

# Supplier Manual CDF01

Westport Fuel Systems Italia

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# 1 - ORGANIZATION

## 1.1 Introduction

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The Supplier Manual of WESTPORT FUEL SYSTEM ITALIA S.r.l. (WFSI) has been developed as a guide for Suppliers, to communicate the methodology applied by WFSI for assessment, qualification, monitoring and management of WFSI Suppliers.

This document also defines the level of Quality and Services that WFSI requires of its Suppliers in order to meet the highest demands of Customers and End Users. To achieve these goals, all Suppliers play a very important role, having to adhere to the requirements stated in this document.

This document is intended to be the primary document for communication of our Purchasing, Logistics and Quality philosophie, as well as Safety, Health and Environmental policies to our Suppliers.

This current version has to be considered as the only valid, potentially as replacement of previous release and/or other similar Documents mentioned on the documentation previously distributed (i.e. WFSI Drawings, ect) and it is available at following internet link:

[wfsinc.com/supplier-portal-europe/home](https://wfsinc.com/supplier-portal-europe/home)

## 1.2 About us

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At WFSI we are driving innovation to power a cleaner tomorrow.

By inventing, engineering, building and supplying clean and affordable alternative fuel systems and components, we are changing the way the world moves.

Our technologies deliver the performance, fuel efficiency and environmental benefits to address the challenges of global climate change and urban air quality. We serve Customers in more than 70 countries with leading global transportation brands.

**At Westport Fuel Systems,  
we think ahead.**

# 1 - ORGANIZATION

## 1.3 Application area

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The WFSI Supplier Manual will be applied to all procurement processes relating to operational manufacturing supplies/materials and auxiliary products, input materials, raw materials, semi-finished and finished materials (i.e. goods) as well as services supplied to WFSI closely associated with manufacturing processes.

This document complements the General Conditions of Purchase in effect and forms an integral part of each Purchase agreement signed by the Parties, as well as any kind of Purchase order sent by WFSI.

All parts, services and substances purchased and used for Supplier's manufacturing process relating to the subject matter of the contract must comply with the laws in force for both, the manufacturing and contract execution countries.

Supplies must take place in full compliance with the specific regulations in force in the Italian territory on Health, Safety and Environment.

## 1.4 Non-Disclosure Agreement (NDA)

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Much of the design and product development work being done at WFSI is proprietary. We recognize that Suppliers may be asked to share proprietary or confidential business information with WFSI to assist in the establishment of a solid and open relationship. To protect proprietary, product development and business information being communicated, we may require Suppliers to sign a Non-Disclosure Agreement protecting the interests of both parties.

## 1.5 Conflict Minerals

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WFSI, together with Suppliers and Partners, is committed to increase transparency regarding the origin of "Conflict Minerals" used in its products, in compliance with the rules defined by the S.E.C. and EU regulations.

Thus, WFSI will not consciously procure metals coming from Conflict Areas not certified "conflict-free". Steps shall be taken to document the status through an annual declaration process.

# 1 - ORGANIZATION

## 1.6 General Conditions of Purchase

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Any Purchase order sent by WFSI to its Suppliers reports the purchase conditions in detail.

The Supplier is responsible to:

- Comply with all requirements indicated on the WFSI Purchase Order
- Verify and ensure a manufacturing capacity appropriate to WFSI needs
- Notify WFSI of any deviations from requirements in a timely manner

## 1.7 Code of Conduct

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WFSI is committed to act ethically, meet all mandatory laws and requirements and pursue a culture of honesty, integrity and responsibility.

WFSI intends to maintain the highest standards of behavior together with the pursuit of the economic results.

WFSI Suppliers are asked to accept and respect this Code of Conduct.

# 1 - ORGANIZATION

## 1.8 Labour and Human Rights Policy

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Respect for Human Rights is a core value for WFSI, as well as sustainable business development.

WFSI policy is consistent with international treaties and European Regulations listed below, applying basic principles:

- United Nations International Bill of Human Rights (ONU)
- Universal Declaration of Human Rights
- International Covenant on Civil and Political Rights
- International Covenant on Economic, Social and Cultural Rights
- International Labour Organization (OIL) declaration on Fundamental Principles – n°29, 87, 98, 100, 105, 111, 138, 182 and Declaration on Fundamental Principles and Rights at work
- United Nation Convention on the Rights of the Child
- European Convention on Human Rights

WFSI is firmly committed to opposing forced labour, human trafficking and child labour.

WFSI strongly and concretely promotes a safe and healthy workplace, the freedom of association and collective bargaining and occupational safety.

This policy confirms the WFSI commitments to workers, suppliers, contractors, sub-contractors at each level, partners and all those who fall within the sphere of impact of WFSI value chain.

WFSI Suppliers are asked to accept and respect this Policy.

# 1 - ORGANIZATION

## 1.9 Regulation CE n°1907/2006 (REACH)

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From June 1st 2007 REACH Regulation places responsibility on industry to manage the risks from chemicals and mixtures, even the non-hazardous ones.

WFSI Suppliers must assure the regulatory compliance with this Regulation for all substances, mixtures and items sold to WFSI, through evidence of appropriate statement.

If the Supplier is not subject to REACH registration, WFSI needs to know whether all substances as such, or present in mixtures, intentionally released from the products supplied, have been registered in any case by the relevant Manufacturer and/or Distributor.

In the event where supplies are eligible for REACH exemptions and excluded from released field of application, WFSI Supplier is asked to send a declaration including:

- Information that products supplied contain SVHC substances from the most updated version of "Candidate List" issued by ECHA and/or substances from annex XIV REACH (authorization list) and/or substances from annex XVII REACH (restrictions list) in the version applicable at the time of declaration issue
- A copy of the most updated version of Safety Data Sheet (if applicable) of products purchased by WFSI, notifying any change of the declaration provided
- Evidence of Supplier's commitment to promptly notify to have learned of its own non-compliance to the REACH Regulation, as well as to suspend supplies related.

If a SVHC is present in an article supplied to WFSI above 0,1% (w/w), then the Supplier shall provide WFSI with all information required by REACH Regulation.

## 1.10 IMDS

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Automotive OEM Customers require all the supply chain, WFSI Suppliers included, the use of International Material Data System (IMDS).

