



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date:	-
Revision No	-
Page No	1 / 12

REV. NO	DATE OF REVISION	DEFINITION OF REVISION

PREPARED BY Ersan SEVENTÜRK	CHECK Buket KANTAR	APPROVAL Didem ÇALIŞKAN
--------------------------------	-----------------------	----------------------------



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	2 / 12

1. Coverage

1.1. This specification, VLE ELEKTRONİK INC. and Supplier's quality and environmental management systems define the rights and obligations of the terms and conditions of business relationships within the scope of practices, breaches of conditions, and are part of the procurement contract.

1.2. The purpose of this document is to convey the expected requirements for quality and environmental management systems to the supplier firm that supplies production goods and / or services to VLE ELEKTRONİK A.Ş.

1.3. This specification has been prepared in order to ensure that the conformity of the services provided by the Supplier to VLE ELEKTRONİK A.Ş. and the quality of the products are guaranteed at a constant and expected level. Additional conditions and changes to this specification will only be valid with VLE ELEKTRONİK A.Ş. It can be done with written approval by Quality Department and Purchasing department.

1.4. The terms of this specification shall be valid until revised and signed by the parties.

2. Supplier Eligibility Requirements

2.1. Suppliers are responsible for any supplier originating defects experienced by VLE ELEKTRONİK A.Ş. customers. The supplier is obliged to produce materials with total quality approach and zero error target and to deliver the produced materials to the specified time, quantity and quality.

2.2. Suppliers are required to comply with the legislative requirements and to be continuously improved in efficient and productive working conditions, to establish and effectively carry out a quality management system that meets the international standard requirements of ISO 9001 (latest version) at least as an assurance of the quality and meeting the requirements of the VLE ELEKTRONİK A.Ş. expectations that can be met in the long run. VLE ELEKTRONİK also encourages the supplier to implement a Quality Management System in compliance with IATF 16949 (latest version) and to obtain the relevant certificate.

2.3. Suppliers shall determine the qualified workforce and technical infrastructure needed to ensure conformity of the materials produced to the defined conditions and provide the necessary resources. The supplier shall have an effective preventive maintenance system planned for machine / equipment maintenance. The supplier must follow the economic lifetime of the production equipment and moulds.

2.4. Suppliers are obliged to ensure that the products they purchase are in compliance with the specified procurement requirements. It also has to determine the methods of control and measurement to ensure the quality of the product it buys. VLE ELEKTRONİK CORPORATION is obliged to inform these control methods if requested.

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	3 / 12

2.5. Suppliers shall check the materials that passed the last inspection and tests visually with the customer and apply delivery a quality approval. These checks made by the customer before shipment must be in quality and quantity shall be in accordance with the characteristic of the material and the function on the product. VLE ELEKTRONİK A.Ş. may request that for the checks made from its supplier, issue exit reports and send these reports with the products in each shipment.

2.6. Suppliers shall ensure that their supplies are traceable at every stage of production. The supplier shall provide raw materials and materials, suppliers, shifts, production dates, machines, operators, etc. used for each dispatched party, from the package / box / chest / traceability information and document these quality records of the traceability system.

3. Supplier Eligibility Requirements

3.1. Materials shipped to VLE ELEKTRONİK A.Ş. Must comply with the defined technical drawings, specifications, specifications, instructions, norms and standards agreed with the supplier. Quality conformity certificates and reports confirming material conformity requirements shall be sent when requested with the dispatched party.

3.2. The materials used in the procurement, the inputs used in the production of VLE ELEKTRONİK A.Ş. assigning of consignment or the sale of the supplier does not invalidate the responsibilities of the supplier regarding the finished product and the conditions of conformity. In addition to the input procured by the supplier, VLE ELEKTRONİK A.Ş. mutually agreed upon control and conformity verification activities shall be carried out for all materials entrusted or sold by the Company.

3.3. The supplier is obliged to maintain records of changes. In case of changes, it is the supplier's responsibility to obtain the first sample and mass production approval for materials. VLE ELEKTRONİK A.Ş. may request the machine / process capability analysis with the purpose of measuring the "repeatability (mass production)" capability of the piece quality after giving the written approval of "feasibility (first sample)" for the first samples. VLE ELEKTRONİK A.Ş. has the right to perform these analyzes on-site with the supplier.

