SUPPLIER QUALITY SPECIFICATION

REV.	DRAFT BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
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REV.	PARAGRAF	CHANGE DESCRIPTION
00	All	First release
01	All	Alignment to VDA 6.3 requirements
02	All	Alignment to IATF 16949
03	All	Complete update
04	1, 6, 12, 15, 19	Alignment with VW requirement. Up-date of D/TLD and PSCR arguments.

CONTENTS

1. Customer expectation

The prescriptions indicated in this Specification aim at:

- defining the requirements necessary for the product self-qualification, consisting of the verification of the full compliance with the technical specifications/drawings before sending the supply to IMR Industriale Sud S.p.A. (hereinafter IMR)

- extend OEM requirements to the supply chain (example Formel Q VW)

- ask the supply chain to implement continuous performance improvement methodologies that generate the conditions for achieving the Zero-Defect strategy in deliveries

- in case that the suppliers do not undertake to improve their performance and in presence of repetitive defects at IMR, a Critical Suppliers program will be applied up with the aim of expelling the supplier from the IMR supplier list in case of failure in the performance stabilization

- in presence of repetitive defects at IMR, the supplier is required to adopt extraordinary measures relating to the 100% check of IMR stock, the implementation of 100% check on its deliveries and, upon request by IMR, is required to use external Service Providers for 100% product/process check

- IMR reserves the right to carry out process/product audits at any time

NOTE: This document is to be considered valid for all IMR-Industrialesud Exterior Division production sites; therefore, it is applicable regardless of the origin of the supply orders and the specified delivery destination.

2. Supplier technical documentation

The Supplier shall prepare and implement, with all the necessary updates, the written prescriptions concerning the assurance of the quality and reliability requirements of the products to IMR (drawings, manufacturing cycles and testing, material specifications, etc.).

3. Subcontractor

Regarding the control of subcontracting, it should be noted that the Supplier, once he has previously ascertained the suitability of his subcontractor, must ensure that the latter plans the quality assurance system the same way he does according to the here mentioned perspective. The timely implementation of corrective interventions towards the subcontractors must always be guaranteed to IMR-ISUD.

During the supply, any replacement of the subcontractors must be reported to IMR-ISUD in those cases in which such replacement may involve changes to the production cycle and/or the materials. The regularization of the modification to the supply chain must be regularized through requalification tests and specific sampling towards IMR-ISUD.

4. Control means

During the assignment phase, the Supplier must verify that he has adequate control means / test equipment, in quantities such as to ensure that all the checks and tests required on the order are carried out, in order to

guarantee compliance of the product features to the IMR-ISUD technical documentation in all production phases. Such means will be periodically subjected to efficiency and calibration tests according to a specific written programme and specific instructions for calibration and maintenance. If the supplier does not have the means of control / test equipment, he must formally inform the IMR-ISUD purchasing department.

5. Changes

The Supplier may not make any changes to the product/process without IMR-ISUD prior and formal authorization. The Supplier who intends to propose changes to the product/process, due to specific production needs, must accompany the request with the certification of the tests carried out for its redevelopment, as they were performed for the product before the modification, and with specific sampling towards IMR-ISUD.
For changes requested by IMR-ISUD or authorized by IMR-ISUD, the Supplier must have an identification system designed to identify the introduction date of the modifications on the product and/or in the production cycle (materials, processes, treatments, etc.).

6. Safety products and/or with compulsory documentation

For security/legislative products and/or with compulsory documentation identified on IMR-ISUD technical documents with letter D* or the symbol*:

the Supplier must implement what follows:

- highlight the safety features and/or those requiring compulsory documentation on the specific documents of the products themselves (control instructions, control plans, controls documentation, etc.) with the same symbols,
- have a system that allows to identify and unequivocally trace, for each production batch, the manufacturing date, the results of control/test performed on the product itself and the possible corrective actions that have affected the product,
- keep the records regarding the checks and the traceability system for 30 years.
- *In case that the Supplier produces components intended for the VW Group with the D/TLD characteristics indicated on the drawing, a D/TLD audit must be carried out once every 12 months. The check list required for the audit will be provided by IMR Industrialesud. The supplier must attach the first D/TLD audit during the sampling phase to IMR Industrialesud and file the subsequent audits for 30 years ensuring their prompt availability in case of request by IMR Industrialesud. The audit must be carried out for each characteristic defined as D/TLD and in case of failure of the tests/tests provided the Supplier must promptly communicate the result to IMR Industrialesud.*

*or other, according to the final Customer Specific Requirements. See 2D.