Entry of the required data within this database is free of charge, is part of the Part Approval Process and must refer to **WFSI IMDS ID: 102779**.

# 1 - ORGANIZATION

## 1.11 Impurities and Chemical Substances

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All material supplied to WFSI must respect:

- the Lgs.Decree n. 49 on 14/03/2014 - Directive 2012/19/UE implementation on Electrical and Electronic Equipment Waste (**RAEE**) as amended.
- the 2011/65/UE Directive on 08/06/2011 (**ROHS**) of European Parliament and Council, on restricted use of determined **hazardous substances into electrical and electronic equipment** (recast) as amended.
- the CE n.850/2004 Regulation of European Parliament and Council on 29/04/2004 on **persistent organic pollutants** (POPs), modification of 79/117/CEE Directive.
- the UE n.2019/1021 Regulation of European Parliament and Council on 20/06/2019 on **persistent organic pollutants** (POPs, recast) as amended.
- the CE n.1005/2009 Regulation of European Parliament and Council on 16/09/2009 on **substances that deplete the ozone layer** as amended
- the UE n.517/2014 Regulation of European Parliament and Council on 16/04/2014 on **fluorinated greenhouse gases** as amended

# 2 – PRODUCT CLASSIFICATION

WFSI classifies its products in 3 families: Components/Products for Automotive OEM/DOEM Customers, Components/Products for After Market Customers and Components/Products for Non Automotive/Non AfterMarket Customers (i.e.Industrial, Marine, EarthMoving)

## 2.1 Components/Products for Automotive OEM/DOEM Customers

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There are three Functional Classes (CF) for these family:

- C.F.1: **safety** components/products, those whose defectiveness compromises the safety and security of persons;
- C.F.2: **important** components/products, those whose defectiveness compromises the functionality and reliability of the finished product;
- C.F.3: **secondary** components/products, those that do not affect particularly on the quality of the finished product.



**For the Drawings which does not have any of above indications (i.e. C.F.1, C.F.2, C.F.3), is recommended to refer to Chapter 3.1 and to the WFSI Purchase Order.**

**For Electronics Components the Functional Class is outdated by the selected Device specific Classification (i.e. AEC-Qxx) and it is implicit into the choice of Part Number.**

## 2.2 Components/Products for After Market Customers

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There are three Classes for these products:

- Critical: **safety** components/products, those whose defectiveness compromises the safety and security of persons;
- Important: **important** components/products, those whose defectiveness compromises the functionality and reliability of the finished product;
- Secondary: **secondary** components/products, those that do not affect particularly on the quality of the finished product.

**For Electronics Components the Functional Class is outdated by the selected Device specific Classification (i.e. AEC-Qxx) and it is implicit into the choice of Part Number.**

# 2 – PRODUCT CLASSIFICATION

## 2.3 Components/Products for No Automotive/No AfterMarket Customers

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For this kind of components/products it is recommended to refer to Classification, information and/or Customer requirements described into the reference documentation.  
Any doubts and information request can be addressed to the Electronic BU Purchasing Dept for components/materials or to the Electronic BU Engineering Dept for semi-finished ones.

# 3 – CHARACTERISTICS CLASSIFICATION

WFSI classifies characteristics according to the Product family.

## 3.1 Characteristics of Components/Products for Automotive OEM/DOEM Customers




The following classes of characteristics are provided, with specific symbols for each Plant WFSI, available on WFSI Drawing:

Characteristic	Symbol			
	WFSI		RSL	
	Cherasco	Brescia	Vancouver	Cambridge
Safety and Regulation		§		
Critical		##		
Important		#	-	-
Secondary	-	-	-	-

# 3 – CHARACTERISTICS CLASSIFICATION

## 3.1 Characteristics of Components/Products for Automotive OEM/DOEM Customers

Each Class of Characteristics shall comply with different requirements, summarized as follows:

CHARACTERISTIC CLASSIFICATION	DRAWING SYMBOL	target	how to control the characteristic involved	data storage (from recording date)
SAFETY and REGULATION		$Cpk \geq 1.67$ (scrap <0,5 PPM)	- 100% Automatic or Manual Check with 5 $\sigma$ threshold; - or SPC (Process Monitoring) - or Process Parameters Recording (only for "Special" Parameters)	15 years
CRITICAL		$Cpk \geq 1.33$ (scrap <63,4 PPM)	- 100% Automatic or Manual Check with 4 $\sigma$ threshold; - or SPC (Process Monitoring) - or Process Parameters Recording (only for "Special" Parameters)	10 years
IMPORTANT		$Cpk \geq 1$ (scrap <2700 PPM)	Variable Data Recording and Cp-Cpk elaboration on a minimum monthly base	10 years
STANDARD	no symbol available	Part Conformity	Sampling check based on the Control Plan frequency	/

For Electronics Components the Characteristics classification is outdated by the Manufactures official characteristics and it is implicit into the choice of Part Number.

# 3 – CHARACTERISTICS CLASSIFICATION

## 3.2 Characteristics of Components/Products for After Market Customers

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The following Classes of characteristics are provided and available on WFSI drawing:

Critical	<b>C</b>	whose non-conformity prevents products functionality
Important	<b>I</b>	whose non-conformity reduces product functionality
Secondary		whose non-conformity does not reduce product functionality but constitutes non-compliance with the design

**For Electronics Components the Characteristics classification is outdated by the Manufactures official characteristics and it is implicit into the choice of Part Number.**

## 3.3 Characteristics of Components/Products for No Automotive/No AfterMarket Customers

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For No Automotive/No AfterMarket Components/Products is valid the Classification for AfterMarket Customers – Chapter 3.2.

# 4 - SUPPLIER QUALIFICATION

WFSI selects, qualifies and monitors its Suppliers both for the Quality Management System and for the Integrated Health, Safety and Environment Management System.

## 4.1 Initial Qualification

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WFSI Purchasing Dept, in collaboration with WFSI Supplier Quality Dept, evaluates, qualifies and classifies all potential new Suppliers.

