

sonnax®

Supplier Handbook



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1.0 Welcome

Thank you for being a valued Sonnax supplier! Sonnax’s mission is to be the leader in bringing innovative, high-quality drivetrain components to the automotive aftermarket. Fulfilling that mission requires a collaborative effort with our suppliers to achieve quality at the source. The purpose of this supplier handbook is to provide information and clarify expectations beyond what is conveyed through the purchase order. The requirements of the purchase order, including standard terms and conditions, take precedence over any requirements in this document. If you have any questions, your first point of contact should always be your Sonnax Buyer.

2.0 Ethical Behavior & Regulatory Compliance

Sonnax employees take pride in their work and are committed to acting ethically and in full compliance with all applicable laws and regulations. We expect our suppliers to act in a similar manner. Suppliers are also expected to support regulatory compliance as follows:

Hazardous Communication	To prepare Sonnax employees in the event of exposure, the supplier is expected to furnish a safety data sheet (SDS) for any chemical applied to the product or packaging (e.g. rust preventative). Information should also be provided about any substance in the product or packaging that produces a questionable odor.
Conflict Minerals	The supplier is expected to notify Sonnax if supplied products contain any of the following minerals (a) Cassiterite (the mineral from which Tin is extracted), (b) Columbite-tantalite (the mineral from which Tantalum is extracted), (c) Gold, or (d) Wolframite (the mineral from which Tungsten is extracted).
State of California Proposition 65	The supplier is expected to notify Sonnax of any products that are labeled with a Proposition 65 warning or could potentially expose Sonnax customers to any of the chemicals on California's Proposition 65 chemical list.
European Union (EU) Requirements (REACH, RoHS)	The supplier is expected to comply with the EU's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Restriction of Hazardous Substances (RoHS) requirements and notify Sonnax if products exceed REACH substance limits.
International Plant Protection Convention (ISPM 15)	To reduce the spread of invasive insects, suppliers shipping from outside the United States are expected to comply with the International Standard for Phytosanitary Measures (ISPM) No. 15 for wood packaging materials.

3.0 Trust & Intellectual Property

We at Sonnax believe that a strong supplier relationship built on trust is one of our core competitive advantages. Trust allows us to engage with the supplier in a collaborative process to develop markets and manufacturing methods that benefit both parties. Collaboration frequently entails sharing information and the following expectations relate to intellectual property.

3.1 Confidentiality and Non-Disclosure

Sonnax is driven by innovation and invests heavily in new product development to service customers and generate a steady stream of growth. Any information provided by Sonnax is to be maintained in strict confidence and in accordance with the purchase order terms and conditions as well as any confidentiality and non-disclosure agreements. In addition, Sonnax considers its supplier list to be confidential and expects the supplier to refrain from disclosing its relationship with Sonnax.

3.2 Exclusivity

Sonnax prefers to purchase product from suppliers who are not otherwise doing business within its industry and expects suppliers to disclose whether they have other automotive aftermarket business

relationships. As a condition of doing business, Sonnax may request the supplier to enter into an exclusivity agreement. Exclusivity enhances trust and maximizes the opportunity for collaboration and growth.

4.0 Supplier Qualification and Development

A high performing supply base is essential for Sonnax to satisfy its customers' expectations. Through assessment and collaboration, we develop capability, improve performance and create a successful supply chain.

4.1 Supplier Quality System

Sonnax expects the supplier to exhibit a commitment to quality. Ideally this is demonstrated with a quality system that is certified or based upon ISO 9001, AS 9100 or IATF 16949, including the following fundamentals:

- a. Quote Process that identifies any exceptions to Sonnax requirements.
- b. Contract Review that confirms and acknowledges the ability to meet the requirements of the purchase order. Contract review should confirm that requirements, including product revision level, have not changed since the quote and that any quote exceptions have been incorporated into the order.
- c. Defined Production and Quality Control Processes including:
 - i. Receipt of incoming material and subcontracted operations
 - ii. Production setup
 - iii. In process controls
 - iv. Final inspection
 - v. Packaging and material handling
- d. Lot Traceability and Record Retention that establishes conformance from raw material to finished product shipment. Serialization and product marking requirements, if required, will be noted in the product specifications.
- e. Continuous Improvement through management commitment, customer focus, measurement of goals, audits and corrective action.