7. Reference samples

When ordering, IMR sends the Supplier the technical documentation necessary to verify the conformity of the product article

Reference samples are adopted for certain products which have binding characteristics that cannot be expressed or put in a drawing or on the relative standard (e.g. colour, appearance, etc.).
These samples can be established and used for the conformity comparison of the product and in cases of claims; therefore, they should be replaced whenever the product undergoes changes related to the characteristics represented by the sample, or renewed in the case of products subject to ageing (in which case there must be a suitable replacement programme).
The reference samples must be produced in duplicate by the supplier and must be countersigned by IMR with date and a revision index. One copy of the reference samples will be used by the supplier while the other by IMR in order to align the control criteria.

8. Approval of Supply

For each new or modified product, before starting the series supply, the Supplier must receive a written approval by IMR-ISUD as successful conclusion of the product approval process defined below.

8.1. IMDS

In order to obtain the approval, it is necessary to enter the data relating to the product supplied in the IMDS (International Material Data System, in compliance with EU Directive 2000/53 and subsequent amendments). The lack of approval to the MDS may affect the payment of the ongoing supplies.
There can be exceptions to this prescription to be agreed upon (e.g. communication to IMR-ISUD of all the data needed to internally create the MDS).

8.2. Product approval process (Sampling)

In order to obtain the approval, it is necessary to submit a sampling according to the following schemes:

- PPAP-AIAG (Production Part Approval Process) **Level 3**
- EMPB (Erstmusterprüfbericht) **PPA - VDA 2**
- CQC (Quality and Conformity Certificate)

The required sampling mode is set out and communicated to the supplier by IMR-ISUD according to the product/supplier.

8.3. Production Identification label

In case of intermediate processing, the supplier is obliged to keep the IMR-ISUD identification on the boxes.

8.4. Supplier self-certification (FREE-PASS)

To the supplier, who complies with the following requirements:

- has a Quality Management System certified according to ISO 9000 and/or IATF 16949
- is able to certify tests performed on the supplied product (e.g. compilation of Mod. 039)
- is able to certify the product supplied with PPA, PPAP, CQC

except in the case of performance deemed unsuitable (e.g. following an analysis of Non-Conformities), IMR-ISUD releases the self-certified supply. The following steps are involved:

a) incoming batches will not be subjected to a systematic Incoming Inspection (CAA - Controllo Accettazione Arrivi) by IMR-ISUD, and therefore may be sent to the Customer without any further inspection other than those performed by the Supplier during the production process

b) supplies will be subjected to periodic inspections, the frequency of which will be defined by IMR-ISUD based on the results of said inspections and an analysis of possible Non-Conformity (NC) reports issued by IMR-ISUD production departments or by Customers

c) records relative to product and/or process approval (EMPB, PPAP, CQC, production), must be filed at the Supplier premises for a period no less than one year after the production's release (for safety products and/or those with obligatory documentation, the period increases to 15 years after the production's release) and made promptly available in the event they are requested by IMR-ISUD

d) all records of controls performed by the Supplier and necessary to ensure the conformity of the product/process must be filed at the Supplier premises for a period no less than 36 months and made promptly available in the event they are requested by IMR-ISUD

e) if possible, the letter F (in capital letters) or the writing FREE must be indicated and easily visible on the identification label of products/packages that belong to the series production

f) each first supply of a new or modified product must be accompanied by a Sampling Report (e.g. PPAP, CQC, EMPB) which includes, if applicable, the following aspects: materials/treatments, dimensional analysis, functional analysis
Agreed exceptions to this procedure are possible.

8.5. Product/batch identification

The Supplier is obliged to identify each supply, batch or product delivered by providing at least the following information:

- supplier name
- item description and IMR-ISUD code (notified to Supplier through purchase order)
- drawing no. and relative change index
- quantity (expressed in unit of measurement shown in order)
- production date / production batch

8.6. Production requalification

Unless otherwise requested, with three-year frequency with respect to the date of receipt of official sampling approval, the Supplier must schedule the requalification of all the series products in progress, in order to confirm the maintenance of the initial requirements specified in the drawing (dimensions, materials, functional, aesthetic). Relative documentation must be filed at the Supplier's premises and made promptly available upon request by IMR-ISUD.