Evaluation and classification occur as follows:

- **Step 1 – Supplier Self-Assessment Questionnaire**  
WFSI Buyer asks to the potential Supplier to complete and return the Questionnaire.  
Any approval will be shared with WFSI Supplier Quality Dept and will take into account the applicable minimum requirements depending on the purpose and conditions (i.e. supplies intended for Automotive OEM/DOEM or AfterMarket Customers, Quality System Certification level, ect)
- **Step 2 – Supplier Audit.**  
If the Step 1 requirements are met, should the need arise, any WFSI entity may request the execution of Supplier Audit at the Supplier's facilities, carried out by the WFSI Supplier Quality Dept through specific checklists (i.e. ANFIA, VDA Potential Audit).

# 4 - SUPPLIER QUALIFICATION

## 4.2 Quality Management System

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WFSI asks to its Suppliers to have and maintain a third-party certified Quality Management System compliant to the following Standard:

- ISO 9001 (current version), as minimum requirement for OEM Components/Products Suppliers (See Chapter 2.1) with the target towards the IATF Certification
- IATF 16949 (current version), as preferred requirement for OEM Components/Products Suppliers (See Chapter 2.1)
- ISO/IEC 17025 (current version), as preferred requirement in case of External Labs for inspection, testing or calibration. Reference for that is the IATF 7.1.5.3.2 (External Labs - IATF16949)

WFSI Certified Suppliers are required to notify WFSI Purchasing Dept and/or WFSI Supplier Quality Dept about possible suspension/non-renewal of their Quality Certificate within 10 working days.

After expiry WFSI also asks to its Suppliers to proactively send the renewed Certificates.

# 4 - SUPPLIER QUALIFICATION

## 4.3 Integrated Health, Safety and Environment Management System

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WFSI asks its Suppliers to have and maintain a third-party certified Integrated Health, Safety and Environment Management System compliant to the Regulation ISO 14001 concerning the Environment and to the Regulation ISO 45001 concerning Health&Safety, as a preferred requirement.

WFSI Infrastructure & HSE Dept assesses and ranks every new Supplier for their Integrated Health, Safety, Environment Management System by asking the Supplier to complete and return the **Supplier's IMS Self-Assessment Questionnaire**.

WFSI Certified Suppliers are required to notify WFSI about possible suspension/non-renewal of their Quality Certificate within 10 working days.

After expiry WFSI also asks to its Suppliers to proactively send the renewed Certificates.

The duration of qualification for non-certified suppliers is three years, after which WFSI will resubmit the questionnaire.

WFSI reserves the right to carry out second party audits on the matter.

# 4 - SUPPLIER QUALIFICATION

## 4.4 Sub-Suppliers Quality Management Systems

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WFSI Suppliers are required to comply with all the requirements mentioned in these Specifications throughout their supply chain (sub-suppliers).

WFSI Suppliers will be fully responsible for ensuring the Quality of their sub-suppliers.

Starting with the choice of sub-suppliers, WFSI Suppliers are encouraged (where possible) to prefer sub-suppliers certified by an approved body or certified by the Supplier itself as a second party contractor.

In addition, WFSI Suppliers are required to guarantee the required level of quality by means of audits carried out in accordance with ISO 9001 and - eventually in the case of OEM supplies - in accordance with IATF 16949.

## 4.5 Risk Assessment

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WFSI Suppliers are required to have a risk assessment process in place to identify areas that could affect their ability to meet WFSI requirements and, consequently, to identify and implement appropriate actions.

# 4 - SUPPLIER QUALIFICATION

## 4.6 Corporate Social Responsibility

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WFSI intends to promote and monitor supplier companies on the topic of Corporate Social Responsibility (CSR) by sending out a specific questionnaire on the topic.

Corporate (and Organizational) Social Responsibility is defined as "the integration on a voluntary basis by companies of social and environmental concerns into their operations" (business and their dealings with stakeholders European Commission Green Paper, July 2001). This definition was expanded and articulated by the European Commission in its Communication on a "Renewed EU strategy 2011-14 for Corporate Social Responsibility" - COM (2011) 681 final.

By renewing its efforts to promote CSR, the European Commission intends to create favorable conditions for sustainable growth, ethically responsible corporate behavior and sustainable job creation in the medium and long term also through a new corporate governance, which must look at human and social capital and territorial communities as a form of sustainable investment.

Incorporated into European policies with the 2001 Green Paper, the renewed EU Corporate Social Responsibility (CSR) Strategy currently continues with the CSR indications contained in the Europe 2020 Strategy and the Entrepreneurship 2020 Action Plan - COM (2012) - 795, the Industrial Policy Initiative and the Single Market Act, in order to create favorable conditions for sustainable growth, responsible business behavior, territorial communities and sustainable job creation in the medium and long term. Moreover, this Strategy also refers to internationally recognized principles and guidelines (the UN Guiding Principles and the OECD Guidelines and ILO Conventions).

The Ministry of Labour and Social Policy is a member of the OECD National Contact Point Committee established at the Ministry of Economic Development and promotes the dissemination of the OECD Guidelines for Multinational Enterprises and Responsible Business Conduct (RBC).

In this framework, the company is asked to assume a social role and to take responsibility for the environmental impacts and consequences of its activities, accounting for the effects, including economic and social ones, on the surrounding environment.

# 5 – SUPPLIER MONITORING

WFSI monitors the performance of its Suppliers through the following instruments:

- **Process/Product Audits, Technical Verifications, Production Capability Assessments:** these are carried out by qualified WFSI personnel and WFSI Customer personnel authorized to visit WFSI Suppliers' production facilities at short notice, following the development of new Suppliers and/or new products, unsatisfactory performance results, Non Conformities on delivered products, etc..
- **Supplier Rating:** the result of monthly evaluation is the Supplier Global Evaluation Index (IVGF) and is based on 6 different aspects:
  - Quality Disturbance (IVFT), is the actual disturbance caused to WFSI by a Supplier Nonconformity, its type and impact
  - Product Conformity (PPM)
  - Impact on the End Customer (EDC) including yard stoppages and production stops
  - Punctuality of Deliveries (OTD)
  - Reactivity (RT) - communication of containment actions against Non-Conformity in accordance with the required timeframe
  - Quality System Certification (Q) - as described in Chapter 4.2

This evaluation allows WFSI to classify its suppliers into the following 4 categories:

Classe	
Preferred Suppliers	A – Recommended Suppliers for Orders and New Product Development
Approved Suppliers	B – Suppliers eligible for supply
Difficult Suppliers	C – Suppliers from whom a specific Action Plan is required within 30 days of receipt of the evaluation
Critical Suppliers	D – Suppliers not authorized to continue supplies

# 6 – PRODUCTION PART APPROVAL PROCESS

WFSI bases its production part approval process on a sampling of 5 samples representative of the production process provided by Supplier upon request, together with PPAP documentation (except in case of different request made through the Purchase Order).

