Henniges Supplier Quality Manual

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1 INTRODUCTION

1.1. PURPOSE:

The purpose of this manual is to define Henniges Automotive processes and requirements for suppliers in an effort to improve communication and Henniges expectations of suppliers beyond the purchase order agreement.

The common goal is to achieve a high level of quality and customer satisfaction at the lowest cost.

1.2 APPLICABILITY / SCOPE

This manual applies to all Henniges Automotive Suppliers. Additional regional requirements are identified as addendum with the region called out, such as: “ADDENDUM: EUROPE”, or “ADDENDUM: CHINA”. Addendum requirements pertain to the specific region noted regardless of supplier manufacturing location. However, all requirements not marked “ADDENDUM” apply to all Henniges regions.

1.3 RESPONSIBILITY

Supplier Quality or as defined in this manual or Henniges functional job descriptions and responsibilities.

1.4 DEFINITIONS / ABBREVIATIONS

1.4.1 DEFINITIONS

Key Suppliers – Suppliers that provide materials and components that comprise the final product.

Company – Henniges Automotive

Supplier – Henniges Tier II

Sub-Contractor – Tier III

1.4.2 ABBREVIATIONS

APQP	Advance Product Quality Planning
CC	Critical Characteristic
DFMEA	Design Failure Mode Effects Analysis
ECAP	Equipment Capability Acceptance Process
IMDS	International Material Data System
PFMEA	Process Failure Mode and Effects Analysis
PPAP	Production Part Approval Process
PO	Purchase Order
QMS	Quality Management System

RFQ Request for Quote
RMA Return Material Authorization R&R
Repeatability and Reproducibility SC
Significant/Special Characteristic SCAR
Supplier Corrective Action Request SPPS
Supplier Practical Problem Solving QR
Quality rejects
NCT Nonconformance Tracking

2 MANUAL

2.1 APPLICATION

2.1.1 This agreement is a part of the supply contract with all locations of Henniges Automotive and affects all articles.

2.1.2 To cover all particular requirements for product and services, specific supplements to this standard can be agreed upon, but must be documented in the supply contract.

2.2 QUALITY MANAGEMENT SYSTEM OF SUPPLIER

2.2.1 Supplier must implement and maintain a quality management system with the obligation to have zero defect objectives, to continually improve delivery, product quality, and quality management system. Supplier must have a documented continual improvement process.

2.2.2 Key suppliers at a minimum will be certified to ISO 9001:2015 and/or IATF 16949:2016, or VDA 6.1.

2.2.3 Small suppliers who are not ISO9001 certified suppliers are designated as Specially Designated Small Suppliers (SDSS). SDSS suppliers require enhanced safe launch measures which include increased Control Plan checks, increased safety stock, enhanced contingency plans, expedite capabilities, etc. The approval process requires Regional Director, Global Director/VP approval and customer waiver to add SDSS suppliers.

2.2.4 The environment is a priority to Henniges and therefore suppliers are encouraged to be certified to ISO 14001 or working toward certification to ISO 14001.
ADDENDUM: EUROPE – Supplier engages to follow all legal requirements related to the environment (namely the directive EU 2000/53/EC as amended, RoHS, directives REACH and GADSL), health and safety protection in work valid in countries in which the product is made, and shall seek to prevent any negative effects on persons and the environment.

2.2.5 Calibration and Testing Service Suppliers must be certified to ISO/IEC 17025.

2.2.6 Supplier must inform Henniges of any changes to their quality management system certification status.

2.2.7 Pass Through Supplier's must complete an annual MMOG/LE self-assessment form per OEM specific requirements. Evidence of completed self-assessment form must be available upon request no later than July of each calendar year.

Commented [DJF1]: Added 'Pass Through' wording.

2.2.8 Nomination of Product Safety Representative (PSB) – Supplier is obligated to assign its PSB. In case supplier supplies a material or a component of which Volkswagen, BMW or Daimler is the end user, he shall nominate the PSB whose authorization is defined in the document "Obligations of Product safety representatives". Suppliers are obligated to notify the name of such person, including phone and email, to the Henniges Purchasing department. Supplier shall deploy this requirement also throughout their supply chain.

Provided supplier supplies a part with safety characteristics (D/TLD, or equivalent used with other OEMs), such supplier shall also assign the deputy representative for PSB according to requirements of Volkswagen and to inform Henniges Automotive in the same way as in case of PSB representative.

2.3 QUALITY MANAGEMENT SYSTEM OF SUBCONTRACTOR

2.3.1 The Henniges supplier is to obligate its subcontractors to implement and maintain a comparable quality management system with the same zero defect obligations for parts purchased and/or externally fabricated.

2.3.2 Supplier must have a documented process to verify incoming components and materials meet requirements.

2.3.3 The company can request documented proof from supplier that they have verified the effectiveness of their subcontractors QMS.

2.4 AUDITS

2.4.1 Supplier allows the company to establish audits whether its quality assurance measures fulfil the requirements defined in this manual or national standard. The audit can be a proactive supplier assessment, system, process, or product audit and supplier is notified in advance of the audit date. In the event that a supplier is red for two (2) consecutive months on the Henniges Supplier Scorecard, a Henniges SQE or designee will perform a supplier Assessment audit at supplier facility.

