

1 SCOPE

The purpose of the Quality Conditions of Purchase is to provide a clear set of requirements for supplying optical, mechanical and electronic components and subassemblies or product related services to Gooch & Housego United Kingdom companies (hereafter referred to as G&H). The goal is to achieve the delivery of defect-free components that meet or exceed the requirements of G&H and its customers. Additional requirements will be specified on the individual purchase orders. The purchase order and its terms and conditions are the contractual document and takes precedence.

2 GENERAL

Certification: It is preferred that suppliers introduce and/or maintain a quality management system meeting the requirements of ISO 9001 or equivalent, with the obligation to strive for defect-free and on-time delivery, and to continuously improve their performance. Certified suppliers must send a copy of their quality system certifications to G&H. Suppliers who are not certified may be requested to present their quality management plan to G&H for review and may be subject to a quality management system audit by G&H.

The supplier is to notify G&H of any changes to their processes, location, facilities, equipment, material, product design (or any change which may affect product design or function) which may have an effect on products or services supplied to G&H. Notifications shall be sent to the supply chain manager.

Risk: The supplier shall define an industrial risk prevention system. The supplier will maintain a risk management process appropriate to the organization and type of product or services manufactured or supplied to G&H. The buyer reserves the right to perform safety or environment audits or evaluations relating to ordered products in the Supplier's premises.

Access Rights: The supplier must permit the customer's representatives and if necessary customers of the end-customer and official services of civil and military surveillance, free access to the part of the workshops where items which are the subject of the customers orders are manufactured, controlled and tested. These rights of access must extend to the suppliers of the entire supply chain. A clause stipulating this must therefore appear in the orders sent by the supplier to its contractors.

Change Control: No change in product characteristics, in particular component or raw material change can be implemented on the buyer designated product without Buyer's written approval.

Any major change affecting the manufacturing processes, site changes shall be communicated to the buyer prior to implementation.

Quality: It is the responsibility of the supplier to ensure that they are working to the latest version of specifications referenced with in this document as well as the purchase order requirements. The supplier is entirely responsible to G&H for the quality of its supplies and their compliance with the technical specifications and order clauses.

Design Authority: The design authority will remain with G&H and its end customer. All activities are to be governed by the terms and conditions clause 11 'Confidential Information' unless others wise covered by a valid non-disclosure Agreement (NDA) between the supplier, G&H and the end

customer if appropriate. All correspondence/questions/queries on the order/specifications/drawings, shall be directed to G&H unless otherwise agreed in writing.

The quality standard ISO9001 applies in whole with the additional requirements detailed in the following sections.

3 QUALITY MANAGEMENT SYSTEMS

Document Control: The supplier shall implement an appropriate process in order to ensure the following:

- Document revision status is valid;
- Applicable documents are available in the sub-tier supplier's premises;
- Prevent use of obsolete documents and/or handwritten notes not yet validated.

Records: All quality records (non-electronic) shall be documented in ink or other permanent marking. Electronic imaging of records in lieu of storing actual inspection records is permissible. All electronic records must be controlled, retained, and retrievable per the same requirements identified for hard records. For electronic records that are transferred from computer files, the storage media must be capable of maintaining the data integrity for the full retention period. Examples of quality records to be retained are available from G&H on request.

The supplier shall maintain records concerning product realisation for a minimum of 10 years. Unless otherwise specified in contract or purchase order, documents retained by the supplier shall be available for review or shall be communicated to the buyer within 48 hours (two business days) upon simple request. Storage environment and recording method shall ensure data preservation and legibility during retention period.

Obsolescence: Any major changes within the supplier organisation must be indicated to the purchasing department of G&H. The supplier must manage obsolescence and must submit a plan of action to the G&H to remove any risks identified relating to obsolescence.

Competence: The supplier shall maintain an adequate system for determining the competence of each individual involved in the manufacture and supply of product or services against purchasing orders placed by G&H. It is recommended that procedures shall be implemented to ensure that eye examinations are administered to individuals performing the final visual inspection, and records retained for each individual.