The Supplier is responsible for informing and providing samples and PPAP documentation in case of design, process, production plant change and new or modified tool/equipment. The approval is to be considered concluded only after the PSW is signed and issued by WFSI.

In case of NoAutomotive supplies, WFSI reserves the right to not proceed with the PPAP request as previously described and below detailed.

## 6.1 PPAP submission levels

Unless otherwise agreed, PPAP documentation expected by WFSI is described in the following table and refers to the:

- PPAP Level 3 for Components/Products for OEM/DOEM Automotive Customers with impact on safety or functionality (see Chapter 2.1) or AEC-Qxx classified, off-the-shelf parts included
- PPAP Level 2 for:
  - Components/Products for OEM/DOEM Automotive Customers without impact on safety or functionality (see Chapter 2.1), off-the-shelf parts included;
  - Components/Products for After Market Customers, where available.

Requirement	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Level 4</u>	<u>Level 5</u>
Design Records of Saleable Products	R	S	S	•	R
Engineering Change Documents (if any)	R	S	S	•	R
Customer Engineering Approval (if required)	R	R	S	•	R
Design FMEA	R	R	S	•	R
Process Flow Diagram	R	R	S	•	R
Process FMEA	R	R	S	•	R
Dimensional Results	R	S	S	•	R
Material Performance Test Results	R	S	S	•	R

# 6 – PRODUCTION PART APPROVAL PROCESS

## 6.1 PPAP submission level

Requirement	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Level 4</u>	<u>Level 5</u>
Initial Process Studies	R	R	S	•	R
Measurement Systems Analysis Studies (MSA)	R	R	S	•	R
Qualified Laboratory Documentation	R	S	S	•	R
Control Plan	R	R	S	•	R
Traceability (if required)	R	R	S	•	R
Part Submission Warrant (PSW)	S	S	S	S	R
Appearance Approval Report (AAR), if required	S	S	S	•	R
Raw Material requirements list				•	
Sample Product	R	S	S	•	R
Master Sample	R	R	R	•	R
Checking Aids	R	R	R	•	R
Records of Compliance with Customer Specific Requirements	R	R	S	•	R
Packaging Sheet	R	R	S	•	R

*S = The organization presents to the Customer (WFSI) and stores a copy of records or documentation in appropriate places.*

*R = The organization must store in appropriate places and make available to the Customer (WFSI) upon request.*

*• = The organization must store in appropriate places and present to the Customer (WFSI) upon request.*

# 7 – TRACEABILITY

## 7.1 General requirements

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The WFSI Supplier must assure its products traceability along the entire process chain, input materials included, as a part of root cause analysis, especially to limit stocks compromised by defects and inadequacy, as well as those in circulation and transit.

The Supplier should immediately and completely check the classification nature and process of these stocks.

Traceability must be assured through a barcode batch number for all Automotive components/products: WFSI Supplier is requested to provide explanatory documents when submitting PPAP, such as pictures, labels, data content and so on.

## 7.2 Raw Material requirements for WFSI Mechanical Div.

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For any component/product with specific requirements on drawing about Raw Material mechanical and/or chemical features, the use of the correct Raw Material must be guaranteed through a UNI EN10204 point 3.1 Certificate.

WFSI Supplier must always be able to provide WFSI with a copy of the Certification mentioned above.

WFSI Suppliers deliver all metal bars/finished/semi-finished products according to the following requirements:

- Brass → obtained from drawn and round bars, accompanied by Raw Material Certificates according to UNI EN1024 point 2.2 certifying composition, mechanical characteristics and according to drawing indications;
- Steel → obtained from drawn and round bars, accompanied by Raw Material Certificates according to UNI EN1024 point 2.2 certifying composition, mechanical characteristics and according to drawing indications;
- Aluminum alloys → accompanied by Raw Material Certificates according to UNI EN1024 point 2.2 certifying composition, mechanical characteristics and according to drawing indications.

# 7 – TRACEABILITY

## 7.3 Raw Material requirements for WFSI Electronics Div.

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All consumables must be delivered by WFSI Suppliers in accordance with the following requirements:

- Tin alloys e for electronic soldering → in accordance with the latest revision of the technical reference datasheets and compliance with the reference standards/guidelines (i.e. IPC-J-STD-004B, IPC TM-650 points 2.6.3.7-2.4.44-2.4.35-2.4.43, IEC 612249-2-21, IPC-J-STD-005, ect)
- Sealing Silicones for electronic assy → in accordance with the latest revision of the technical reference datasheets and compliance with reference standards/guidelines (i.e. ISO 11600-F&G-25LM, DIN 18540 Class F, EN 15651-CE MARK, etc.)
- Paints and Resins for Conformal Coating Electronic Assemblies → in accordance with the latest revision of the technical datasheets and compliance with the relevant standards/guidelines (UL, IPC-CC-830, Mil-I-46058C, etc).

# 8 – INCOMING INSPECTION

Suppliers to WFSI commit to assure full compliance of supplies with quality standards, statutory and regulatory requirements or any CSR (Customer Specific Requirements) in case of OEM supply, performing all necessary products/process controls through its technical/organizational structures.

All supplies and materials delivered by Supplier to WFSI, except for sampling, are considered in "Free-pass" and, as a rule, will not be subjected to any acceptance inspection.

In any event, WFSI reserves the right to occasionally carry out random or 100% checks on incoming lots at its sole discretion, in order to assess the Supplier's compliance with these commitments and/or especially as a result of previous noncompliance.

"Free-pass" implies that in any case the Supplier's total assumption of responsibility for any direct or consequential damage and/or cost caused to WFSI.

