



CUSTOM GLASS
SOLUTIONS

Custom Glass Solutions Supplier Quality Manual Rev.: 5

February 21, 2019
Custom Glass Solutions
Upper Sandusky, Fostoria, and Worthington



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1.0 Introduction

Custom Glass Solutions (CGS) success is based on supplying high quality, high performance products at a competitive price to our customers. Our suppliers are a key element in achieving and maintaining this high standard of performance. We consider our suppliers an important part of the CGS team. CGS strives to develop and maintain positive working relationships with all of our suppliers.

This document sets out and defines CGS' expectations of our suppliers. As a supplier to CGS, you agree to conform to the quality system guidelines in this document.

Exceptions to these guidelines must be agreed to in writing by an authorized officer of CGS.

This Manual and CGSs Contract Terms are available on the Custom Glass Solutions website, or upon request from a CGS authorized purchasing representative. In this document, "you" or "your" relates to the supplier and "we" or "us" relates to Custom Glass Solutions.

2.0 Supplier Selection and Supplier System Expectations

2.1 Supplier Selection Criteria

Supplier selection and supplier retention will be based on the following:

- a) All new suppliers must comply with the requirements established in sections 2.2, 2.3, and 2.4 (if applicable) within this document.
- b) All new suppliers are to have a supplier assessment on file with CGS Purchasing unless a waiver is permitted. The supplier assessment may be completed as a self-assessment, or as an on-site review by CGS representation.
- c) New suppliers will be assessed based on:
 - i) Expertise in the product or service required
 - ii) Customer directed sourcing activity
 - iii) Competitiveness within the market with regards to capabilities, cost, and/or quality.
- d) Current suppliers will be retained based on measured performance, and compliance with the guidelines set forth in the remainder of this document. Current suppliers unable to meet the expectations with regards to measured performance and compliance with the guidelines set forth in this document will be required to provide corrective action plans with approved timing to become compliant to their deficiencies.





2.2 Quality Systems Requirements

All suppliers of products and services provided to CGS that affect customer requirements must be, at a minimum, ISO 9001 certified with the goal of conforming to IATF 16949. In the event that the supplier is not certified, CGS will place the supplier on “New Business Hold” and will replace the supplier with a certified supplier that meets all of CGS’ requirements.

Your quality manuals and overall quality systems will conform to ISO 9001 and/or IATF16949 standards. CGS reserves the right to require more specific component requirements from its suppliers.

CGS may exempt certain organizations from ISO 9001 and/or IATF 16949. This exemption applies to those organizations whose automotive business is of such low significance that they will not register to ISO 9001/IATF 16949 but are still needed as a supplier. Exemption criteria will be in writing and applied consistently in the application of this exemption. The audit is structured to evaluate the supplier's systems conformance to or ISO 9001 and CGS requirements.

2.3 Conflict Minerals Reporting; Compliance and Ethics

You must respond timely to CGS' requests for information on the source and chain of custody of any Conflict Minerals (defined below) necessary to the functionality or production of the products you supply to us. In order to comply with this requirement, you must either register your organization with iPoint Conflict Minerals Program (IPCMP) at: <http://www.conflict-minerals.com> and submit online all requested information or complete the Electronic Industry Citizenship Coalition® and Global e-Sustainability Initiative (EICC-GeSI) template at: www.conflictreesmelter.org and submit all requested information to CGS Supplier Quality. The term “Conflict Minerals” means columbite-tantalite, cassiterite, wolframite and gold ores – which are refined into tantalum, tin, tungsten and gold, respectively, or other minerals or compounds that may be designated in the future by the U.S. Secretary of State.

You must ensure that the information provided in this regard is current, accurate and complete, to the best of your knowledge and belief as of the date of your submission, update such information in a timely manner if the status of any product you supply to us changes, and retain all necessary documentation to support the information you provided.

You must also include substantially the same requirements set forth above in each of your contracts with your sub-suppliers that provide any material or sub-component incorporated into products you supply to us.

CGS expects all of its suppliers to meet our expectations regarding responsible sourcing.





2.4 Heat Treating; Plating; or Coated Product Supply

Suppliers providing CGS with heat treated, plated or coated product / material shall meet the requirements of the AIAG CQI- 9, 11,12 Heat Treat, Plating and Coating System Assessments. Records of these assessments including any corrective actions required for compliance shall be maintained and made available upon request by CGS.

For Special Characteristics utilizing customer directed symbols 'O', where applicable, you are expected to be aware of the OEM 'marking' requirements.

You must complete the attached supplier information sheet on the web site. You must update the list when you make personnel changes and provide it to CGS' purchasing group.

