per 2000/53/EC) lead, cadmium, mercury, hexavalent chromium;
- (3) chemicals restricted under the Montreal Protocol on ozone-depleting substances;
- (4) chemicals restricted under the law of the countries into which the products are shipped;
- (5) any substance listed on the candidate list of the REACH Regulation (Regulation (EC) No 1907/2006) above the 0.1% threshold w/w of the article; (<https://echa.europa.eu/candidate-list-table>). In case of complex objects, as defined by ECHA Guidance on requirements for substance on articles, SVHC substances shall not exceed the threshold of 0.1% w/w in all single articles constituting the complex object. (<https://echa.europa.eu/guidance-documents/guidance-on-reach>).
- (6) chemicals subjected to restriction according to Annex XVII of REACH (Regulation (EC) No 1907/2006); (<https://echa.europa.eu/it/substances-restricted-under-reach>)
- (7) chemicals subjected to authorization according to Annex XIV of the REACH (Regulation (EC) No 1907/2006); (<https://www.echa.europa.eu/it/authorisation-list>)
- (8) Bridgestone reserves the right to ask suppliers to carry out test analysis to check and confirm absence of banned chemicals.

7.5 Conflict Minerals

Suppliers shall ensure to be continuously updated about any legal reporting requirements concerning the so called conflict minerals and to comply with the relevant reporting as needed. Bridgestone requires annual reporting only to those suppliers affected by the reporting provisions though the excel template (CMRT) available at <http://www.responsiblemineralsinitiative.org/>

Non-reporting suppliers will be deemed as declaring that no reporting requirement is pertinent to the product supplied, pending any verification from Bridgestone side. Suppliers of beadwire must always provide the above mentioned reporting format on yearly basis. Additionally we are requiring suppliers in scope to be DRC conflict free.

8 GLOBAL AUTOMOTIVE DECLARABLE SUSTANCE LIST (GADSL)

As global tier 1 supplier of the Automotive Industry, Bridgestone requires its suppliers to declare the content of any of the substances indicated within the latest issue of the “Global Automotive Declarable Substance List” (GADSL), see <http://www.gadsl.org> (“Reference List”) and the relevant rules downloadable at www.mdsystem.com (Public IMDS Pages).

It will be supplier’s responsibility to monitor any new yearly update of the GADSL and to declare to Bridgestone Europe TCE Tire Materials Development Department the content of any newly listed substance, when present within the material supplied to Bridgestone Europe above the threshold limits specified within the GADSL (for any classification as D, P, or D/P) and if they have not yet been declared in the MSDS or material specification.

App. C 3 of 6	Revision Re-issue	Issue Date Feb 22, 2024	Replaces Dec 21, 2022	Originated by S. Roccatagliata/C. Journet	Approved by A, Delli Colli/F. Paletta
------------------	----------------------	----------------------------	--------------------------	--	--

BSEMEA QUALITY MANAGEMENT	Incoming Materials	SUPPLIERS QUALITY MANUAL	Q.S. 109
---------------------------	-----------------------	-----------------------------	-------------

9 **IMDS DECLARATION**

When applicable, Suppliers shall be registered in the International Material Data System (IMDS) <https://www.mdssystem.com/imdsnt/faces/login>.

It is also highly recommended that Suppliers get training from a qualified source. If a training cannot be done, then Suppliers shall read all the information available at the website: <https://public.mdssystem.com/en/web/imds-public-pages/new2imds/>.

Suppliers shall submit to Bridgestone Europe NV/SA the Material Data Sheet (MDS) Declaration of the product in line with the rules indicated in the IMDS General Rules and Guidelines and all other related documents.

Once the MDS Declaration is sent to Bridgestone Europe NV/SA, the compliance towards the IMDS Rules will be evaluated and Suppliers shall guarantee the modification of the MDS in case of errors until the MDS is acceptable.

In case of any changes in substances/materials contained in the products the MDS Declaration shall be updated and sent to Bridgestone Europe NV/SA for another evaluation.

10 **PACKAGING**

Packaging of chemicals intended to be used by Bridgestone Europe Plants, where applicable, shall be in accordance with the provisions set by CLP (Regulation (EC) No 1272/2008).

For chemicals delivered to Bridgestone Europe Plants not located in the European Union any local applicable regulatory provisions on packaging shall be respected.

10.1 **Marking of packaging**

Any packaging delivering materials subject to the provisions of Regulations on the transport of dangerous good (by air, road or sea) shall be appropriate for the substance(s) it contains and identified with the required marking as per ADR/IATA/IMDG/RID/ADN (dangerous goods regulation).

Wood in general is forbidden for use in packaging to be delivered to Bridgestone **EMEA** plants.