2.4.2 Supplier is to grant Henniges access to all operating sites, checkpoints, stores, adjoining areas, and related quality documents required to complete the audit. Appropriate restrictions are accepted when identified by supplier in advance of the

audit to protect security of company secrets and/or confidentiality.

2.4.3 Henniges will require supplier to implement corrective action and/or action plans to improve product or processes based on the audit results, if applicable. Plan must include responsibility and due date for completion. Supplier will report the status of the plan per agreement.

2.4.4 When quality or other problems emerge caused by products, services, and/or deliveries by the subcontractor of supplier. Supplier is responsible for auditing their supplier and identifying, implementing all required improvement actions. When the issue has an effect on Henniges supply or product quality, supplier should notify Henniges of the improvement actions or issues with any subcontractor.

2.4.5 ADDENDUM: EUROPE – Supplier is obligated to perform the production process audit (per VDA6.3 requirements) once per year at minimum, and the product audit for every product supplied to Henniges Automotive (supplied products can be meaningfully classified and merged in groups/families) provided Henniges Automotive does not renounce such requirement. Auditors´ competencies see IATF 16949 7.2.3 and 7.2.4.

Supplier can be called by Henniges Automotive to present process self-audit pursuant to the methodology Formel Q capability. Where Volkswagen is the end user, supplier is obligated to perform the process audit pursuant to Formel Q capability 1x per 12 months. Provided the process audit shows the assessment result C or repeated (2x) B, supplier is obligated to inform Henniges Automotive without request and can expect an escalation procedure from Henniges Automotive.

The company Henniges Automotive reserves the right to perform the audit at suppliers within the scope of requirements of ISO 9001 and IATF 16949 or VDA 6.3. Also, Henniges Automotive reserves the right to conduct supplier Technical Review (TRL) according to the VW specific requirements in Formel Q Capability. Suppliers shall support the company Henniges Automotive as much as possible.

2.5 SUPPLIER SELECTION / AWARD PROCESS (RFQ / SELECTION)

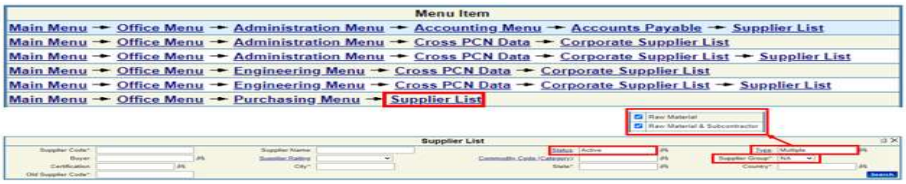
2.5.1 Approved Suppliers- Henniges Buyer will select suppliers from the Henniges Approved Supplier List (ASL) and other suggested suppliers. Suggested or customer directed suppliers must be approved prior to award of business.

2.5.1 New Suppliers: Henniges Purchasing representative will provide access to the Henniges Supplier Quality Manual – GLB QM 02 and may request completion of the Supplier Profile and Self Assessment (GLB QM 02-3). This includes technical and

financial risk assessments. Henniges may also complete an on-site New supplier quality system audit based on VDA6.3 P1 – Potential Assessment. Once completed and submitted, Henniges will determine if the potential new supplier fulfills the required technical core competencies, (program management, financial stability and Quality Management System) to be included in the Approved Supplier List (ASL) – which gives supplier the opportunity to quote and be awarded for new business to Henniges worldwide. Henniges optionally may apply the same procedure in case of a direct supplier indicated by its customer.

2.5.2 Approved Suppliers List: Henniges Purchasing will select suppliers from the Henniges Approved Supplier List (ASL) and other suggested suppliers. Suggested or customer selected suppliers must be approved prior to award of business.

2.5.3 ASL access in Plex in the Supplier List screen with the following criteria:
2.5.3.1 Status: Active
2.5.3.2.1.1 Type: Raw Material + Raw Material & Subcontractor
2.5.3.2.1.2 Supplier Group: NA



2.5.4 Supplier performance from initial audits is communicated to suppliers by Henniges Purchasing. Supplier is required to react in accordance with the rating table shown

Supplier Rating	A - qualified	B - conditionally qualified	C – not qualified
Reaction	Inform about the potential for improvement	Inform about the potential for improvement and request measures to improve	Inform supplier about the results, find alternative suppliers / request measures to improve

Suppliers that receive a "B" or "C" must submit a corrective action plan no later than 30 days after receiving the audit results. Supplier is required to keep Henniges informed of the progress until all items are successfully closed.

2.5.5 The complexity of the product and severity of the interaction with the product fit, appearance, performance, and durability requirements will also be a factor in selecting a supplier for quoting.

2.5.6 Suppliers selected that meet above criteria will receive an RFQ.

2.5.7 Supplier quote must include tooling, equipment, gauging, and piece price costs along with PPAP timing to Henniges.

2.5.8 Supplier has accepted manufacturing feasibility of the product by submitting the quote to Henniges.

2.5.9 Henniges Buyer will review quotes, document cost and timing in a matrix for team review.

2.5.10 The Henniges Buyer with input from the program team will select a supplier based on tooling cost, piece price, timing, financial stability, and supplier rating.