9. Quality Audit

The supplier allows IMR-ISUD and possibly IMR-ISUD's customer to perform process, product and system audits. The supplier may stipulate confidentiality agreements relative to all audits concerning IMR-ISUD supplies. Audits are performed following an agreement on its coverage and duration.

The Supplier agrees to allow an audit at least 48 hours after a quality problem has been identified. IMR-ISUD has the unlimited right to information on contractual elements.
At the time of the audit, the assessment of quality guarantee measures at supplier premises and the classification of suppliers is based on the current edition of Volume VDA 6.3 (for the end Customer VW is considered the latest edition of the Formel-Q-Fähigkeit) and on the PA model.
IMR-ISUD and the supplier undertake to keep all information of operations confidential, as well as the results of partner audits, which can be checked only by qualified auditors of the OEMs for which the component is intended.

10. Non-Conformity Management (written response and Corrective Actions)

Each Non-Conformity opened by IMR-ISUD and notified to the Supplier through the FOR-NCO form, must be followed by a written response by the Supplier clarifying the proposed Corrective Actions (including timeframes), preferably using the form sent by IMR-ISUD (the same FOR-NCO).
The percentage of Corrective Actions, in a written form via the 8D Report and communicated following the opening of a Non-Conformity, the speed of communication and the efficiency of Corrective Actions are all assessed by IMR-ISUD and contribute to establishing a periodic assessment of the Supplier's performance.
The supplier is obliged to adopt immediate corrective measures and supply replacement parts. The supplier must ensure trained personnel is available for the selection, reworking or supply of replacement parts free of defects in the agreed timeframes.

11. Costs for management of Non-Conformity

In the event of non-conformities caused by the supplier, IMR-ISUD will charge the supplier for sustained costs. Ordinary management costs are constituted by the hourly cost of personnel involved in selection, reworking and repair operations, by the possible cost of scrapping pieces and by administrative costs for the management of the non-conformity. These costs may also be increased by extraordinary costs, for example those due to machinery or production line downtime, or costs charged by the Customer.

12. Supplier evaluation system

12.1 BU Division Exteriors

Notification relative to the supplier category will be sent periodically. This category is assigned to the Supplier by IMR-ISUD following activities designed to assess Supplier performance.

Supplier performance is measured based on four specific performance indicators:
SQ (Quality System Certification – minimum requirement ISO 9001:2009), IQ (supply quality, expressed as PPM of rejections - target 300), IS (respect for delivery times – target 100% punctuality) and IR (reactivity of Supplier, expressed as a percentage of identified Non-Conformities that were followed by efficient Corrective Actions - target 100% of replies with 8D report).” Each of these parameters has a certain weighting used to determine the Supplier's general performance index. A category will be assigned based on this index.

Explanatory diagram of categories:

Class	Supply state	Notes
A	Suitable	No action required
AB	Acceptable	Corrective Actions (Action Plan) are required

B	Not suitable second opinion needed	Corrective Actions (Action Plan) are urgently required; in the case of an imposed Supplier, the Customer is notified; if this class is maintained for the subsequent two assessments, the Supplier may be removed.
C	Not suitable	Supplier removed from Qualified Supplier List and is excluded from finalising additional contracts until level "B" is reached

12.2 BU Division Interiors

SAC issues the supplier's assessment every six months, based on the following indicators:

- Quality certificates (minimum requirement ISO 9001:2009)
- Purchase documentation (M-047 - M051 - Origin of goods)
- 8D and PPM responses
- Punctuality of the deliveries

Weighted numeric values are assigned to these indicators, resulting in an outcome that demonstrates the overall reliability of the supplier.

The maximum values obtainable for each indicator are as follows:

- Quality certification: 15
- Purchase documentation: 30
- Responses 8D and PPM limits respect: 35
- Punctual delivery: 20

Based on the evaluations described in the previous point, suppliers will be divided into classes according to the following criteria:

CLASS C: 0<= Score <=69
CLASS B: 70<= Score <=88
CLASS A: Score >= 89

New Suppliers are chosen after the sending of a self-assessment questionnaire, to be completed by the Supplier. One of the minimum requirements to become IMR suppliers is to have an ISO 9001: 2015 certified Quality system. All suppliers of machines, equipment and systems will also be evaluated on the basis of the energy performance of their products.