4.2 Supplier Assessment

Supplier capabilities are identified and reviewed to evaluate risk and identify opportunities for growth and development. The supplier is expected to be forthcoming with information about their manufacturing processes including subcontracted operations. Supplier shall provide Sonnax access to their facility for on-site assessment as requested. Sonnax monitors supplier performance for product quality (Ref. Sec. 6.0) and on-time delivery (Ref. Sec. 8.2) and expects the supplier to demonstrate continuous performance improvement in both areas. The supplier assessment process leads to formal supplier certification as follows:

Supplier Certification Levels	
Preferred	High maturity quality system with minimal risk and consistent performance for both quality and on-time delivery.
Qualified	Moderate risk in the quality system or inconsistent performance.
Approved	Basic quality system, performance improvement needed.

5.0 New Product Qualification & Process Changes

Sonnax utilizes a Production Part Approval Process (PPAP) to qualify the manufacturing process for select custom manufactured products. If determined necessary, requirement for PPAP will be indicated on the purchase order. The PPAP process is not typically used for off-the-shelf products or existing standardized Sonnax products. The principal objectives of the Sonnax PPAP process are: 1) Provide transparency of the production process to facilitate risk assessment. 2) Define the production process so it is repeatable for future production lots. 3) Demonstrate that the defined process is capable of meeting customer requirements.

5.1 PPAP Order

When determined necessary the first production purchase order of a new custom manufactured product will be treated as a PPAP qualification order. For prepaid orders, PPAP documentation is expected to be submitted and approved before parts are shipped. For all other orders, parts should be shipped together with the PPAP document submittal.

5.2 PPAP Submittal Requirements

Unless otherwise specified, a Level 4 PPAP submission is required as defined in Appendix A. Documents should be submitted by email to the Sonnax Buyer listed on the Purchase Order.

5.3 Manufacturing Process Changes

Once a PPAP submission has been approved, the defined manufacturing process is expected to remain unchanged for future production. For preexisting products that were not qualified through a PPAP process, the supplier is expected to maintain the process used to produce previously supplied and accepted product. In all cases, significant process changes are expected to be submitted to the Sonnax Buyer for approval prior to implementation.

6.0 Quality Requirements

Sonnax requires all products to be supplied in full conformance with the requirements of the purchase order including referenced drawings, specifications, standard terms & conditions and this document. All requirements shall be communicated by the supplier to their sub-tier suppliers as applicable. Once the order is accepted any deviation from order requirements is treated as a nonconformance and needs to be handled through the nonconforming material procedure defined in Appendix C.

6.1 General Product Condition Requirements

In addition to quality requirements specifically stated within the purchase order, product drawing and reference documents, product must meet generally accepted workmanship including:

- a. Product shall be free of rust; burrs or other sharp edges; dings, scratches or handling damage; visible dirt, chips or other debris.
- b. Product appearance is required to be uniform and consistent including color and texture.
- c. Required text printed on the product must be clear and legible.

6.2 Quality Documentation

Sonnax requires all suppliers to submit with each shipment quality documentation as defined in Appendix B of this handbook. New product qualification (PPAP) orders have additional document submission requirements (Ref. Sec. 5.2). The supplier shall retain and make available upon request, relevant inspection documents, material certifications and/or material test results for twelve (12) months from date of production.

Submitted documents should reference the Supplier's Lot Number or Supplier's Invoice Number along with the Sonnax Purchase Order Number, Sonnax Part Number and Revision Level. Unless otherwise directed, documents should be submitted by e-mail to

QualityDocuments@sonnax.com with an e-mail subject line that includes the Sonnax Part Number and Purchase Order Number.