3.4. During delivery of materials to VLE ELEKTRONİK A.Ş. and storage, the type of package that will prevent the materials to get damaged is determined with VLE ELEKTRONİK A.Ş. approval. VLE ELEKTRONİK A.Ş. also has the right to request the supplier by specifying the specifications of the packaging and transportation. Markings on plastic, metal packaging boxes to be recycled must not be easily erasable or detachable, they must not fall during transport and storage.

3.5. The packaging made by the supplier shall be accompanied by the product identification information (VLE ELEKTRONİK A.Ş. code and description, production date, supplier name, place of production, quality

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	4 / 12

control approval mark, delivery note number, lot / lot number, number , volume, or weight). VLE ELEKTRONİK A.Ş. may make additions to these definitions in writing.

3.6. In an event of material damage due to non-conformity to packaging specifications, miscellaneous materials, poor definition of material due to inadequate marking, etc. VLE ELEKTRONİK A.Ş. has the right to reject the related shipment. All re-transportation, repacking and re-marking costs incurred for this reason shall be borne by the supplier.

4. Security and Environment - Social responsibility

4.1. VLE Elektronik A.Ş. encourages its suppliers to establish facilities that comply with the environmental management system ISO 14001 (latest version). Suppliers shall be conscious of minimizing all contrary conditions that may threaten human health and environmental cleanliness in all its facilities and production processes. It must monitor and ensure compliance with current legal requirements in terms of environmental aspects that can be controlled and influenced by the activity, its products and services. It shall establish the necessary monitoring, measurement, evaluation and registration system to ensure that the inputs used and the materials transported to VLE ELEKTRONİK A.Ş. do not contain substances harmful to human and environmental health prohibited by national and international laws and / or are used within the permitted limits.

Material prohibitions / restrictions

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd) and
- Chrome VI (Cr VI)

(EU Directive on End Of Life Vehicles 2000/53/EC)

Annex II of Directive 2000/53 / EC defines limitations or limitations for the above mentioned materials. In general, the above mentioned materials shall be avoided. If this is not possible, the relevant products must be properly marked and documented. To ensure that used device parts are handled in an environmentally friendly manner, the most restricted items must be removed.

The supplier ensures that the supplied parts meet the following requirements:

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	5 / 12

4.1.1. Material Declaration Form (IMDS)

The sub industry supplier company is responsible for making material declarations for the materials used in the parts it is producing / will produce. The Material Declaration is the declaration of the content of the material used in the part to be produced and whether prohibited materials are used.

The material declaration applies to materials (such as paint coating) that affect the parts used as auxiliary in the production process. Regarding the material declaration, the data about the material content obtained from the accrediting institutions will be entered into the IMDS data system. Sub industry supplier company may not change materials without written consent of VLE Elektronik A.Ş. for parts manufacturing processes.

4.1.2. REACH

The products shall only be used in accordance with EC regulation No. According to 1907/2006 ("REACH") and must contain or release substances that are registered and approved for the proposed applications.

4.1.3. Conflict minerals

The minerals used in the supplied products shall not be originated from certain areas of conflict (Democratic Republic of Congo or armed groups in the country of its end). In particular, the Supplier must comply with the Dodd-Frank Wall Street Reform and Consumer Protection Act, which requires declaration of the use of conflict minerals ("tantalum, tin, gold and tungsten") in their materials. (All supply chain) The Supplier will report this by filling out the Conflict Minerals Reporting Notification [CFM] form. For more information and details, visit <http://www.conflictreesmelter.org>.

5. Warranty Terms and Period:

The Supplier complies with the provisions of the Law on the Protection of the Consumer together with its liabilities for the conformity conditions defined above.

The warranty period is the same as the legal warranty period in the countries where the products are sold, not less than 2 years. The starting date of the warranty period is the day that the final product in which the supplier materials are used, is delivered by VLE ELEKTRONİK A.Ş. to the customer. The Supplier guarantees the suitability of the materials supplied during this period for the purpose of use.

Any costs caused by nonconformities arising during the warranty period, for supplier reasons; including those acquired by third parties shall be undertaken by the supplier.

During the warranty period and coverage, a part (if possible the complete) materials that are replaced by the VLE ELEKTRONİK A.Ş. customer or final user company authorized services at the customer are sent by VLE ELEKTRONİK A.Ş. to the supplier in order to determine the nature of the failure. Investigation

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	6 / 12

conducted for the nature of the failure is reported to VLE ELEKTRONİK A.Ş. For supplier originated failures; the supplier undertakes to prevent encountering the same failure, take corrective and preventive actions and notify VLE ELEKTRONİK A.Ş. regarding these actions.