For suppliers who participate, with their activities and supplies, in VW group projects, the IATF 16949: 2016 certified Quality system represents a basic requirement that must be completed by the Customer's Specific Requirements reported in the last edition of Formel Q (VW group). The ability to meet Formel Q requirements must be demonstrated by the supplier by completing the self-assessment questionnaire based on VDA 6.3 with the additional VW Formel Q requirements.

The questionnaire will be subsequently assessed by IMR-ISUD. During this phase, each question is assigned a different weighting depending on the importance of the relative activity in relation to the type of product/process requested. The final evaluation will be obtained by comparing the total point score obtained and the total point score possible, to obtain a percentage.

13. Performance objectives

At the same time as the evaluation relative to the year that has passed, IMR-ISUD reserves the possibility to communicate performance objectives to the supplier. These objectives must be pursued in order to obtain a positive evaluation by IMR-ISUD (insertion in category A). Suppliers should prepare a performance monitoring methodology to keep progress under control.

14. Supplier responsibilities

IMR-ISUD will autonomously perform a supplier evaluation. Basically, suppliers will be classified in category "A", "AB", "B" or "C".
The supplier will be informed on a half-yearly basis of the results of such evaluation.
In the event of a "B" classification, improvement actions must be implemented and their efficiency must be reported to IMR-ISUD.
In the event of a "C" classification, the supplier will be excluded from future contracts until level "B" is reached (business on hold).

15. Product Safety and Conformity Officer - PSCR (Product Safety and Conformity Representative)

A Product Safety Officer **(PSCR)** must be nominated by the sub-supplier with the following tasks:

- Contribute, develop and define priorities to eliminate or avoid defects in products associated with safety during the development phase (error prevention)
- Contribute or initiate and verify which themes are important to the safety of the project/process FMEA
- Cooperate in the context of "lesson learned" when releasing a new product to prevent errors relative to safety generated in the production zone, during assembly and process testing
- Create "lesson learned" checklists for the qualified revision of the project and processes in terms of product safety aspects
- Ensure that quality data and evidence of compliance required by law and regulatory authorities are documented in sufficient detail and transparency to demonstrate that products have been manufactured in accordance with all laws and standards of relevant safety
- Personally perform or ensure regular checks are performed on the production and products in the current series in order to confirm the product's safe uses (including predictable improper uses) and the introduction and monitoring of measures (emergency) for identified variants
- Assess the probability of a fault in the concerned product and frequency in the event of a fault
- In the event of a claim, verify the corrective actions foreseen for their rapid implementation and long-lasting efficiency
- Training employees on liability to avoid defects, documentation and consideration of existing requirements
- The efficiency of measures must be confirmed in writing by the supplier - **PSCR**

*The nominated **PSCR** must have completed the **PSCR** training on the **VDA QMC license**.*
The Supplier has to send a copy of the certificate obtained by its PSCR to IMR Industrialesud and must require its sub-suppliers of components for the VW Group to nominate the PSCR within its structure.

16. Escalation Process

Error-free supplies are the main objective of IMR-ISUD and have great importance and priority also for our customers.
Error-free deliveries from our suppliers are an absolute requirement. Our model of **Escalation Process** is activated in case of incorrect and non-conforming supplies that highlight a systematic criticality with the supplier. In the event that suppliers do not respond with quick and effective actions to resolve the non-compliance of supplies, the escalation model requires the creation of a problem solving team consisting of the supplier, IMR-ISUD and, if necessary, an external consultant with the aim of solving criticalities.

The opening criteria for the escalation model can be:

- incorrect supplies
- repetitive errors, despite final delivery of 8D Report
- unsatisfactory management of complaints by the supplier
- repeated and / or protracted exceeding the communicated targets
- customer complaints concerning parts purchased from suppliers
- critical and / or significant error
- consequences of the supplier's failure for the IMR-ISUD production
- consequences of the supplier's failure for the IMR-ISUD customers production
- potential complaints from field or complaints from the IMR-ISUD customer field

Based on the criticality and the extent of the aforementioned criteria, the Escalation Process can start from Level 2 or 3 of the relevant model (see annex).