4 PRODUCT REALISATION

Verbal Agreements: Verbal agreements or instructions shall under no circumstances be construed as approval or authorization to proceed. Any changes that may affect quality must be documented and communicated to G&H quality assurance representative prior to affectivity of the change. Such changes may be ownership, Manufacturing location, Process or inspection techniques.

Concessions: Supplier request for concession/permit against G&H purchase order (drawing, specification, order etc.) shall be submitted to G&H quality assurance representative for approval. Any work carried out prior to receiving an approved concession/permit is at the supplier's risk.

Purchase Orders: G&H Purchase orders for product will be sent by email. The supplier is to acknowledge orders in a timely manner, be responsible for ensuring that deliveries are in line

with the acknowledged dates. The supplier shall inform the buyer as soon as he is aware of any incidents or anomalies likely to affect fulfilment of the contract or purchase order (delivery date, product conformity etc.) G&H will provide delivery performance data on a regular basis.

Sourcing: The supplier shall ensure that materials, processes and sub-tier supplier used to manufacture the G&H product will be sourced in accordance with G&H requirements. Any change of material suppliers, processes or location of any part of the manufacture or the use of an 'equivalent' material/grade to that specified, must be identified to G&H with sufficient warning to allow full evaluation of any potential impact. No changes shall be made without written approval from G&H quality assurance representative. When specified on the drawing or Purchase Order, suppliers must use only sources approved by G&H to perform special processes. The use of directed sources does not relieve the responsibility for subcontractor control.

Deliverable Data: The supplier must provide raw material test reports/certification results/laboratory analysis with a C of C, stating country of origin, with each manufactured batch. It must be clear as to the origin of the raw material, processing or manufacture of the part. This may be detailed during a formal audit of the suppliers manufacturing facility, but written approval must be received from G&H before continuing to manufacture.

ROHS: G&H require the supplier to fully comply with specified component finishes and solders on the drawing supplied by G&H Against individual purchase orders. G&H require the supplier to maintain a clear definitions and configuration control of the component finishes and solder with in products delivered to G&H.

REACH: In the event that REACH applies, the supplier shall use its best efforts to ensure that the goods and or services are REACH compliant. The supplier warrants and represents that any substance or chemical that they are obliged to register Under REACH has been registered and that it has made all reasonable enquires of its suppliers and subcontractors to ensure That they have carried out any obligations to register under the legislation

Compliance: It is the sellers' responsibility to obtain all required export licenses from non-UK destinations, and advise G&H prior to shipment of any control requirements attached to the items. Copies of licenses shall be supplied by the seller to G&H prior to shipment.

The seller will also advise G&H of any re-export or re-transfer restrictions that apply to all items to be supplied prior to confirmation of the Purchase Order. G&H are committed to complying with all applicable laws, regulations, and contractual requirements. It is imperative that all products supplied to G&H meet the requirements of the purchase order in full.

FAR/DFAR: Any items being supplied to the United States may be required to satisfy the requirements of the FAR and DFAR regulations. All items supplied to G&H must be in compliance with these requirements.

Fraudulent and Counterfeit Material Avoidance: G&H wishes to prevent counterfeit and suspected counterfeit items from being procured and installed in our products. We expect that you are equally concerned to ensure that counterfeit items do not enter the supply chain and we would therefore ask you to review your supply chain to prevent counterfeit and suspected counterfeit items from being procured and supplied

to G&H.

It is recommended that items are purchased directly from original component manufacturers (OCMs), OCM authorized (i.e. franchised) distributors, or authorized (i.e. franchised) aftermarket manufacturers. Use of Items that were not provided by these sources must be approved in writing by the G&H and the request shall include all actions to ensure the Items thus procured are new, unused and authentic Items. The supplier shall flow down these requirements to the supplier's supply chain for any Items sub contracted by the supplier for product that is intended for G&H.

Foreign Object Damage (FOD) Prevention: The supplier shall pay due diligence to prevent foreign objects getting into any deliverable item. In general, good industrial practise, good house keeping, and final product inspection encompassed in a structured quality management system are sufficient for the mechanical and optical components parts supplied to G&H. The supplier shall flow down these requirements to the supplier's supply chain for any Items subcontracted by the supplier for product that is intended for G&H.