# 9 – NON COMPLIANT PRODUCTS

In the event of material not complying with specifications, WFSI drafts a specific Nonconformance Report and sends it to the Supplier, who shall:

- Comply with requests (completion of 8D problem solving report) and respond within the timing specified by the form, from the immediate containment action (within 24 hours after receipt of notification) up to the effective resolution
- Inform WFSI personnel who drafted the Nonconformance and agree on containment and disposition of the defective material
- Bear the Nonconformance management default costs in the amount of € 200.00 for each report sent.
- Pay for any cost incurred for sorting, rework, production downtime, special shipping, returns of Noncompliant material and more (directly or as a result of a Debit Note issued by WFSI).



**Repeated occurrences due to ineffective countermeasures are not acceptable and require corrective actions to eliminate the process deficiencies. Lesson learned from documented nonconformities shall be extended to similar processes and products supplied to WFSI. WFSI may take extraordinary measures such as Supplier Audit, suspension of supplies, hold of new business, removal from the list of qualified suppliers, etc as needed.**

# 10 – DEVIATIONS FROM SPECIFICATIONS

WFSI expects all supplied parts/products to fully comply with the requirements.

Non-conforming parts may not be sent to WFSI without written authorization from WFSI.

In the case of deviations from the specifications, the supplier must promptly inform WFSI with the relevant details and reasons, by means of a special Deviation request.

After appropriate analysis, WFSI will consider whether to accept/reject such a request. Until that time, the Supplier is not authorized to supply parts under those conditions.

In the event that this does not happen, the Supplier is liable for all misunderstandings and problems caused and will be penalized; it will be answerable to WFSI for all operations necessary for the return of material and any downtime or lost sales.

# 11 – MOULDS AND EQUIPMENT

WFSI-owned moulds and equipment for the production of components may be loaned for use by the Supplier, who is obliged to preserve and maintain them to the best of its ability.

For the duration of the supply contract, WFSI Supplier is therefore obliged to carry out ordinary and extraordinary maintenance work at its own expense.

In case of Testing Equipment, a maximum time limit of 11 working months (12 months less 30 working days) is established within which the supplier must notify WFSI of the calibration expiry date shown on the label. WFSI will send the new label and/or will verify (by an agreed visit to the supplier or shipment of the test to WFSI) the Testing Equipment by issuing a new label.

It is a clear Supplier responsibility to communicate WFSI non-functioning/partial functioning of the Testing Equipment during the period of loan for use, in order to avoid the shipment of non-compliant products/semi-finished products to WFSI.

In the Supplier quotation, the Supplier is obliged to specify the technical characteristics, production capacity and number of pieces guaranteed by the Equipment/Mould offered.

When a Mould and/or Equipment is close to reaching the end of its life, the Supplier is obliged to inform WFSI by making an appropriate request for new construction, providing evidence by submitting samples and a detailed description of the reasons. This request has to be done sufficiently in advance in order to guarantee regular supplies, any damage due to such failure will be charged to the Supplier.

Pursuant to Art. 23 and Art. 72 of Legislative Decree 81/08 as amended, WFSI will only supply Moulds and Equipment that comply with the applicable laws and regulations.

Any work on WFSI moulds and equipment made by the Supplier must be authorized in advance by WFSI.

# 12 – CHANGES MANAGEMENT

## 12.1 Design Changes

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In case WFSI modifies a Drawing, WFSI Purchasing informs the Supplier by sending the new drawing and asking for a new quotation keeping into consideration the related PPAP sampling preparation.

Any Design Change intended by the Supplier (i.e. off-the-shelf parts included) must be promptly communicated to WFSI for analysis, and prior approval, followed through PPAP sampling.

Any Design Change made by the Supplier but not communicated to WFSI and not analyzed/assessed/approved by WFSI, is not authorized and deemed a non-conformity.

## 12.2 Process Changes

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Suppliers desiring a process change (i.e. change of manufacturing site, new sub-supplier, new or modified equipment, etc) shall submit a completed Process Change Notification to the WFSI as soon as the modification project is known.

Any Process Change intended by the Supplier (i.e. off-the-shelf parts included) must be promptly communicated to WFSI for analysis, and prior approval, followed through PPAP sampling.

Any Process Change made by the Supplier but not communicated to WFSI and not analyzed/assessed/approved by WFSI, is not authorized and deemed a non-conformity.

# 13 – REQUALIFICATION

The WFSI Supplier has to apply a re-qualification procedure for its components/products:

- In case of changes in the conditions present at the time of approval.
- Regularly, at least once a year, on products for OEM/DOEM Automotive Customers (unless otherwise agreed). The supplier must maintain a re-qualification/monitoring program for reliability and environmental testing in order to assure and demonstrate to the customer that the delivered products meet all agreed requirements. All related documentation must be stored and accessible at all times upon specific request by WFSI.

# 14 – SUSPENSION OF SUPPLY

If any one of the following conditions may apply, WFSI reserves the right to suspend supplies:

- Failure to comply with the WFSI Purchasing General Conditions
- Products and/or manufacturing processes changes made by Supplier without proper notice and/or WFSI authorization
- Negative Test results
- Improvement Plans not respected
- Lack of controls
- Components rejected by the Customer due to malfunction
- Inadequate Supplier Responsiveness
- Failure to comply with delivery date and quantities

In case of defects:

- Recurring on the same product;
- With a direct impact on Safety

WFSI applies in cascade, the following Control Shipping Levels:

- CSL1 – the supplier must internally 100% control & certify next shipments;
- CSL2 – the supplier must 100% control & certify next shipments by an external Provider, within 48 hours of receiving official notification. If the Supplier is unable to select a Provider, WFSI will provide references. The minimum requirements are:
  - ISO 9001 Certification
  - Previous experience of 5 minimum years in sorting activities
  - Specialized documentation (dedicate reporting)

Should one or more Non-Compliance(s) related to the CSL2 activation persist, the NBH (New Business Hold) procedure will be activated.

# 15 – LOGISTIC

## 15.1 Order Management

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WFSI Suppliers are obliged, according to the General Terms and Conditions of Purchase, to verify and ensure adequate production capacity for WFSI's needs.

Suppliers are required to communicate to WFSI a reliable lead time (time from order to delivery), on the basis of which WFSI will schedule the procurement of materials. This lead time must be reasonable and in line with the Sector lead times.