2.5.11 Henniges Buyer will notify the approved supplier of business award and verifiy cost, timing, and payment terms prior to issuing a purchase order.

2.6 PRODUCT/PROCESS DEVELOPMENT AND PLANNING (APQP)

2.6.1 GENERAL DEVELOPMENT REQUIREMENTS

2.6.1.1 Supplier shall plan and develop product and processes required for product realization (PPAP) based on their quote, Henniges program timing and customer specific requirements where applicable (i.e. VDA 2, Formel Q, BIQS, etc.). The plan must facilitate communication within the organization to ensure all required steps are completed on time, at acceptable quality and cost levels.

2.6.1.2 Supplier must review and approve feasibility of the product required by Henniges

prior to initiating a quote and/or accepting a purchase order. Feasibility must include manufacturing, appearance, material performance, and durability based on product requirements.

2.6.1.3 Henniges empowers its suppliers to identify, document and communicate any issues or concerns with design, materials, performance, appearance, and durability based on their expertise, knowledge and lessons learned from similar products.

2.6.1.4 Supplier is responsible for disposition of all product requirement concerns prior to accepting the Henniges purchase order.

2.6.1.5 Supplier must ensure confidentiality of Henniges designs and specifications for products and processes under development. Henniges will ensure confidentiality of supplier's proprietary designs and processes under development. In highly sensitive cases a documented confidentiality or no compete agreement may be required between customer, Henniges, and supplier.

2.6.1.6 Supplier must allow Henniges to review product and process development and planning via on-site review and confirmation during development, if required.

2.6.1.7 Supplier must notify Henniges if there is a change in program timing and a risk to meeting agreed upon tooling completion or PPAP date. Supplier will be required to add additional resources and/or work additional hours (7 Days, 24 Hours) to ensure date is met.

2.6.1.8 Qualification and approval of tools, equipment and gauges is defined and controlled by Henniges Component ECAP process. Approval will include run at rate, process capability, Gauge R&R, and PPAP Customer required run at rate documents and customer specific requirements where applicable (i.e. VDA 2, Formel Q, BIQS, etc.).

2.6.2 DESIGN / PROCESS CONTROL

2.6.2.1 Supplier shall have a process to control or react to design and process changes required. Supplier is responsible for verifying that the required Henniges written approval or amended or new purchase order is obtained prior to proceeding with any change.

2.6.2.2 Suppler is responsible for change feasibility of their product to purchase order and Henniges defined requirements.

2.6.2.3 Supplier must receive all math data files for product development or tool change

from the Henniges controlled FTP web site with user identification and a password issued by the Henniges data coordinator via data transfer form. All math data files received through e-mail or other methods are not controlled and should not be used by supplier.

2.6.2.4 All special and critical characteristics must be defined on all process control documents. (ie. Process Flows, Control Plans, PFMEA, Inspection Plans, etc…)

2.6.2.5 Supplier should have an effective risk reduction process that reduces risk in the following order: Severity, Occurrence, and Detection.

2.6.2.6 Supplier must submit capability (Cpk) data to the purchasing Henniges Plant on an every 3 years, free of charge for all special characteristic dimensions or performance testing or select dimension used for PPAP. Capability submission is required to meet incoming supplier quality requirements.

2.6.2.7 Statistical process control (SPC) is required for all special characteristic dimensions and functions listed in the design record and control plan. Process capability must be documented and evaluated. 100% verification is required when acceptable capability is not realized.

Capability of operating equipment and processes must be demonstrated. Unless otherwise stated by the OEM customer, the minimum requirement for short-term capability is 1.67 Cpk and long-term process capability is 1.33 Cpk. Short-term is defined at 30-100 measured values, and long-term is after 20 or more production days at normal or contracted production capacity.

SPC can be used to measure and evaluate process capability for any dimension or function. Acceptable capability is required for a selected dimension (when no special characteristic is stipulated) for PPAP to the responsible Henniges facility.

2.6.2.8 Mistake-proof sensors and function must be verified with test masters or ‘rabbits” at the beginning of each shift and after changeover and documented.

All critical characteristics (CC) must have mistake-proofing to prevent failure modes unless written agreement is obtained from Henniges quality.

2.6.2.9 Safe launch measures (i.e. GP12, GLB WI 05, etc.) are required for the first three months of production or until acceptable quality and capability is realized and Henniges quality has agreed to stop increased inspection.

2.6.2.10 ADDENDUM: EUROPE – In case of safety relevant characteristics, all documents belonging in these requirements shall be duly marked and archived pursuant to legal regulations, whereas the duration of archiving shall be ensured for 15 years from the end of a production. It is necessary to ensure the perfect assignment of record documentation to supplied batches or individual products.

Parts with safety relevant characteristics, where Volkswagen is the end user, are marked as D/TLD parts. In such case the concern Volkswagen enlarged its requirements above the scope of the standard and regulations and requires suppliers to perform self-audit of documentation keeping of D/TLD parts pursuant to the methodology Formel Q - capability. Suppliers who are subject to such requirements shall perform the self-audit on a 12-month basis, archive its results for 15 years from the production end, and provide its results to Henniges Supplier Quality without request to do so. If any questions are answered no, supplier shall inform Henniges Automotive of the audit results without being asked to do so; including subsequent measures and in such case supplier is automatically classified as supplier C. The criterion of such audit performance is part of suppliers' assessment in Henniges Automotive. The audit shall not be older than one year.