Product Safety: the supplier shall review the state in which a product is able to perform to its designed or intended purposes Without causing unacceptable risk of harm to persons or damage property, within their scope & responsibility. This shall also apply to all packaging that the components or assemblies are supplied, to G&H.

Ethical Behaviour: It is recognised that operating to the highest ethical standards benefits all companies and society. We at G&H, fully acknowledge and support this principle. G&H's long term success depends on all Associated stakeholders upholding their integrity in bidding, negotiating and performing contracts. That expectation applies to all suppliers to G&H, that they too shall behave ethically towards their customers, suppliers, competitors, employees, and other stakeholders.

Human Factors: The supplier shall consider Human factors and the extent that they directly impact on the quality of products Or services and their employees, such as, for example:

- Social (e.g. non-discriminatory, calm, non-confrontational);
- Psychological (e.g. stress-reducing, burnout prevention, emotionally protective);
- Physical (e.g. temperature, heat, humidity, light, airflow, hygiene, noise).

Product/Service Conformity: Supplier shall ensure that their employees and sub-tier suppliers are aware of their contribution to product/service conformity.

ESD (Electrostatic Discharge): Where applicable, the Supplier shall implement all necessary arrangements required to control ESD during manufacturing and handling of electronic components or electronic assemblies. The provisions shall comply with MIL-STD-1686 or EN 61340 Standards

Traceability: The Supplier shall implement a traceability procedure ensuring that the following information may be retrieved in respect of any given product or batch of products.

- Manufacturing history (manufacturing, assembly, testing operators)
- For each manufacturing step, quantity of accepted and rejected products.
- Destination (delivery, scrap) of each product or batch of products.

- Non-conformities with the applicable manufacturing and inspection requirements.
- Records of all tests carried out.

Packaging: Parts are to be individually serialized; on small optical components this may be on the individual packaging as agreed at the time of the order. Batch identity to be retained on delivered parts. The parts are to be clean and suitably packed to prevent damage during transit. The primary packing is to be of an appropriate material suitable for clean room environment. Products that have a shelf-life shall be delivered in an opaque, single unit packaging with the product label identifying the manufactured date and the expiry date or shelf-life. Regarding the supply of products with a limited shelf life, the product on receipt by the customer should have greater than 80% shelf life remaining.

5 MEASUREMENT, ANALYSIS AND IMPROVEMENT

FAIR: The purchase order will detail whether a first article inspections (FAI) is required to be performed in accordance with SAE AS 9102. The supplier holding the G&H purchase Order is responsible for assuring completion of the requested FAI Report for all finished part characteristics generated by Sub-tier Suppliers. At any time, G&H may request a complete FAI to be performed in lieu of a partial (delta) FAI. The buyer reserves the right to witness the first article Inspection at supplier's premises.

Non-Conforming Parts: The supplier shall coordinate all reports of non-conformances on orders for G&H. Articles deemed scrap must be clearly identified and adequately segregated from conforming material. The disposition of scrap is at the discretion of the supplier unless otherwise specified by the purchase order. G&H must be informed immediately (not to exceed 24 hours or the next business day) of suspect nonconforming product shipped regardless of destination. The supplier is to ensure that related characteristics which may be affected by rework or repair operations are identified and re-inspected after these operations are performed.

Corrective Action: Any nonconformity notified by the buyer (nonconforming products and/or purchase order line delivered late) shall be subject to root cause analysis. This analysis shall involve the implementation of relevant corrective and preventive actions. The supplier is required to provide a report documenting the occurrence, findings, and assessment of the affected product and submit to G&H.

Should there be a customer issue with any devices manufactured by the supplier; G&H will use its internal SCAR (supplier corrective action request) procedures to inform the supplier. This will require the supplier's quality department to investigate the root cause and report effective preventive actions taken with a closure timeframe of 30 days. Any such occurrences will affect the supplier's quality performance rating, which G&H will be providing on a regular basis.