6. Corrective / Preventive Activities Procedure (8D Method)

The supplier is obligated to notify the interim precautions taken, the methods to be applied, within the first 12 hours at most from the date of the malfunctioning sample sending date or from the date of notification for any incompatibilities that a preventive action is asked to be conducted. Within 10 working days following the receipt of the interim precautions, the permanent measures regarding the problem should be notified in writing. This notification should be in the format (8D) that will contain the root cause of the problem, corrective action steps, preventive activities, responsible persons, time schedule.

The supplier is obliged to prevent the inaccurate product to be delivered to VLE ELEKTRONİK A.Ş. by starting from the first shipment after the notification.

If the Supplier fails to complete all of the activities specified in the 8D report within the specified period, it shall carry out 100% control over all shipments to be dispatched.

All packages referred to for the control shall be marked permanently on the box and shall notify VLE ELEKTRONİK A.Ş. of the marking method.

In an event where the incompatibilities may cause downtime at VLE ELEKTRONİK A.Ş., at a scale that will hinder the manufacturing, VLE ELEKTRONİK A.Ş. has the right to investigate the process related to the failure (on site investigation). The extra costs (transportation, accommodation, waste of time) arising from these inspections are covered by the supplier.

7. PPAP Presentation Control and Verification

The supplier must send the PPAP samples produced under serial production conditions to VLE ELEKTRONİK A.Ş. Before sending the samples, the supplier should verify with appropriate measurements and examinations and submit the relevant verification records with the samples.

The supplier must submit the standard PPAP Level 3 and electronic copy, unless otherwise stated. (see AIAG PPAP Manual).

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	7 / 12

The supplier should ship samples with the mark “SAMPLE” (PPAP). In cases where multiple molds or molds are produced in molded parts, the supplier shall send 5 samples per mold and mold cavity and shall indicate the mold or mold cavity on which the sample belongs. VLE ELEKTRONİK A.Ş. informs the supplier of the “ACCEPT” or “REJECT” decision after the sample approval process. Prior to mass production approval, VLE ELEKTRONİK A.Ş. may request a trial party.

8. Supplier eligibility requirements

8.1. Eligibility Control

VLE ELEKTRONİK A.Ş., has the right to check the quality of the goods it purchases. It may also keep materials out of control for an extended or indefinite period of time. This does not remove the supplier's liability for defects or nonconformities caused by the supplier. The supplier must have conducted and documented all conformity verification tests and measurements required prior to shipment. VLE ELEKTRONİK A.Ş. has the right to request certain tests from the supplier regarding material eligibility verification.

8.2. Non-Conformity Detection and Resolution:

In an event where from the materials shipped to VLE ELEKTRONİK A.Ş., the tests or examinations conducted on the samples taken from the said materials and a non-conformity is identified, the supplier is liable to remedy the said non-compliance in a manner that will not hinder manufacturing and incur losses to VLE ELEKTRONİK A.Ş. In the event of non-conformity, VLE ELECTRONICS A.Ş. may request one or more below to be applied. VLE ELEKTRONİK A.Ş.;

8.2.1. May request all raw materials, process and final inspection records expected to be conducted by the supplier.

8.2.2. May reject shipment party. May request the supplier the urgent delivery of new materials instead of the rejected shipping party. (All costs that may arise for the material provision shall be covered by the supplier.)

8.2.3. May request the supplier to extract the shipment party. The supplier shall carry out revalidation activities for the post-extraction party.

8.2.4. The location of the extraction shall be determined by VLE ELEKTRONİK A.Ş. It may define a special method and plan for re-validation operations. The costs incurred due to extraction and

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	8 / 12

validation conducted by VLE ELEKTRONİK A.Ş. or have it conducted by a third party shall be assumed by the supplier.

8.2.5. Due to unsuitable shipment, VLE ELEKTRONİK A.Ş. may request replacements for any materials, semi-finished products and final products that are in the manufacturing lines or stocks and are deemed under potential risk. Emergency action plans related to semi-finished products and product reprocessing are determined by VLE ELEKTRONİK A.Ş. This emergency action plan is immediately shared with the supplier.