3.0 Quality Performance

Suppliers are expected to provide parts and services that have zero defects and result in zero claims. CGS may rate its suppliers on PPM, rejections, on-time delivery, expedites, and other performance metrics. Your quality performance will be taken into consideration when we make sourcing decisions. Your supplier performance will be tracked and is available at different time intervals upon request.

Supplier Review Meetings

Suppliers who do not meet CGS performance expectations may be selected to attend a Supplier Review Meeting. Supplier review Meetings are plant-lead meetings designed to drive suppliers to identify the systemic/management issues that need to be addressed in order to put effective closure to an issue(s). The basis upon which a supplier may be invited to a Supplier Review Meeting include, but are not limited to, unsatisfactory:

- a) Quality Performance
- b) Delivery Performance
- c) Concern Responsiveness
- d) Problem Solving Performance
- e) APQP Performance

4.0 Legal, Ethical and Other Expectations of Our Business Partners

You will conduct your business lawfully, ethically, and with integrity in accordance with our expectations.





5.0 Advanced Product Quality Planning

You will utilize the planning procedures and techniques provided in the most current *AIAG Advanced Product Quality Planning and Control Plan* reference manual. You will be asked to supply data at regular intervals prior to PPAP in order to conform to CGS' APQP Process.

6.0 CGS Access to Supplier Facility

Upon 24-hour notice, you must allow us and our customers to have an on-site review of all processes, including those of sub-suppliers and sub-contractors if specified in the notice.

7.0 Production Part Approval Process

Requirements and Expectations

Level 3 is the submission level default unless otherwise specified in writing by CGS Supplier Quality.

You will conform to all requirements defined in the *AIAG PPAP Manual, Latest Revision*, in addition to CGS' specific requirements. All PPAPs must be submitted electronically and utilize the CGS PPAP checklist to be provided prior to PPAP.

As a supplier of product and/or service that effects customer requirements, you will ensure that all of your sub-suppliers meet all requirements of the latest revision of the AIAG PPAP Manual. CGS reserves the right to request inclusion of the sub supplier's PPAP within the supplier's PPAP submission.

Any modifications after PPAP to part, process or facility must be communicated and approved in writing by CGS Purchasing and / or Supplier Quality prior to commencement of activity. The activity must include resubmission of PPAP.

All PPAP packages must be submitted electronically via email.

7.1 Supplier Request for change/Customer notification and submission requirements

No changes are authorized without the approval of a CGS representative. The change request is to be submitted by email, a minimum of 180 days prior to the change occurrence unless otherwise acknowledged and approved by a CGS representative.





7.2 Deviations for Non-Conforming Material

It is the policy of CGS **not** to accept product that does not meet the requirements of the applicable drawings and specifications. Requests for concessions on non-conforming product will be submitted to CGS user plants and Supplier Quality for review by a cross functional authority and to obtain customer approval, as required, prior to shipment. Any such requests shall be accompanied by a thorough explanation of the root cause for the non-conformance, the actions taken to eliminate these root causes and to prevent reoccurrence, and the date of quality assured product availability together with confirmation of its traceability and the manner of identification.

NOTE: See Production Part Approval Process for clarification regarding safety-related items.

7.3 Bulk Material

Requirements for bulk material PPAPs are as follows:

1. Bulk Materials include, but are not limited to the following:
 - a) Adhesives and sealants – solders, elastomers
 - b) Chemicals -resins, polishes, additives, treatments, colors
 - c) Coating -topcoats, undercoats, primers, phosphates
 - d) Film and film laminates
 - e) Ferrous and non-ferrous metals - bulk steel, aluminum, coils, ingots
 - f) Monomers, pre-polymers and polymers - rubber, plastic, resin
2. PPAP submission and approval is required for:
 - a) Bulk material processing technologies that are new to suppliers and that have not been previously used for this application
 - b) Suppliers that are starting to sell a new product for a new application
 - c) Any change that would normally be expected to have an effect on the part and material formulation
3. Requirements: The Bulk Materials Requirements Checklist must be utilized.
4. In addition to the above PPAP requirements, CGS expects its suppliers to provide the following data where applicable:
 - a) Material certifications tested per required specifications
 - b) Color plaques or numeric color values, if applicable
 - c) On-going SPC data, if specified





8.0 Revalidation and Certification

Annual Revalidation

CGS requests you to revalidate supplied parts and material annually. Revalidation at a minimum will consist of the following:

- a. Dimensional layout (all characteristics on the current print)
- b. Performance testing
- c. Measurement system analysis
- d. Update of any CGS specific requirements
- e. MSDS
- f. ISO/TS certification
- g. Lev 4 Warrant noting 'Annual Validation' in the comments section
- h. Any changes to Conflict Minerals related to the product

The supplier will retain records of the annual revalidation, which will be made available to CGS within 24 hours upon request.