The conclusion of the Escalation Process can occur in case of return to the previous state of supply (100% conformity of the product)
IMR-ISUD reserves the right to charge on the supplier all costs arising from the application of the Escalation Process.

17. Definition of packaging

The choice of collection/packaging means may significantly affect the product's Quality. At the time of the order, it is the responsibility of the Supplier to establish an internal packaging cycle, which must be approved.
For small-sized components, such as metal or plastic inserts, the Supplier simply needs to ensure the packaging is suitable to maintain the product's conformity, without the need for any approval by IMR-ISUD.

18. Qualification of personnel for special processes

If the Supplier uses special processes (e.g. painting, gluing; for which it is not possible to assess the quality of the product unless destructive tests are performed), IMR-ISUD must be sent documentation providing evidence that personnel involved in said processes are suitable qualified.

19. SPC and Cpk/Cmk

Statistical Process Control (SPC) and Process Capability and Machine Capability Indexes (Cpk and Cmk) are the responsibility of the Supplier in cases where the Supplier is involved in processes requiring these. Statistical process control is required for all characteristics identified as "critical" or "safety" by IMR-ISUD in the technical documentation of reference, ensuring compliance with the following requirements:

1. Short-term capability Ppk ≥ 1.67 *on at least 50 pcs.*
2. Long-term capability Cpk ≥ 1.33 *on at least 125 pcs.*

In the case of small volume batches, any exceptions to the number of pieces necessary to demonstrate the capability must be agreed with the IMR Quality Service.
In case of failure to reach the Process / Machine Capability indicated above, the supplier must select 100% of the relative characteristics. Additional requirements may be requested by IMR-ISUD in the event of special product criticalities (e.g. Safety characteristics).
The results of these activities are to be filed at the Supplier premises and must be promptly available if requested by IMR-ISUD.

20. Customer property maintenance

If the Supplier receives Customer property (e.g. moulds), the Supplier is obliged to take maximum care and possibly perform scheduled maintenance necessary for the production of conformant pieces. In the latter case, IMR-ISUD will send the Supplier the maintenance cycle that must be performed by the Supplier. Corrective maintenance is the responsibility of IMR-ISUD.

21. Confidentiality

The Supplier is obliged to maintain the confidentiality of sensitive product data (end Customer, original designs, IMDS data, PPAP level 3 or PPA documentation, reference samples). All exceptions to this prescription must be approved in writing by IMR-ISUD.

22. Materials from conflict areas

Based on the "Conflict Minerals Rule" IMR-ISUD is required to maintain records on an annual basis of information relating to the use in its products of conflict minerals (as defined below) from the Democratic Republic of the Congo or from neighbouring countries such as Angola, Burundi, Central African Republic, Republic of Congo, Rwanda, South Sudan, Tanzania, Uganda and Zambia (the "Covered Countries"); and, in some cases, to conduct due diligence processes (on their own or through a subcontractor) to identify the origin of conflict minerals.
The term "Conflict Minerals" refers to coltan, cassiterite, gold, wolframite and their derivatives, tantalum, tin and tungsten and any other mineral or derivatives thereof indicated by the Secretary of State of the United States, or by any other competent authority, such as being in use to finance the conflict in the Democratic Republic of the Congo or in a neighbouring state.
Suppliers signing this contract declare and guarantee to IMR-ISUD that none of the products, parts or materials delivered to IMR-ISUD will contain "Conflict Minerals" originating from a "Covered Country". From time to time

and to the extent necessary, IMR-ISUD may request Suppliers for documents, information and other evidence of the accuracy of the previous declarations and warranties.
IMR-ISUD expects the Suppliers to immediately notify in writing if they have come to know or have reason to believe that the above declaration and warranty is false for products, parts or materials that have been delivered to IMR-ISUD.

23. Compliance with laws

Suppliers are responsible for ensuring that their directors, officers, employees and subcontractors, representatives or agents understand and comply with applicable regulations and conventions, as well as regional and national legislation, to the extent applicable to the contract in question or to the business relationship.

24. Corporate social responsibility

The supplier must demonstrate on request to effectively manage the problems of social and ethical impact internally and in the areas of activity.