Purchased parts designated as critical (D/TLD parts, or it is a technologically complex product, new technology) require supplier to pursue the methodology of VDA (QPN_RGA/2TP for Volkswagen Group) with direct supervision by Henniges Automotive. This applies to purchased parts designated with special characteristics and high risk suppliers (given the results of risk assessment) even if not explicitly mentioned in the assignment letter.

2.6.3 PROCESS APPROVAL

2.6.3.1 Process requirements and documentation at a minimum must meet the latest edition of the AIAG PPAP manual, and other OEM customer specific requirements where applicable. Henniges may require additional evaluation or records as required.

2.6.3.2 Supplier shall provide and maintain a timing plan to meet the contract agreement. Timing status will be submitted to the identified Henniges team members.

2.6.3.3 Equipment, tooling, and components will be evaluated and approved based on drawing or specified requirements in the Mold SOR and Equipment SOR documents along with run at rate and capability evaluation. Capital equipment

requires buyoff at supplier and Henniges plant unless otherwise agreed upon.

2.6.3.4 Equipment and tooling ownership must be permanently marked and verified prior to Mold SOR, Equipment SOR, or PPAP approval. Identification shall read "Property of Henniges/(OEM Name)" . If OEM has additional tag and identification requirements including photographs then supplier must provide this support prior to PPAP.

2.6.4 PROTOTYPE/PREPRODUCTION PARTS

2.6.4.1 The goal is to manufacture prototype parts using a production process and tools. But, at a minimum supplier must use process planning (flow charts, control plans, inspection plans, and work instructions) to define and implement the prototype build. All special and critical characteristics must be documented on all process control documents.

2.6.4.2 Prototype parts must meet all drawing requirements prior to shipment. Supplier must have a dimensional plan to layout or CMM parts to show conformance to drawing requirements for each serial numbered part, as required. Quantity of parts inspected is documented in the specific build plan. Special characteristics must be inspected 100% until acceptable capability is realized on a production process.

2.6.4.3 All prototype/preproduction parts shipped to Henniges must have agreed upon identifier on the packaging and parts; must follow customer specific requirements where applicable.

2.6.5 TEST EQUIPMENT AND GAUGES

2.6.5.1 All test equipment and gauges must be calibrated traceable to NIST, or national equivalent. All external calibration companies must be certified to ISO/IEC 17025 or national equivalent.

2.6.5.2 A test and inspection plan must be developed to measure all agreed upon dimensions or functions and special characteristic requirements in the design record based on the control plan. Variable data is required for all special characteristics unless otherwise authorized in writing by the Company quality department.

2.6.5.3 Gauge R&R goal should be less than 10% of product tolerance, but based on cost and feasibility Henniges will accept an R&R at $\leq$ 20%. Gauge R&R of >20% must have a corrective action plan to develop the gauge and improve the R&R to 20%. If 20% is not realized, Henniges quality may approve R&R up to 30%

based on product criteria and cost/benefit analysis of data. Greater than 30% must have corrective action.

2.6.5.4 All test equipment or gauges purchased through a Henniges Automotive purchase order must be permanently identified as owned by "Henniges/OEM Customer Name". See 2.6.3.4 for additional requirements.

2.6.5.5 Test equipment and gauges will be approved as stated above and PPAP but Henniges customer may require review and approval of gauge design prior to gauge build. If required, Henniges customer's approval process will be enforced.

2.6.6 PLANNING OF PROCESS EQUIPMENT/ PREVENTIVE MAINTENANCE

2.6.6.1 Supplier's manufacturing processes and operating equipment must be planned and developed with sufficient capacity to produce the required features within tolerance at the specified part volume plus customer required percentage increase. Supplier capacity studies will be verified during Supplier Assessment Audits (Section 5.1 in the Henniges Supplier Assessment Audit). If the capacity is not met supplier must submit an improvement plan to meet customer maximum daily requirements.

2.6.6.2 The process plan includes the Process FMEA development and improvement actions. PFMEA, risk must be scored correctly to the latest version of the AIAG FMEA Manual. PFMEA is a risk analysis tool used to identify product variation risk based on current process measurable, product quality concerns and lessons learned on past and current products.

2.6.6.3 Supplier must have a documented process and schedule for preventive maintenance. The maintenance schedule must include all Henniges or Henniges customer owned equipment and tooling. Supplier is responsible for identifying and stocking key replacement parts.

2.6.7 PACKAGING PLAN / PRODUCT IDENTIFICATION

2.6.7.1 Packaging must be developed and defined to eliminate damage during transportation and storage. Convenient handling and environmental aspects must be considered along with quantity allowed, suitability for transportation, stacking, and cost. Environmental aspects and reduction in quality based on pollution, corrosion, and chemical reaction must be evaluated and avoided.