Material Certification

The supplier will provide evidence of material certification (conformance to specification) with each lot/batch or shipment to the receiving CGS facility. In some cases, the supplier may be asked to participate in “pre-certification” approval processes prior to actual shipment.

The certification documentation may be faxed or included with the shipping documentation and addressed to the attention of the appropriate plant personnel.

9.0 Statistical Process Control

If requested, the supplier will provide evidence of control and on-going capability as required for submittal at PPAP revalidation. SPC monitoring is required where applicable for prototype, preproduction trial runs, PPAP and continuous improvement monitoring. Minimum capability values are Ppk/Cpk of 1.67 for the pre-production trial runs and Ppk/Cpk 1.33 for PPAP.

Evidence of control and on-going capability may be required for submittal on a regular basis.

10.0 Nonconforming Product

In the event that you supply product that CGS believes is nonconforming (all products shipped past an interim date or without full PPAP approval are considered nonconforming), you will be responsible for the nonconforming product and subject to the following actions:





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1. We can return the entire lot of product, or any portion thereof, to you at your sole cost. Freight fees will be applied if you are unable to supply return freight options. You will refund us for the cost of the product or replace it with conforming product free of charge at CGS' sole option. (This is only applicable if there is adequate stock to maintain production until certified product is available.)
2. You will sort the product at our facility within the timeframe specified by us to identify conforming product that we can consume to maintain production.
3. In the event you are unable or unwilling to sort product within twenty-four hours (unless specified otherwise), we will have the option to:
 - i. sort the product for \$20 per hour, or
 - ii. have the product sorted by an impartial third party approved by us. You will pay all of the third-party sorting company fees
4. A \$500 administrative/manpower fee (a onetime fee applied to either of the above charges).

In the event that the nonconforming product is found at a CGS customer location, you will be responsible for any sorting costs in addition to any charge-backs incurred by CGS from its customer. In addition, we reserve the right to debit any warranty charges incurred for defects caused by your nonconforming product. These charges may include, but are not limited to, transportation costs for return materials, evaluation costs incurred by CGS personnel, dealer markup, and any punitive costs incurred from CGS' customer. You will also be expected to support customer-designated meetings to resolve warranty issues related to your product.

The remedies listed in this document for nonconforming product are not meant to be exclusive and, in addition to those remedies or actions set forth in this document, CGS shall have the right to seek all other remedies, either by law or in equity.

10.1 Containment and Corrective Action

You will take all necessary actions to contain and correct the nonconformity both in-house and at the CGS location. This may include, at a minimum, sorting and/or rework. Supplier is responsible for shipping costs for returned material and the cost of replacement of material. All products shipped past an interim date or without full PPAP approval are considered nonconforming.

10.2 Controlled Shipping

The standard guidelines for implementation of controlled shipping take into consideration one or more of the following:





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- Inadequate containment and/or resolution of nonconformance via corrective actions.
- Untimely responsiveness for a nonconformance via corrective actions.
- Repeat corrective action requests from one or multiple CGS locations
- Incapable processes.
- CGS customer quality rejection due to a supplier component. Two levels of controlled shipping exist:
 - a) Level 1 controlled shipping is defined as an additional 100% inspection process after final inspection in a separate inspection area. Your employees at your location will complete the sort in order to make sure CGS does not receive nonconforming parts/material. You must communicate the containment results daily to us.
 - b) Level 2 controlled shipping is the same activity but the “person(s) performing the sort” must be employees of an impartial third party. We must approve the sorter company that you select. You will pay all of the third-party sorting company fees. The Level 2 containment may take place anywhere throughout the supply chain as designated by CGS. Level 2 containment is in addition to the Level 1 requirements already put in place. Notification to supplier's quality registrar will take place with request for re-audit of supplier's systems. You must communicate the containment results daily to us.

We will notify you in writing of the controlled shipping level exit criteria.

If you are placed on a customer special status (e.g., GM CSII, Ford Q-1 revocation) for quality / delivery spills with product that is shipped to customers other than CGS, you are required to notify CGS Supplier Quality of the customer special status.

Entry to CSII will place the supplier on New Business Hold.

11.0 Supplier Corrective Action Reports

You are required to respond to CGS Supplier Corrective Action Requests. A Supplier Corrective Action Request will be forwarded with supporting documentation to the requestor within 5 working days of the occurrence. Initial response for containment must be within 24 hours.