For each Order received, the Supplier is also obliged to provide an order confirmation (date and quantity). Failure to send such a confirmation shall be deemed after 3 days as a confirmation of the Order in the required time and quantity. In the event of deviation from the requests/confirmations, the Supplier is obliged to promptly notify WFSI.

The order types are, in general, as follows:

- Closed Order
- Call-off from Open Order
- Vendor Scheduling

WFSI reserves the right to request advances or postponements on current orders. Advances are often aimed at ensuring continuity of production, which requires flexibility and responsiveness on the part of the supplier, as well as the ability to organize urgent transport independently in cases where this is requested by WFSI.

The Supplier is obliged to accept the postponement requests received:

- at least 7 days before the estimated transport start date, for Orders received from WFSI Mechanical Div.
- within the cancellation window, for Orders received from WFSI Electronic Div.

In addition, the supplier may not present material for delivery earlier than the scheduled dates.

WFSI reserves the right to charge the Supplier for any extra cost-generating impacts resulting from failing to meet confirmed dates and quantities.

Any exceptions must be agreed with the involved WFSI Dept.

# 15 – LOGISTIC

## 15.2 Packaging and Deliveries

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WFSI Suppliers must ensure adequate packaging of supply products to protect the material during any kind of transport and handling. Avoiding dents, knocks, damage both to the packaging itself and to the parts inside.

The Supplier is required to comply with the specifications defined (Packaging Sheets) and approved by WFSI during the PPAP.

Packaging of the parts must be in packages with a total weight of no more than 15 kg (12 kg recommended). Only one item must be contained within each package. The pallets must be stable and well protected by protective film.

For safety reasons, if there is a risk of overturning and loss of load due to the type of packaging, it must be properly secured (e.g. metal or plastic strapping, plastic film). WFSI cannot handle (in particular loading and unloading from the vehicle) unsafe loading units: in such situations, any extra costs for dismantling and reassembling the pallet will be borne by the Supplier, according to the terms of delivery.

In order to protect the environment, priority must be given to packaging using recycled and reusable material. Furthermore, the continuous optimization of logistics must be pursued by improving the loads on pallets and means of transport.

In the case of inadmissible stacking of several pallets, it is the responsibility of the WFSI supplier to apply an identification sign in English "DO NOT STACK".

# 15 – LOGISTIC

## 15.2 Packaging and Deliveries

As an example, when stated in the WFSI technical documentation, the type of packaging is defined as follows:

IDENTIFICATION CODE	PACKAGING DESCRIPTION
SC	Rearranging components in cardboard boxes
ASC	Rearranging components in beehive cardboard boxes
RSC	Bulk components in cardboard boxes
SSC	Components inside plastic bags in cardboard boxes
RCF	Bulk components in iron boxes
CF	Rearranging components in iron boxes
ACF	Rearranging components in beehive iron boxes
TSC	Components on thermoformed in cardboard boxes
TCP	Components on thermoformed in plastic boxes
SSA	Components inside plastic bags in beehive boxes
CP	Rearranging components in plastic boxes
P	Rearranging components on pallet
CAP	Buy components packed
SD	Drawing specific
APL	Rearranging components in beehive plastic boxes

# 15 – LOGISTIC

## 15.3 Material Identification



Labelling of overpacks (pallets) and individual packages (parcels) must be carried out by means of goods identification plates.

As far as the **parcel label** is concerned, the following information **must be** included:

- WFSI Part Number (P/N)
- Shipping/Production Date (DATE)
- Shipped quantity (QUANTITY)
- WFSI Supplier Code (SUPPLIER): is the code that WFSI assigns to each supplier; this code can be found on each WFSI purchase order and consists of 7 digits (e.g. 4009009)
- Supplier batch number (BATCH #).

The image "**Label No. 1**" is an example of how the label should be presented on a single box or parcel:

**Label n°1**

   P/N	ID	4000016118299
	P/N	AL756552P
	DESCR	Corpo alluminio arrotondato fragile
	DATE	22/11/2020
	QUANTITY	500
	SUPPLIER	4000988
	RECIPIENT	TG33
	POSITION	A01
	START LOCATION	L0233
	BATCH #	SPL3417

WFSI provides the Supplier with instructions on the content and format of these labels.

Any exceptions must be agreed with the involved WFSI Dept.

# 15 – LOGISTIC

## 15.3 Material Identification

As far as the **summary label** is concerned, the following information **must be** included:

- Order type and number (ORDER)
- WFSI Part Number (P/N)
- Shipping/Production Date (DATE)
- Shipped quantity (QTA)
- WFSI Supplier Code (SUPPLIER): is the code that WFSI assigns to each supplier; this code can be found on each WFSI purchase order and consists of 7 digits (e.g. 4009009)
- Supplier batch number (LOT #).

The image "**Label No. 2**" is an example of how the summary label should be presented: it is a summary label, therefore it is unique and must contain all data relating to the entire delivery of each individual item. This label must follow the Ddt and can be printed on a simple A4 sheet of paper: no adhesive label is needed. The Summary Label must be a minimum size of A5 (210mmX148mm).

**Label n°2**



WFSI provides the Supplier with instructions on the content and format of these labels.

Any exceptions must be agreed with the involved WFSI Dept.

# 15 – LOGISTIC



**Remember that on each parcel there must be all the information related to the item inside the parcel itself, while the Summary label must group all the information related to the entire batch delivered.**

In the case of multi-pallets, there must be a detail label showing codes and quantities on the individual pallet (packing list).

In the case of two or more batches of the same article in the same delivery, the necessary steps are as follows:

- Stack the boxes so that the newest batch is placed at the bottom of the pallet while the “oldest” batch should be placed at the top of the pallet so that it can be used first;
- There must be a summary label for each batch on the pallet (3 batches = 3 labels).

## 15.4 MMOG-LE

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WFSI is a company that applies the MMOG-LE (Global Materials Management Operations Guideline - Logistics Evaluation) principles in the automotive sector and operates in compliance with these requirements, which were introduced to allow companies to develop and refine their Materials\_Planning\_and\_Logistics (MP&L) processes to a World\_Class level.