2.6.7.2 Supplier must define the packaging agreement with Henniges Plant prior to production PPAP . Packaging trials must be completed prior to SOP to confirm robustness of dunnage to protect product. The supplier is responsible for testing and validation of all expendable packaging using either ASTM D-4169, ISTA 3E testing, or as specified by the applicable CSR. This would include but not limited to: shock, vibration, compression, and drop testing. All testing costs are the responsibility of the supplier.

2.6.7.3 Supplier must ensure identification and traceability of products supplied. This identification includes labeling of packaged products, manufacturing location, mfg date, shift, and part identification, as required in the agreement.

2.6.8 TRAINING

2.6.8.1 Supplier's employees must be competent and qualified for their job function. Supplier must ensure this through appropriate internal or external training courses. A training record must be available for all employees producing a product or service for Henniges

2.6.8.2 All shifts shall be staffed with personnel responsible for ensuring part or product quality.

2.6.9 INITIAL PPAP SAMPLES / IMDS

2.6.9.1 Supplier is to submit for approval the manufactured first samples off the production process and tooling in the agreed amount. Inspection frequency for capable processes will be per the control plan and non-capable processes require 100 % gauging or inspection or as agreed upon with Henniges quality.

2.6.9.2 Evaluation, testing, inspection, and process data from sample run must be documented in the PPAP package per AIAG PPAP Manual and submitted to the specified Henniges Plant. Supplier shall submit Level 3 PPAP documentation at a minimum unless otherwise agreed upon in writing from the Company quality group.
ADDENDUM: EUROPE – Supplier shall submit VDA2 PPA documentation - level 1 for materials, level 2 for component parts (plastic components, metals, etc.) and level 3 for parts containing customer recognized special characteristics (typically glass).

2.6.9.3 Supplier must provide verification concerning the composition of the materials used and their individual components as well as aspects relating to the environment. Supplier must input the IMDS data into the system prior to delivery of first samples or PPAP package.

2.6.9.4 Supplier will implement additional 100% inspection as required by Henniges or OEM inspection requirements during launch or after major design and/or process changes. Time period for extra inspection will be defined by Henniges.

2.6.9.5 Henniges corporate supplier quality to verify safe launch measures during supplier launch readiness audit (i.e. GP12 station ready, GP12 instruction completed and approved by Henniges, GLB WI 05, etc.).

2.6.9.6 Henniges plant quality must verify safe launch measures (i.e. GP12 inspection form, etc.) are on supplier's Control Plan before approving Supplier's PPAP.

2.6.9.7 Suppliers will submit a full layout for requalification every 3 years (per IATF 16949 Section 8.6.2).ADDENDUM: EUROPE – Suppliers shall submit a full PPA resubmission every 3 years; parts with special characteristics require once per year (per VDA2).

2.6.10 RE-SUBMISSION OF PPAP

2.6.10.1 Supplier must provide advanced notice to Henniges and submit a new PPAP package if the following occurs:

- Changes to manufacturing materials (also from subcontractors) defined in the process documents, specifications, and design record.
- Change to process steps or elimination of a process step. (Example:
- part bent using a bender changed to on-line sweep process).
- Changes to the inspection process/equipment defined in the process documents.
- Change of subcontractors.
- Transfer of manufacturing location.
- Transfer of the manufacturing equipment within the location.
- New start-up after decommissioning of 12 months or more.

2.6.11 ACCEPTANCE TESTS / TEST CERTIFICATES

2.6.11.1 Acceptance and test certificates are not required for PPAP product shipments, unless specified. Supplier must record all test and acceptance data and retain it in case Henniges requests to review the documents

2.6.11.2 Supplier is stating in the PPAP that the goods delivered are free of faults, have guaranteed characteristics and correspond to the requirements defined in the design and process records.

2.6.11.3 Supplier must submit a Certificate of Analysis or tests (as per EN10204 3.1) for all deliveries of raw materials and components where specified on the SOR/ MTS.

2.7 SUPPLY CHAIN MANAGEMENT

2.7.1 SUPPLIER COMMITMENT

2.7.1.1 Henniges Purchasing will seek long term agreements and commitments with commodity suppliers to facilitate the cost reduction programs required by our customers. This may include rebates and future cost or price structuring based on specific volume levels or business percentages.

2.7.1.2 All long term and short-term commitments will be negotiated by Henniges Purchasing and documented. All Henniges facilities will be notified of any agreements.

2.7.1.3 Henniges has high expectations of all suppliers and will seek commitments with suppliers that have a strong commitment to quality improvement and cost savings by contract agreement.

2.7.2 SUPPLIER DEVELOPMENT

2.7.2.1 Based on finite resources, Henniges will prioritize supplier quality improvement plans (QIP) based on supplier performance ratings and importance of the product or component to product quality and customer satisfaction.

2.7.2.2 A supplier QIP or controlled shipping may be initiated based on poor quality and delivery performance as the last step before possible product re- sourcing is approved. Suppliers with a monthly score of red for 3 consecutive months, or red 5 times in the last 12 months, on the Henniges Supplier Scorecard must submit a QIP. Upper management meetings between
Henniges and Supplier will be conducted on a quarterly basis to review the QIP progress.

2.7.2.3 Supplier QIPs may include support in quality systems, Lean Mfg, six-sigma, team oriented problem solving, etc.

2.7.2.4 Quality Management System development includes monitoring supplier process metrics (PPM, Premium Freight) and annual audits as required.