6.3 Product Inspection

Sonnax relies on the supplier to carry out adequate inspections and controls to ensure a supply of conforming product. Sonnax will conduct periodic audit inspections to verify correlation with the supplier's inspection results and product conformance. Product is required to meet drawing dimensions and features at ambient conditions of 70°F +/- 5°F (21°C +/- 3°C). The supplier is expected to ensure that measurement equipment, instruments and gauges are appropriate for the feature and tolerance being measured and are calibrated and maintained in proper working order.

6.4 Product Markings

Custom manufactured product shall be free from markings, stickers or tags other than those specified by Sonnax. Any product markings applied by the supplier during the manufacturing or inspection process should be removed prior to shipment. Off-the-shelf products may be marked in accordance with the supplier's standard practice. When inspection samples, corresponding with dimensional inspection results, are provided they should be clearly identified by marked packaging or tags, but not by stickers or other marking on the product itself.

6.5 Customer Supplied Material

Sonnax may furnish material to the supplier for subcontracted processing. The supplier is expected to count and inspect the material upon receipt and notify Sonnax of any quantity discrepancy, damage or nonconforming condition prior to processing. Material control and identification should be maintained from receipt to shipment to avoid mixing product, especially during bulk processing. Product should be returned to Sonnax adequately packaged and identified.

7.0 Packaging

Packaging is critical to preserve and protect product, provide product identification, and to facilitate safe and efficient handling and processing by Sonnax and its customers. It is expected that suppliers use the guidance below to define and standardize packaging for both the individual product as well as bulk or crate packaging. Contact the Sonnax Buyer with any questions related to packaging.

7.1 Packaging Expectations

- a. Packaging shall comply with any requirements that are listed on the Sonnax drawing, specification or purchase order.
- b. Product shall comply with the packaging defined during the PPAP process.
- c. Unless otherwise specified, packaging shall conform to the general packaging requirements defined below.
- d. In all cases, once established, product packaging is required to be uniform and consistent between shipments including the type and size of packing material used and the quantity of pieces in both individual and bulk packages.
- e. Any changes to packaging shall be submitted for approval to the Sonnax Buyer.

7.2 General Packaging Requirements

If not otherwise specified or defined, packaging shall:

- a. Enable a safe and efficient workplace
 - i. Box weights shall be kept below 40 lbs. (18 kg)
 - ii. Box construction shall be adequate to maintain its integrity during shipment and storage.
 - iii. Pallets and crates:
 - Maximum weight 2,300 lbs. (1,045 kg)
 - Maximum dimensions: Length 48" (122 cm), Width 40" (102 cm), Height 34" (86 cm)
 - Pallets should have 2-way fork access and a minimum of 3 stringers on the bottom
 - Pallets and crates should arrive intact without broken boards or strapping and in a condition suitable for rack storage
 - For international shipments, wood needs to be treated for insects in compliance with ISPM 15 including heat treatment or fumigation and marking.
 - iv. Packaging, pallets and crates shall be free from sharp edges and protruding nails, screws or staples
 - v. When it is viable, plastic strapping/banding is preferred instead of metal as it presents fewer operator safety risks during the unpacking process.
 - vi. Packaging shall resist mold growth during shipment and storage. If fungicide is applied a SDS is to be provided.
 - vii. To support an efficient receiving process, product should be consolidated so like parts are grouped together on the packing slip and physically grouped together on the pallet or in the crate.