Specifically considered is the process of managing the procurement, handling, storage of materials, parts and finished products (and related information flows) throughout the organisation through efficient and effective order management.

The WFSI Logistics Organisation sends the Questionnaire to the Supplier requesting its completion and return.

Any exceptions must be agreed with the involved WFSI Dept.

# 15 – LOGISTIC

## 15.5 WFSI Supplier Portal

The Supplier is obliged to use the WFSI Portal

<http://supplier.brc.it/Login.aspx>

The screenshot shows the Westport Fuel Systems Italia Supplier Portal interface. At the top is the Westport Fuel Systems logo. Below it, the text reads "WESTPORT FUEL SYSTEMS ITALIA SUPPLIER PORTAL". The main content area is divided into two sections. The first section, titled "Login", contains a form with fields for "UserID:" and "Password:", a "Remember me" checkbox, and "Logon" and "Reset" buttons. The second section, titled "NEW SUPPLIER?", contains the instruction "FILL IN BOTH THE FIELDS IN ORDER TO GET THE SELF EVALUATION MODULES". This section has two columns of input fields: "Supplier Name" and "VAT Number" on the left, and "Select a file to upload:" with a "Scogli file" button and "Nessun file selezionato" text on the right. Below these is an "Upload file" button and a "Send Informations" button. At the bottom of the page, there is a footer with logos for VALTEK, emer, OMVL, ZAVOL, and BRC, along with contact information for Westport Fuel Systems Italia S.r.l. (Via La Meria, 1 - 12062 Chianasso (Cn), Italy, P.IVA 0025993043), a phone number (+39 0172 46081), and the website www.wfsinc.com.

In order to ensure an efficient and unambiguous exchange of information between the parties, to manage orders and to generate labels.

WFSI provides the Supplier with detailed instructions on the content and use of the Portal.

Any exceptions must be agreed with the involved WFSI Dept.

# 15 – LOGISTIC

## 15.6 CONAI

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WFSI Suppliers are required to indicate on sales invoices the data necessary for CONAI (CONSORZIO NAZIONALE IMBALLAGGI) obligations.

In order to fulfil its obligations towards CONAI, WFSI Infrastructure & HSE sends foreign Suppliers a table requesting certain information on packaging (e.g. type, description, quantity, weight, etc.) and asks them to fill it in.

Please note that the foreign company that intends to take the place of Italian customers in the fulfilments required by the consortium provisions can do so by appointing a fiscal representative pursuant to Article 17 of Presidential Decree 633/72 (VAT regulations).

The fiscal representative must register with CONAI in the name and on behalf of the represented company and carry out the periodic settlement of the CONAI Environmental Contribution and the relative payment.

Alternatively, in the absence of a fiscal representative, CONAI allows foreign companies with direct identification for VAT purposes in Italy to elect a special domicile for the purposes of the Environmental Contribution only and to fulfil the same settlement, declaration and payment obligations as the fiscal representative.

If the appointment of a fiscal representative and direct identification are precluded for a foreign company which, although making direct sales to Italian customers, has a permanent establishment in Italy, the right to replace such customers in fulfilling the obligations provided for by the consortium provisions is granted to the same permanent establishment, which, in the name and on behalf of the parent company, registers with CONAI and fulfils the obligations of settlement, declaration and payment of the Environmental Contribution.

It should be noted that, in all the above cases, the sales invoices of the packaging (empty and/or full) must also include the information relating to the CONAI Environmental Contribution required by the consortium provisions, so as to allow national customers to have the necessary information for any subsequent fulfilment.

## 15.7 Electronics Supplies Specifications

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For suppliers linked to specific electronic supplies, please refer to the respective standards on labelling and packaging of electronic components.

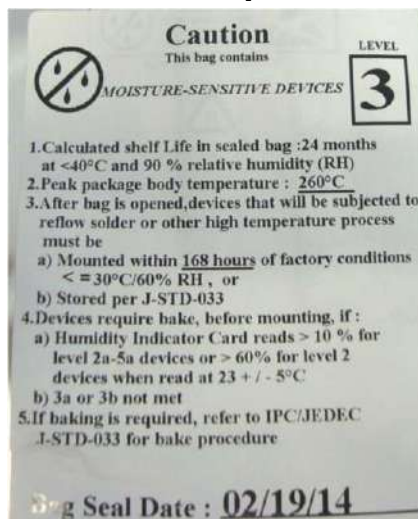
# 16 – SPECIFIC REQUIREMENTS FOR COMPONENTS, MATERIAL AND ELECTRONICS PRODUCTS

## 16.1 Moisture-sensitive Manufacturers and Distributors Supplies

These electronic components (moisture sensitive devices) must necessarily be vacuum-sealed in ESD-compliant packaging: a standard label (Moisture sensitive caution label) must be affixed to each package with the following information:

- Level
- Supplier Packaging Date
- Storage period under vacuum conditions
- Ambient conditions required for storage
- Use time after opening the package

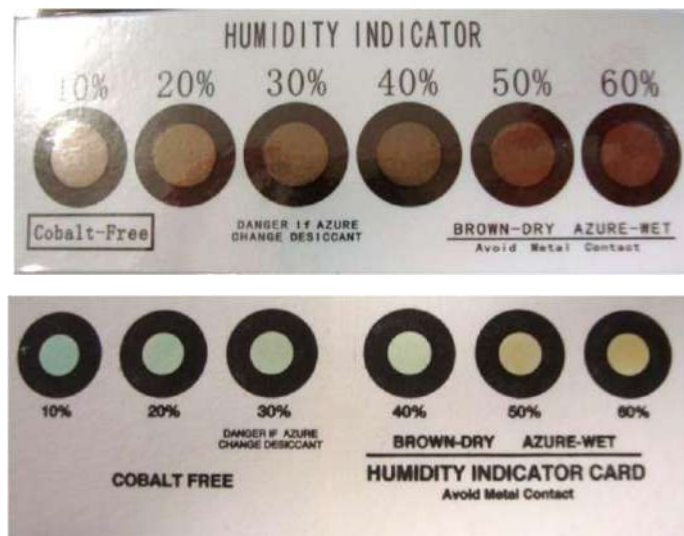
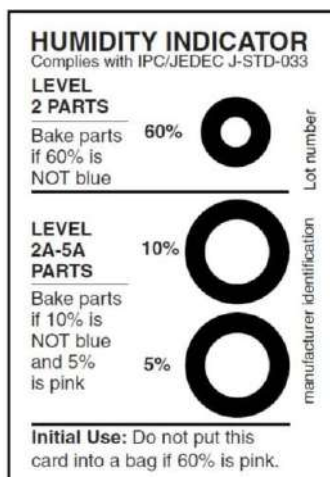
### Example:



# 16 – SPECIFIC REQUIREMENTS FOR COMPONENTS, MATERIAL AND ELECTRONICS PRODUCTS

## 16.1 Moisture-sensitive Manufacturers and Distributors Supplies

Inside each package, there must be a relative humidity indicator to show the state of preservation of the components themselves and in some cases dehydrating bags (made of silica gel). Some examples of moisture indicators (HIC):



## 16.2 Not Moisture-sensitive Manufacturers and Distributors Supplies

Such electronic components (no moisture sensitive devices) must be packaged in such a way as to avoid oxidation on the metal parts and must be contained in specific packaging that avoids electrostatic discharge phenomena (shielding bags).

In case of specific cleaning requirements, unitized and/or vacuum packaging may be required.

# 16 – SPECIFIC REQUIREMENTS FOR COMPONENTS, MATERIAL AND ELECTRONICS PRODUCTS

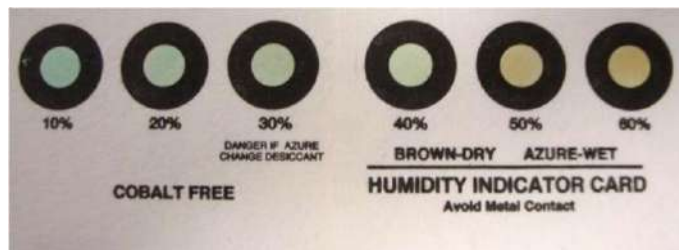
## 16.3 PCB Manufacturers Supplies

Printed circuit boards (PCBs) must be free of all traces of contamination and must be thoroughly cleaned without affecting the surface of the circuit.

No rework is allowed on printed circuit boards dedicated to the automotive and in some cases non-automotive market.

Printed circuit boards must be tested for moisture level according to IPC TM 650 2.6.28 - Moisture Content and/or Moisture Absorption Rate, (Bulk) Printed Board.

Printed circuit boards must be vacuum-packed: each package must be equipped with a moisture indicator (HIC) to show its state of preservation, and in some cases dehydrating bags (made of silica gel), placed inside the first level packaging, in a special arrangement so as not to damage the PCB(s). Here is an example of a moisture indicator (HIC):



The packaging must be designed to withstand mechanical stress, contamination during transport or storage, prevent moisture risk, be protected against ESD.

Reference standards, latest revision:

IPC A 600 – Acceptability of Printed Boards

IPC-6012 - Qualification and Performance Specification for Rigid Printed Boards

IPC 1601 – Printed Boards Handling and Storage Guideline

IPC 5704 – Cleanliness Requirement for Unpopulated Printed Boards

IPC TM 650 2.3.25 - Detection and Measurement of Ionizable Surface Contaminants by Resistivity of Solvent Extract.

# 16 – SPECIFIC REQUIREMENTS FOR COMPONENTS, MATERIAL AND ELECTRONICS PRODUCTS

## 16.4 PCB/PCBA Cross-sections and Additional Test

Below are some general guidelines to be followed by PCB Manufacturers and/or Testing Laboratories, subject to written agreements and purchase conditions agreed with WFSI:

- For conducting cross-sections refer, but not necessarily only, to the IPC-TM-650 TEST METHODS MANUAL paragraph 2.1.2 Cross-sectioning-Semi or Automatic Technique Cross-section Equipment (Alternate) for rigid PCBs.
- PCB cross-sections are mainly intended to check the quality of the following characteristics (main references IPC 600 and 6012 latest revisions):
  - PCB raw material;
  - Internal structure of multilayer panels;
  - Connection between layers;
  - Coverage and thickness (angular) soldermask;
  - Thickness and integrity of surface finish;
  - Metallisation and thickness in through holes when existing;
  - Thickness and register of external and internal conductors.
- The cross-sections of PCBAs are mainly intended to check the quality of the following characteristics (main references IPC A-610 latest revision):
  - visual condition of welds for THT and SMD components
  - X-ray analysis e.g. for checking presence of voids;
  - Intermetallic soldering;
  - visual status of post-soldering components;
  - presence of possible copper dissolution.

The above, following the acceptability criteria below, where applicable/required by customers:

- Target condition: an ideal condition of total lack of imperfections;
  - Acceptable condition: condition that is not necessarily perfect, but still guarantees the full functionality of the assembly. This situation occurs, for example, when cavities are found in the weld;
  - Defect condition: condition in which the functionality of the assembly is no longer ensured. This condition is linked, for example, to the presence of cracks in the weld that cause it to fail;
  - Process indicator condition: condition that identifies an imperfection that recurs but does not affect the functionality of the assembly.
- Pull&Shear Test: according IEC-62137-1.1/ IEC-62137-1.2, on components to be agreed with WFSI
  - Bending Stress: according UNI 10478, in process steps to be agreed with WFSI.

# 16 – SPECIFIC REQUIREMENTS FOR COMPONENTS, MATERIAL AND ELECTRONICS PRODUCTS

## 16.5 Electronics components Independent Distributors Supplies

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Given the current situation in the international market, WFSI has decided to extend this specification to this category of Distributors, subjecting them to the screening and qualification standards usually used for official Distributors/Suppliers.

These specifications must be duly accepted by these reference Suppliers before placing purchase orders to ensure quality products.

Revision No.-Date	Revision Description	Editor	Approver
04 – 03 April 2024	General review. Cherasco and Brescia Supplier Quality Manuals harmonization	E.Robasto	E.Zanini
05 – 20 January 2026	Cap.5: added note in blue color	E.Robasto	E.Zanini
06 – 17 March 2026	Pag.12: modified control method for Safety and Critical characteristics	E.Robasto	E.Zanini