2.7.2.5 Supplier Quality issues that reach the customer (OEM) make supplier red on the Henniges scorecard.

2.7.2.6 Supplier short term development is monitored through 8D's. Supplier long term development is monitored through Supplier Assessment Audit

2.7.3 CONTROLLED SHIPPING

2.7.3.1 Based on continued poor quality and/or delivery performance a supplier may be notified by Henniges that controlled shipping is required to protect Henniges and their customer from further problems. Henniges quality shall identify specific defect or concern to be controlled. All costs associated with controlled shipping due to a supplier quality issue will be charged back to supplier.

2.7.3.2 Controlled shipping (CS) has two levels:

2.7.3.2.1 Level CS-1
Supplier must identify specific personnel to monitor, measure, inspect and certify all product shipped to Henniges and identify all product that was inspected. A report must be generated that identifies the type and quantity of defects or problems that were found by the CS-1 inspection and provided to Henniges on a daily basis.

2.7.3.2.2 Level CS-2
Supplier must employ an independent third party to monitor, measure, inspect, and certify all products.All certified product must be marked and identified.A report must be generated and provided to Henniges on a daily basis that identifies the type and quantity of defects or problems that were found by the CS-2 inspection. Supplier must identify the CS-2 organization responsible to Henniges quality personnel. If supplier refuses to comply with CS-2 request then Henniges may set- up CS-2 at their facility and charge back costs to supplier. Henniges shall have the authority to approve/veto the CS2 provider selected by supplier.

2.7.3.3 A supplier will be removed from controlled shipping when inspection datashows a stable process for twenty production days for the specific defect or concern. Henniges quality personnel will review the data and current issues and if acceptable will remove supplier from controlled shipping.

2.8 SUPPLIER RATING / EVALUATION

2.8.1 EVALUATION OF APPROVED SUPPLIERS

2.8.1.1 The Henniges Plant Quality Manager is responsible for ensuring that supplier

performance information is documented each month for his/her facility. Corporate supplier quality group is responsible for reviewing and summarizing data from all facilities.

2.8.1.2 Supplier performance shall be monitored for performance through the following indicators:

DELIVERY PERFORMANCE INCLUDING PREMIUM FREIGHT. (40 POINTS)
100% ON-TIME DELIVERY IS REQUIRED.

A - Quantity Violation (Over/Under Shipment) = -3 Pts / Incident

B - Expedited Shipment = -3 Pts / Incident

C - Shipment Violation: (missing paperwork, incorrect mode, incorrect carrier, missing ASN, late ASNs, missing barcode labels, barcode labels that will not scan or with incorrect data, supplier portal issue, NAFTA Certificate of Origin not submitted timely, etc) = -3 Pts / Incident

D - Delivered product quality (PPM) (40 Points)

0 – 25 PPM = 40 Pts

26 – 100 PPM = 35 Pts.

101 – 200 PPM = 30 Pts.

201 – 300 PPM = 25 Pts.

301 – 400 PPM = 20 Pts.

401 – 500 PPM = 15 Pts.

501 – 700 PPM = 10 Pts.

701+ PPM = 0 Pts.

Lack of response to 8D requests or issues (5 Points)

Point reduction from ten is subjective per plant perception

Late PPAP and annual dimensional layout or Incomplete (5 Points)

Point reduction from ten is subjective per PPAP expectations

Bulk suppliers are scored by percentage (not PPM).

Green: <0.5% Yellow: 0.5 – 1.0% Red: >1.0%

2.8.1.3 Suppliers with an A, B or C rating may be evaluated for improvement based on a single event such as customer disruptions, field returns, and/or quality issues.

2.8.1.4 Suppliers with a rating less than B may be evaluated for improvement by the global supplier quality group. Improvement plan may include an audit of all processes and related documents or additional training. Improvement plan will be documented.

2.8.1.5 Suppliers with a C rating after improvement plan implementation may be evaluated for resourcing of product. Supplier quality and purchasing will jointly evaluate supplier for additional improvement or resource planning. If necessary, supplier shall help Henniges plan (bank build) and execute a resource plan.

2.8.2 SUPPLIER CHARGE BACK / DEBIT

2.8.2.1 SUPPLIER PRODUCT SHIPPED TO HENNIGES FACILITIES

2.8.2.1.1 In the event that non-conforming material is received by Henniges. Supplier is required to take immediate containment action (< 24 Hrs.). Supplier must provide a detailed problem solving analysis and 8D (per GLB QM-02-1) within 10 days or earlier as agreed upon between supplier and Henniges Quality. If required, the specific OEM format will be used to document the permanent corrective action.

2.8.2.1.2 Costs incurred by Henniges due to poor product quality, non-conforming product, and delivery based on contractual requirements will be charged back to supplier.

2.8.2.1.3 Henniges will debit supplier for all non-conforming or rejected material received and the cost to ship the products back to supplier, if required.

2.8.2.1.4 If product sorting is required, Henniges expects supplier to sort their product. If Henniges is in a shutdown situation they will sort immediately and charge back sorting costs to supplier.