8.2.6. Based on the level of non-conformity, in order to prevent repetition of non-conformity in the next shipment of the supplier and to deliver materials under risk to VLE ELEKTRONİK A.Ş.; VLE ELEKTRONİK A.Ş. may request additional verification and marking including pre-shipment 100% checks.

8.2.7. In an event where non-compliance is identified at the internal production and assembly lines or at final checks; verification checks may be renewed for the material. Materials that have been produced or are ready to be delivered may be returned from production lines.

In an event of a deviation from conformity conditions, the supplier shall cease serial production without waiting for VLE ELEKTRONİK A.Ş. approval and shall also cease delivery.

9. Performance Measurement, Monitoring and Evaluation

VLE ELEKTRONİK A.Ş. monitors supplier performance evaluations via SAP system. The evaluation method defined in the SAP system is an important system aiming at zero defects and zero loss purposes, making it possible and encouraging continuous improvement.

In an event where from the materials shipped to VLE ELEKTRONİK A.Ş., Supplier Performance Evaluation System work on a number of values, such as access control checks, process replies, customer replies, select workers, time to respond to the supplier's 8D reports, and so on. In the system, suppliers are evaluated monthly on PPM basis and reported to procurement department.

The supplier industry annual target ppm is announced by mail in the first month of each new year. It is monitored by VLE ELEKTRONİK A.Ş. on a monthly basis. On 3 month periods, the supplier industry performance results are notified to the suppliers by VLE ELEKTRONİK A.Ş. Procurement department via e-mail. For the suppliers who received a B for two consecutive periods, an action is requested. If required VLE ELEKTRONİK A.Ş. may request an on-site audit.

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	9 / 12

As VLE ELEKTRONİK A.Ş. taking strategic decisions regarding decreasing or increasing the work load on the suppliers, or awarding new projects, takes quality performance, logistics and structural performance indicators and suppliers' costs, collaboration, efficiency and process audit results conducted at the supplier based on projects into consideration.

10. Audits:

VLE ELEKTRONİK A.Ş. evaluates the compliance of the supplier to expected process, environment and quality management system standards, on-site via project based "process" audits. These audits are conducted in align with the coverage of VDA 6.3 "German Automotive Association". VLE ELEKTRONİK A.Ş. has the right to scheduled and not scheduled audits at the supplier.



Supplier is responsible for providing access to all production sites, test departments, warehouses and quality related documents, if necessary, in project audits. During audits, the privacy and occupational safety expected by the supplier shall be taken into consideration. The supplier is liable to notify VLE ELEKTRONİK A.Ş. within the time periods specified in the audit report the action plans regarding the audit findings open for improvement. Post audit improvement action plans shall include application dates and responsible individuals.

11. Special Characteristics

Special characteristics are categorized based on product characteristics (VLE Elektronik A.Ş. or its customer) and production process parameters.

Special characteristics shall be completed in supplier design logs, design FMEA, process FMEA, control plans, process flow, working instructions and other associated documentation.

VLE has created its exclusive characteristics table utilizing the criteria and symbols shown in the table below. (Supplier may only use different symbols with VLE approval)

Special Characteristics Table	Class	Symbol
<ul style="list-style-type: none">➤ Safety risks (accident risk, risks against life) for the individuals who use the product➤ Not abiding legal regulations.	Safety / Regulations	 
<ul style="list-style-type: none">➤ Functionality issues (primary function loss or malfunction, compromised efficiency and product use);➤ Issues at mounting	Critical	C
<ul style="list-style-type: none">➤ Partial reduction of productivity and / or product use (loss or corruption of secondary functions, low performance level functions).	Important	I

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



SUPPLIER QUALITY HANDBOOK

Document No	YSEK.01
Issue Date	28.06.2018
Revision Date	-
Revision No	-
Page No	10 / 12

For Safety / Regulation Characteristics and Critical Characteristics, VLE requires Statistical Process Control (IPK) applications and / or 100% quality control from the supplier.

In the event that the supplier "passes through" the characteristics or the products without being approved or controlled by the quality management system of VLE Elektronik A.Ş., the appropriate controls shall be provided by VLE Elektronik A.Ş. and shall be able to offer it when requested.

12. Machine and Process Sufficiency

The supplier must meet and document the process qualification requirements defined in the AIAG PPAP and SPC Guidelines. If the following qualifications are not provided, 100% control is obligatory. Accordingly; Cor acceptance criteria machine sufficiency, $Cmk > = 2$, for initial process sufficiency $Cpk > = 1,67$ and serial production process sufficiency $Cpk > = 1,33$. The supplier should document the controls in the control plan, follow the processes and verify the success of the qualification objectives.