- viii. When it is feasible, plain packaging, without the supplier's name or logo, is preferred since it can be relabeled and reused avoiding the need to repackage product.
 - ix. Excess or redundant packaging should be avoided - it's wasteful, impedes subsequent processing and increases safety risks by creating excess handling
- b. Preserve and Protect the Product
- i. Supplier furnished packaging shall protect the product from rust for at least 1 year from the time of receipt at Sonnax.
 - ii. Rust preventative shall be applied in the minimum amount required to protect the product and shall be compatible with automatic transmission fluid. An example of a suitable rust inhibitor is CRC Industries CRC 3-36 or equivalent. The supplier is expected to provide a SDS for any applied rust preventative.
 - iii. Vapor Corrosive Inhibitor (VCI) bags and/or paper may be required to provide protection from corrosion. If VCI bags are used, the bags are required to be heat-sealed airtight. If VCI paper is used, the paper is required to completely wrap all part surfaces and be placed in a heat-sealed airtight plastic bag.
 - iv. Parts with friction paper bonded to steel surfaces require the use of VCI bags and/or VCI paper exclusively.

NOTE

Friction paper cannot be coated with liquid rust preventative, due to risk of damage to friction material.

- v. Packaging should protect the product from handling or shipping damage
 - vi. Packaging should keep the product clean and free from dirt or dust
- c. Adequately Identify the Product - The exterior of each package and master carton should be clearly identified with, at minimum, the Sonnax part number and the quantity in the package or carton.

8.0 Commercial Expectations

Sonnax expects the supplier to meet all the requirements of the purchase order contract including quantity, on-time delivery and compliance with quality requirements.

In the event the supplier cannot comply with a requirement, Sonnax expects to be notified at the time of quotation so the exception can be addressed prior to ordering. If the exception has not been addressed in the purchase order, Sonnax expects the supplier to note the exception as part of order acknowledgement and withhold order acceptance until the exception is resolved. Once the order is accepted any deviation from order requirements is treated as a nonconformance and needs to be handled through the nonconforming material procedure defined in Appendix B.

If problems or delays occur, the supplier is expected to take, at their expense, every reasonable action to recover so the supply of product is not interrupted.

8.1 Order Acknowledgement

Purchase orders issued to North American based suppliers are expected to be acknowledged within 2 business days of order receipt as an indication of the supplier's acceptance and intent to fulfill the order. International suppliers are expected to acknowledge purchase order receipt within 3 business days. Order fulfillment includes full conformance with all quality requirements, price, delivery, quantity, and any other requirements of the order. Any exceptions to order requirements are expected to be communicated in the order acknowledgement and resolved prior to order acceptance.

8.2 On Time Delivery

The full order quantity is expected to arrive at the *Ship-To* location on the *Requested* date as specified in the purchase order. The *Requested* date is the expected date of arrival at the *Ship-To* location, not the date of departure from the Supplier's facility. Sonnax measures supplier delivery performance and both late and early receipts of more than 3 days are treated as delivery issues. For prepaid orders, product is expected to be delivered to the specified carrier in sufficient time to allow for standard shipping transit time.

8.3 Quantity

Product is expected to be delivered in the quantity ordered. Quantity discrepancies should be brought to the attention of the Sonnax Buyer prior to shipment and the actual quantity supplied needs to be accurately reflected in the shipment documents. Overage up to 10% of the order quantity will typically be accepted for custom manufactured product to account for variable fallout during production. Count discrepancies found subsequent to receipt (e.g. during processing at Sonnax) will be submitted for credit.

8.4 Invoices/Accounts Payable

Invoices should be submitted by e-mail to invoices@sonnax.com.

Appendix A: PPAP Submittal Requirements

LEVEL 4 PPAP SUBMITTAL REQUIREMENTS	
Part Submission Warrant (PSW)	A declaration, signed by the supplier, summarizing the PPAP submission and affirming that it represents the defined production process.
Control Plan	Detail of process steps and inspection or other quality control measures throughout the process.
Packaging Details	Documentation defining packaging details (type, quantity, size) - if not included in the Control Plan.
Initial Process Studies	Process capability (Cpk) evaluation demonstrating $Cpk > 1.0$ for any feature identified as Critical or Major on the Sonnax drawing.
Design Record	A “bubble” drawing with features numbered to coincide with dimensional inspection results
Dimensional Results	100% inspection results for three pieces minimum unless otherwise specified.
Inspection Samples	Inspection samples clearly identified to correspond with the submitted Dimensional Results. Sample identification should be by marked packaging or tags but not by stickers or other marking on the product itself.
Material Certification	Mill or third-party lab test results demonstrating conformance to the specified material requirement.
Certifications for Subcontracted Operations	Certification for any subcontracted operations as applicable (e.g. Heat treatment, Plating, Etc.).
Other Material or Performance Test Results	Any other tests required by the drawing or specification.