2.8.2.1.5 Special circumstance or unusual situations will be handled on a case-by-case basis through purchasing.

2.8.2.1.6 Henniges facilities may have different forms, process steps and charges based on their internal returned material or supply management process. Management Fee charges will be defined and documented by each facility.

2.8.2.2 SUPPLIER PRODUCT SHIPPED DIRECTLY TO THE CUSTOMER

2.8.2.2.1 If Henniges receives a rejection from the customer on a supplied product. The supplier is fully responsible for the following costs:

Henniges travel costs to attend meetings at the customer facility to correct or

support a quality or delivery issue.

All costs related to Controlled Shipping Level CS-1 and/or Controlled Shipping Level CS-2 per OEM requirements.

All customer debits for line stoppage, sorting, replacement of parts, expedited shipments, and other charges incurred because of an issue with suppliers product.

Management Fee for returned material or supply management process defined by the responsible Henniges Facility.

2.8.3 PRODUCT / SUPPLIER RE-SOURCING

2.8.3.1 If a supplier continues to have quality or delivery issues with Henniges, re-sourcing of that product to a different supplier will be considered. Suggested suppliers must be approved or have a Quality Rating >80 prior to award of business.

2.8.3.2 Upon request, supplier shall provide a detailed list of Henniges owned tooling and gauges along with specific capital equipment attached to the tooling to complete the current process.

2.8.3.3 Supplier is required to provide additional product up to the contract and additional 25% quantity to build the required product bank to protect product availability and quality to the customer.

2.8.3.4 Upon re-source approval, purchasing will issue formal re-source notification to the current supplier along with the specific timing of the tool move based on the re-source plan.

2.8.3.5 Henniges will witness the transfer of tooling and gauges and address any issues or concerns that may arise during the process.

2.8.3.6 Henniges quality will follow the re-source through plant trials and PPAP of the product and process at the new supplier.

2.9 Supplier Escalation Process

2.9.1 Plant Level

Plant quality Engineer contacts supplier for problem resolution by issuing a Supplier Corrective Action Report. The QE or Materials Department

performs a follow up with supplier by email or phone if supplier does not meet the requirements of (GLB QM-02-1 Henniges SCAR-8D-Chargeback form).

If the QE or Materials Department does not get resolution through emails or phone calls, a conference call needs to be scheduled with supplier. If there is no resolution the Plant QE or Materials Department escalates the issue to the corporate Supply Quality Engineer.

2.9.2 Corporate Supply Quality Engineer

Corporate SQE contacts supplier for problem resolution, reference section 2.7.2 in this manual for supplier development details. If there are no resolutions, the SQE escalates the issue to the Commodity Manager.

Other Corporate SQE escalation measures includes the following:

- 2x consecutive audit ratings at level C or B
- Suppliers with D characteristic for Volkswagen does not retain the records of D/TLD within 12 months
- Lack of provision of following documents in case of urgency - report from process audit, report from audit D/TLD or no provision of information on the product safety representative, regarding its changes
- Changes necessary for re-sampling pursuant to VDA 2 or PPAP are not notified
- Sampling refused in assessment or conforming with reservation at third and further assessment
- Non-conforming two-days production or R&R

2.9.3 Commodity Manager

Commodity Manager contacts supplier for problem resolution, and/ or escalates the issue to the Director of Purchasing.

Supplier could be invited to Henniges Automotive for a meeting where supplier must present the analysis / corrective actions / preventive actions for improvement. Henniges normally invites the Supplier's Quality Manager, Key Account Manager and General Manager/ Owner.

2.9.4 Vice President/ Director or Purchasing

Director of Purchasing contacts supplier for resolution, and/ or escalates the issue to the VP of Quality.

Revision	Changes made:	Date:
01	Original GDX Manual updated to Henniges Requirements and Henniges Numbering and Format	10/28/08
02	Updated to ISO 9001:2008 and ISO/TS 16949:2009 2.2.2 – Updated to ISO 9001:2008 and ISO/TS 16949:2009 2.2.6 – Updated to ISO/TS 16949:2009 2.6.3.1 – Changed ECAP to Equipment SOR 2.6.3.3 – Changed ECAP to Equipment SOR 2.6.3.4 – Added supplier must support additional ownership marking with photographs to new OEM requirements 2.6.5.4 – Added see 2.6.3.4 for additional identification	10/14/09
03	Revised 2.8.1.1, score deduction for Shipping Violations to -3, was -5. Also added in 100% on- time delivery is required. Expanded types of Shipping Violations. Approvers changed from Tom Waterstradt to Nick Shebib. Updated Contact name and numbers for questions.	7/11/12
04	Approvers changed from Nick Shebib to Steve Hollatz. Updated Contact name and numbers for questions.	3/8/17
05	2.2.2 and 2.2.6 Added IATF 16949: 2016 Approvers changed from Steve Hollatz to Michael Sharp Updated Contact name and numbers for questions. 2.9 Added Supplier Escalation Process. 2.4.1 Added proactive supplier assessments.	3/2/18
06	Added section 2.6.9.5 and 2.6.9.6. added link to 8d form (GLB QM-02-01 form)	3/28/18