In case of authorized deviations, any wood packaging falling within the scope of the EU Directive 2000/29/EC and pertinent amendments, inter alia Commission Directive 2004/102/EC, shall report the required marking (ISPM15) when entering the Community territory.

10.2 **Packaging design**

Packaging must be designed to perform at best its function and has to consider:

- Waste volume minimization at user plant;
- Recyclability of materials;
- Compliance of chemicals (silica gel, humidity indicator chemicals, clays, etc) with the same legal requirements here above reported;
- Materials reusability (i.e. returnable elements of the packaging)
- Avoid as much as possible single use plastic

App. C 4 of 6	Revision Re-issue	Issue Date Feb 22, 2024	Replaces Dec 21, 2022	Originated by S. Roccatagliata/C. Journet	Approved by A, Delli Colli/F. Paletta
------------------	----------------------	----------------------------	--------------------------	--	--

11 LABELING

Labeling of chemicals intended to be used by Bridgestone Europe Plants, where applicable, shall be in accordance with the provisions set by CLP (Regulation (EC) No 1272/2008).

For chemicals delivered to Bridgestone Plants not located in EU, any local applicable regulatory provision on labeling shall be respected. In particular, labels shall conform with color, symbols and general shape to the models defined by the applicable legal requirement, if any.

12 ADDITIONAL REQUIREMENTS FOR ELECTRONIC PRODUCTS/COMPONENTS

Suppliers are required to ensure their product comply with following certifications/regulations:

- E-mark certification, where required because of the nature of the Products or their functions. Where such certification is not required, a written confirmation by Supplier that this is not the case, will be provided.
- CE certification following the Radio Equipment Directive (2014/53/EU) and any of its subsequent amendments. Certification has to be obtained pursuant to the applicable harmonized standards at the time and, where the product category so requires, with the involvement of an EU accredited Notified Body “NB” (accreditation must be maintained at least for as long as the Products are to be placed on the EU market). Certification has to be evidenced by supporting technical documentation and by a Declaration of Conformity;
- CTIA certification for the battery;
- Packaging and Packaging Waste Directive (94/62/EC) and any of its subsequent amendments which include without limitation Directive (EU) 2015/720;
- RoHS Directive (2011/65/EU) and any of its subsequent amendments which include without limitation Directive (EU) 2017/2102;
- Battery and Battery Waste Directive (2006/66/EC) and any of its subsequent amendments which include without limitation Directive 2013/56/EU;
- REACH Regulation ((EC) No 1907/2006) and any of its subsequent amendments which include without limitation Regulation (EU) 2018/675;
- WEEE Directive (2012/19/EU) and any of its subsequent amendments; and
- Compliance with any local laws and regulations that BSEMEA reasonably requests the Supplier to follow in the countries in which the products will be sold (e.g. French Decree No.2014-15733 requiring the placement of the “Triman” logo on recyclable product packaging).
- California Proposition 65 – For devices sold in North America

Depending on the destination country of the products, additional certifications may be required by BSEMEA such as, for example:

- NOM-NYCE -LATAM/Mexico
- UKCA – United Kingdom
- ICASA – ZA
- FCC – US
- Radio Spectrum Management – NZ (R-NZ)

App. C 5 of 6	Revision Re-issue	Issue Date Feb 22, 2024	Replaces Dec 21, 2022	Originated by S. Roccatagliata/C. Journet	Approved by A, Delli Colli/F. Paletta
------------------	----------------------	----------------------------	--------------------------	--	--

BSEMEA QUALITY MANAGEMENT	Incoming Materials	SUPPLIERS QUALITY MANUAL	Q.S. 109
---------------------------	-----------------------	-----------------------------	-------------

- SUBTEL -CL
- IC – Canada

13 **SAFETY MANAGEMENT SYSTEMS**

Bridgestone promotes the achievement of ISO45001:2018 certification amongst its suppliers : in case of supply of materials/tire components and services please send to Bridgestone TCE Tire Materials Development, TCEMATERIALS@bridgestone.eu, a copy of your certificate. Renewals shall also be sent within 2 months after the certificate expiry date. Supplier shall notify **BSEMEA** in case of change of certification status.

14 **VISIT OF BS PERSONNEL AT SUPPLIER'S PREMISES**

In the case of Bridgestone personnel visiting the premises of Supplier, this one shall inform preventively Bridgestone personnel of all risks that they might be facing during the visit. In no case shall Bridgestone personnel be exposed to carcinogenic, mutagenic or toxic agents nor be exposed to dangerous situations. In case of doubt, Supplier shall contact preventively Bridgestone Safety Manager of the location of origin of the personnel.

App. C 6 of 6	Revision Re-issue	Issue Date Feb 22, 2024	Replaces Dec 21, 2022	Originated by S. Roccatagliata/C. Journet	Approved by A, Delli Colli/F. Paletta
------------------	----------------------	----------------------------	--------------------------	--	--