Any questions related to PPAP submittals should be directed to the Sonnax Buyer.

Appendix B: Requirements for Supplier Quality Documents

PRODUCT STAGE	QUALITY DOCUMENTS REQUIRED FROM SUPPLIER
Prototype	First Article Inspection report (FAIR) with material certification and/or test results for mechanical properties. Additionally, any documents specified on Purchase Order, in referenced drawings, and/or in Sonnax technical specifications.
Development/Pilot Lot	First Article Inspection report (FAIR) with material certification and/or test results for mechanical properties. Additionally, any documents specified on Purchase Order, in referenced drawings, and/or in Sonnax technical specifications.
Production Lot	Any documents specified on Purchase Order and in referenced drawings.
Material Deviation Request (MDR)	Inspection reports with material certification and/or test results for mechanical properties related to observed deviation. Supplier shall provide documents at time of MDR submission.
Revision Level Change	Inspection reports with material certification and/or test results for mechanical properties related to revision change.
Subcontracted Services	First Article Inspection report (FAIR) with material certification and/or test results for mechanical properties. Additionally, any documents specified on Purchase Order, in referenced drawings, and/or in Sonnax technical specifications. Quality documentations shall be submitted by Supplier to Sonnax when service is complete and before product is forwarded to another subcontracted service, if applicable.

Unless otherwise directed, documents should be submitted by e-mail to **QualityDocuments@sonnax.com** with an e-mail subject line that includes the Sonnax Part Number and Purchase Order Number.

Appendix C: Nonconforming Material Procedure

Sonnax expects all products to be supplied in full conformance with the requirements of the purchase order and expects any exceptions to be addressed prior to order acceptance (Ref. Sec. 6.0). The following procedure applies when the supplier fails to fully conform to the requirements of an accepted order.

C.1 Nonconforming product identified prior to shipment

Prior to shipment, if the supplier discovers they have produced nonconforming product they are expected to take every possible action to remedy the error to furnish conforming product by the commitment date. If the supplier cannot remedy the nonconformance or discovers, after accepting an order, that they are unable to fully meet the order requirements, the supplier may submit a material deviation request (MDR) to request authorization to ship nonconforming product.

- A. The deviation request needs to be in writing using a Sonnax MDR form and submitted to the Sonnax Buyer.
- B. The MDR needs to include a description of the nonconformance, and corrective actions taken to prevent recurrence.
- C. If the MDR is approved the supplier will be provided an approved MDR number that must be referenced with the shipment of nonconforming product. **This is the only circumstance where it is acceptable for a supplier to ship nonconforming product.**

C.2 Nonconforming product identified after shipment

At any time following shipment by the supplier, product that is found to be nonconforming will be dispositioned by Sonnax using a formal material review process (MRB). Disposition may include return to vendor (RTV), rework, sort or accept. In the case of returns, the supplier is expected to promptly provide credit and furnish either a return material authorization (RMA) or authorization to scrap the product. Regardless of disposition, Sonnax expects to be reimbursed for all costs associated with a nonconformance.

C.3 Corrective Action Request (CAR)

Following a nonconformance, Sonnax may issue a corrective action request (CAR). The supplier is expected to provide a written response within 2 weeks. CAR responses should document interim containment actions, root cause analysis, long term corrective action and evidence of implementation.

END OF DOCUMENT: PAGE 13 FOR REVISION HISTORY ONLY