07	Added 2.2.7 MMOG/LE requirement. Remove ISO/TS 16949:2009 Section 2.2 Added "All costs associated with controlled shipping and sorting due to a supplier quality issue will be charged back to supplier" at end of section 2.7.3.1 Changed 'Quarterly' capability to 'Annual' Capability- Section 2.6.2.9 Added the sentence "Customer required run at rate documents will be used when applicable." Section 2.6.1.8 Added Section 2.6.2.10 and section 2.8.1.1- Suppliers must submit an annual PPAP with a full part layout. Changed wording from "may be charged back" to "will be charged back.' Section 2.8.2.1.2 Added more detail to the escalation process- Section 2.9 Added the sentence- . "In the event that a supplier is red for 2 consecutive months on the Henniges Supplier Scorecard, a Henniges SQE or designee will perform a supplier Assessment audit at supplier facility." Section 2.4.1 Added 2.6.6.1 Supplier capacity studies will be verified during Supplier Assessment Audits (Section 5.1 in the Henniges Supplier Assessment Audit). If the capacity is not met supplier must submit an improvement plan to meet customer maximum daily requirements.	6/3/19
08	NOTE: This document (GLB QM 02) replaces the Henniges Europe Supplier Quality Manual (HQ-P02-008). 1.2 – Updated the Scope 1.4.2 – Add abbreviations: SCAR, SPPS, QR, NCT Updated ISO 9001 to 2015 Added 2.2.8 PSB 2.4.5 – Added Addendum Europe 2.5.2 – Removed overall rating from table. 2.6.1.1 –Added: and customer specific requirements where applicable (i.e. VDA 2, Formel Q, BIQS, etc.). 2.6.1.8 – Added: and customer specific requirements where applicable (i.e. VDA 2, Formel Q, BIQS, etc.). 2.6.2.5 – Replaced RPN with risk. 2.6.2.6 – Replaced SC/CC with special characteristic 2.6.2.7 – Added: and after changeover 2.6.2.9 – Added: Safe launch measures (i.e. GP12, GLB WI 05, etc.) are 2.6.2.10 - Added Addendum Europe 2.6.3.1 – Added: and other OEM customer specific requirements where applicable. 2.6.4.3 – Replaced non-PPAP with preproduction. Added: and parts; must follow customer specific requirements where applicable. 2.6.5.1 – Added: or national equivalent 2.6.9.2 - Added Addendum Europe 2.6.9.5 – Added: GLB WI 05 2.6.9.7 – This section is new. 2.6.10.1 – Added: must provide advanced notice to Henniges 2.6.11.3 – This section is new. 2.6.7.2 – Changed wording; added GLB QM 02-2 & OEM packaging form. 2.7.3.2.1 – Added: and provided to Henniges on a daily basis. 2.7.3.2.2 – Added: and provided to Henniges on a daily basis. Added: Henniges shall have the authority to approve/veto the CS2 provider selected by supplier. 2.8.1.3 – Replaced 80 -100 with A, B or C 2.8.1.4 – Replaced 80 with B 2.8.1.5 – Replaced below 80 with C	9/4/19

09	2.7.2.1 thru 2.7.2.3 – Replaced supplier development terminology with QIP. 2.7.2.2 – Added "Suppliers with a monthly score of red for 3 consecutive months, or red 5 times in the last 12 months, on the Henniges Supplier Scorecard must submit a QIP. Upper management meetings between Henniges and supplier will be conducted on a quarterly basis to review the QIP progress." 2.8.1.1 Added "The Henniges Plant Quality Manager is responsible for ensuring that supplier performance information is documented each month for his/her facility.Corporate supplier quality group is responsible for reviewing and summarizing data from all facilities." 2.8.1.2 Changed 10 points to 5 points. Added Bulk Supplier criteria. 2.8.1.3 Removed "Henniges will provide supplier rating to each supplier at a minimum of once per year." 2.9.1 Added "or Materials Department". 2.9.2 Removed "the SQE performs follow ups, which may include conference calls, supplier visits and Quality Improvement Plan". Replaced with "reference section 2.7.2 in this manual for supplier development details".	2/26/2020

10	2.2.3- Added Designated key suppliers 2.2.6- Updated wording per GM CSR for Designated Small Suppliers 2.2.7- Added wording 2.5.1- Updated New Supplier procedure 2.5.2- Updated Approved Supplier selection. 2.5.3- Added ASL access in Plex. 2.6.2.6- Removed annual PPAP and changed Capability annually to every 3 years. 2.6.2.8- Removed Annual PPAP including a full part layout 2.6.9.7- Changed Annual to every 3 years 2.6.7.2- Updated wording Removed Grant McComb and added Thiago Calin as contact at the end of the manual. Added GLB QM 02-3 Supplier Profile and Self-Assessment to Reference documents	10/9/20

3. Reference Docuemnts

AIAG PPAP Manual
AIAG FMEA Manual
AIAG MSA Manual
AIAG APQP Manual
VDA 2, VDA 5, VDA 6.3, VDA 6.1, Formel Q
ISO17025
GLB QM 02-1 SCAR-8D-Chargeback form
GLB QM 02-2 Packaging Approval form
GLB QM 02-3 Supplier Profile and Self-Assessment

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3 APPROVAL

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