13. Losses and Compensation

VLE ELEKTRONİK A.Ş. demands the supplier to compensate insofar the nonconformity losses due to the supplier. Amount that the supplier will pay for repayment due to nonconformity costs is not a "penalty" for the supplier, but aims to increase the responsiveness of the supplier to continuous improvement and corrective actions.

The following provisions apply if there is nonconformity from supplier.

VLE ELEKTRONİK A.Ş. share evidence with the supplier that the incompatibility is due to the supplier. Within the definition of nonconformity originating from supplier, together with nonconformity caused by quality; shipping delays and the number of items shipped are more or less ordered are included.

VLE ELEKTRONİK A.Ş. has the right to request that the supplier replace any defective materials (without payment of any fees) identified before use in production. If the supplier supplies appropriate material instead of faulty material, VLE ELEKTRONİK A.Ş. does not request a refund from the supplier if the company has not lost labour and production losses.

This practice does not mean that supplier error reporting for erroneous transmissions will not be opened, process improvements and corrective actions will not be carried out.

VLE ELEKTRONİK A.Ş. may request the supplier to pay a refund for the following losses caused by non-conformity caused by the supplier.

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



13.1. VLE ELEKTRONİK A.Ş. Losses In Production:

- Costs for sorting and recycling (including costs of labor and re-packing, repacking costs including materials used) to ensure product, semi-finished or material conformity,
- VLE ELEKTRONİK A.Ş. costs incurred due to standstill in production lines (non-production),
- Costs, fire, scrap, incomplete and incorrect shipment to eliminate the inconvenience caused by the product, semi-product, material blockage and blockage.

VLE ELEKTRONİK A.Ş., for the determination of the mistakes originating from the supplier company shall make the laboratory tests performed and the transaction fee to the supplier as 50 euros per error notification for the waste of time spent on these examinations.

13.2. Field Return Losses

- During the warranty period, re-transaction costs for service call and product conformance due to customers' failure notices,
- The costs incurred due to customer product return,
- The costs of service, materials, product replacement costs to ensure the suitability of the products, including the cost of recalling and recalling the product due to raw material or process errors due to the same reason, within a certain period of time,

13.3. Losses subject to legal punishment

- In the case of material and physical damages arising from the use of prohibited chemicals by VLE ELEKTRONİK A.Ş. and suppliers, subcontractors, warehouses, final customers and any kind of contact with such material or final product.
- Due to the violation of the legal requirements, the cost of customs clearance, product blockages in the warehouse and the cost of removing these blockages, as well as the costs for calling and seizing products from the field,

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN



The Supplier is obliged to compensate the losses incurred. At the same time, we must take all necessary precautions to remove all potential danger, risk and nonconformities that cause the continuation of the critical mistake and inform the company VLE ELEKTRONİK A.Ş. immediately of the action plan. VLE ELEKTRONİK A.Ş. will send the results of analyzes carried out by its own sources or made to independent expert institutions (universities, accredited laboratories etc.), as well as send faulty materials or products to the supplier for examination by the supplier.

For the supplier, VLE ELEKTRONİK A.Ş. data are taken reference for reimbursement calculations however mutual consent shall be established. If mutual agreement can not be reached within four weeks, VLE ELEKTRONİK A.Ş. records are taken as basis.

14. Termination of Specification

In the event that one or more of the following conditions arise, VLE ELEKTRONİK A.Ş. may terminate this contract unilaterally under the terms of this contract.

- Severe breach of specification compliance requirements by the supplier,
- Quality and Logistics performance indicators, if the supplier's objectives are below the given continuity of the situation,
- Failure to provide adequate and fast action by the supplier for the identified non-conformities caused by the supplier and for the permanent solution of the loss, the situation in which the problems encountered are left unresolved,
- The cause of death, injury and heavy material damage due to supplier nonconformity,
- If the supplier's activities are not carried out in accordance with the law and are under legal follow-

Termination will not remove the responsibilities of the supplier for the materials already shipped.

The terms of this specification shall be valid until revised and signed by the parties.

With the signing of the contract, the supplier accepts the conditions and responsibilities specified in the contract.

PREPARED BY	CHECK	APPROVAL
Ersan SEVENTÜRK	Buket KANTAR	Didem ÇALIŞKAN