If we do not find the report acceptable, you will address all issues identified by the requestor and resubmit by the original deadline provided. Lack of proper response will be taken into account when evaluating supplier performance and reviewing for new business awards.





12.0 Delivery

12.1 Releases

We will communicate quantity and delivery requirements to suppliers using procurements releases or SRM.

In the event of a change in release, you will request and receive a copy of the updated release form from the appropriate CGS facility. Failure to comply may result in a negative impact to deliver performance.

12.2 Quantities

You will ship purchased components and services to the exact quantity per the release. Bulk material quantities will be within 5% of the requirements indicated per the release.

You must immediately contact the receiving CGS plant in the event that a required quantity cannot be met.

12.3 On-Time Delivery

The expectation for delivery is 100% on time.

12.4 Advance Shipping Notice

If required by CGS, the supplier will forward (by Fax or EDI) an Advance Shipping Notice (ASN) to the receiving CGS facility.

12.5 Excess Freight Charges

If we incur excess freight charges due to the fault of the supplier, the supplier will be responsible for these excess charges.

You are responsible for the freight when multiple shipments are required due to your inability to meet our production schedule.

12.6 Hazardous Material

The supplier will annually provide a Material Safety Data Sheet (MSDS) to the CGS facility receiving any Hazardous Material or parts/components containing Hazardous Materials. All material classified as hazardous by local, state or central government regulations will be identified, documented, handled, packaged, and shipped as required by applicable laws, rules and regulations.





You are responsible for making sure that all shipments of Hazardous Materials or parts/components containing Hazardous Materials comply with U.S. Department of Transportation (DOT) Haz Mat laws, rules and regulations.

12.7 Packaging and Labeling

You will obtain packaging and labeling requirements and approvals from the receiving CGS facility. These requirements shall be included in the PPAP package and include photos as examples documented prior to PPAP approval.

12.8 Import Requirements

All suppliers must be in compliance with US Customs regulations and the import and export laws and regulations of the United States and those of any other jurisdiction or country as may be applicable. Requirements include completion of annual NAFTA Certificate of Origin for all parts supplied, C-TPAT (Customs-Trade Partnership Against Terrorism) questionnaire, TSCA (Toxic Substance Control Act) certification and any other applicable laws or regulations.

The United States government requires that CGS and our suppliers utilize pallets that have been certified as having been constructed from wood that has been treated / fumigated. The pallets need to bear a seal, showing certification. The US requirement affects all inbound shipments into the United States. For more information visit the following web site <http://www.aphis.usda.gov/ppq/wpm/>.

ALL INTERNATIONAL SHIPMENTS MUST COMPLY WITH THE FOLLOWING:

INVOICE: All shipments **MUST** contain an invoice. The invoice must comply with CBP Requirements and specifically contain the following elements:

1. Be in English or have an English-translation included;
2. Contain the Shipper's complete name and address;
3. Contain "SOLD TO" **AND** "SHIP TO" Name and Address for physical delivery (post office box addresses and account payable locations, e.g. lockboxes, are not acceptable);
4. Be System Generated with a unique invoice number; **hand-written** invoices will **not** be accepted;
5. Contain the date of shipment;
6. The 2010 Incoterms® rule (with named place) must be included as per the accepted CGS purchase order;
7. Contain the CGS Purchase Order Number, or, Return Authorization Number;
8. Contain the CGS Part Number;
9. Contain a full description of the item. This **MUST** include a complete written description without acronyms, generalizations, or industry terms and be sufficient for CBP to confirm the tariff classification of the goods. For example, "W/S" or "Lite" would not be not acceptable;





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10. The total quantity shipped as well as any quantity or figure required by CBP (e.g. the square meters of each windshield);
11. Include the CGS-approved harmonized tariff classification for each article;
12. Contain both UNIT PRICE AND TOTAL VALUE. Reasonable and verifiable values **MUST** be listed for all items, even free of charge items. **Invoices with "0.00" will not be accepted;**
13. Currency of sale;
14. State the COUNTRY OF ORIGIN (manufacture) for EACH item. (NOTE: This may not be the same as Country of Export or Country of Purchase; and
15. Signature of the responsible party at the vendor with their printed name and title.

Invoices missing any of the above may be rejected resulting in the possible return/refusal of the shipment.

Note: Replacement merchandise which is shipped by the vendor to satisfy a prior short-shipment must be fully declared to CBP at time of entry even if furnished free of charge. CBP requires that each import entry accurately reflect the merchandise being imported at that time; it is not permissible to balance out past shortages or overages by declaring an adjusted quantity on two or more entries. Each import entry must reflect the actual quantity and merchandise received.

PACKING LIST: One copy of the packing list must be provided with the Invoice, AND a second copy must be placed on/in the first carton/box. The packing list shall state in adequate detail what merchandise is contained in each individual package, including the quantity and net and gross weights. Shipments containing multiple cartons and packing lists shall be accompanied by a master packing list summarizing the entire shipment.

Note: If the nature of the goods or shipment precludes the need for a packing list, e.g. one-part number being shipped in one box, no packing list is required provided the invoice contains the box count and net and gross weights.

CARTON NUMBERING/LABELS: All cartons (or other such shipping container, e.g. box, crate) must be numbered "X of Y" so as to indicate the total number of cartons in the shipment and the corresponding carton number. Each number shall correspond to the packing list. All cartons in the shipment must have an address label. All address labels must have the complete "Ship To" address and Custom Glass Solutions Purchase Order or Return Authorization Number.

CONTAINER SEALS and SOLID WOOD PACKAGING: For full-container shipments, vendors are required to seal the container using a high security seal that meets or exceeds PAS ISO 17712 standards for high security seals. Seal numbers must be listed on the invoice, packing list, and bill of lading or other transportation.





13.0 Material Identification and Traceability

You must be able to identify a specific lot or batch through all states of production, packaging and delivery. This must include any out-sourced operation. Injection molded product must have cavity identification.

You must also record the raw material/component lot/batch number assigned by the sub-supplier that is used to produce each specific lot/batch of final product.

The specific lot/batch number will be recorded on all documentation pertaining to the delivered product. This documentation will include, at a minimum:

- Raw material lot number
- Job set-up sheet
- Production log
- Inspection/testing methods
- Control charts
- Traveler tags

14.0 Purchased Products and Services (Sub-suppliers)

The use of customer designated subcontractors does not relieve the supplier of the responsibility of ensuring the quality of subcontracted parts, materials and services.

This may include:

- Product Containment Levels 1 and 2
- Designation of Registration Requirements
- Increased inspection methods

15.0 Tooling and Equipment

Detailed tooling and equipment drawings, including processing parameters and list of perishable tooling, must be provided for all CGS funded investments.

In order to receive payment, a copy of the tooling drawings / pictures must be provided to CGS. Also, our purchase order and approved sample submission paperwork, complete with our full approval signature must be attached to your invoice. In addition, the following statement must appear on your invoice: The tools included in this invoice have been stamped or inscribed with a tool number and our part number & are clearly labeled; "Property of Custom Glass Solutions."

CGS funded investments must permanently be identified and readily visible with the following information; "Property of Custom Glass Solutions" and "Part Number xxx." All PPAP's must include digital photos as evidence of the above requirements.

All Tools considered "Production Tools" are required to meet the quoted Run @ Rate/8hr shift at 100% efficiency. Parts must pass a 300 consecutive piece run with capable R&R and dimensional data.

Tooling and equipment purchased by CGS must be kept in suitable condition to produce product capable to meet all specifications as defined in the approved PPAP. Tooling and Equipment maintenance records must be maintained and be available upon request from CGS.





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The right, title and interest to all supplies, materials, tools, jigs, dies, gauges, fixtures, molds, patterns, equipment, designs, drawings, gages, specifications, spare parts, trial parts, ancillary products, or items owned by CGS (or by its customer) and other items furnished by CGS (or by its customer) ("Bailed Tools") to supplier for use in manufacturing the goods, or for which supplier is reimbursed by CGS (or its customer), shall be and remain the property of CGS (or its customer). In the event that CGS issues a Tooling Purchase Order, all right, title, and interest in and to any part of the Tooling, including any and all supplies, materials, tools, jigs, dies, gauges, fixtures, molds, patterns, equipment, designs, drawings, specifications, spare parts, trial parts and ancillary products, shall pass to CGS as soon as it is acquired or fabricated in accordance with a Tooling Purchase Order or other written documentation issued by CGS. ("CGS-owned Tooling", together with Bailed Tools are collectively referred to herein as "Tools"). During the term of a Purchase Order, all Tools in the possession of supplier shall be deemed to be bailed property and shall not be deemed to be a fixture or a part of supplier's real property. Supplier shall bear the risk of loss of and damage to CGS property, including but not limited to any tools.





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“Attachment A”

Supplier Contact List	
Supplier Name	
DUNS/SUN Number	
Mailing Address	
Manufacturing Address	

Contact	Name	Position	Phone	Fax	Cell	Email
Customer						
Primary						
Scheduling						
Primary						
Shipping						
Primary						
Quality						
Primary						
Management						
Primary						

