



CRENLO PROCESS STANDARD

Supplier First Article Requirements

Purpose:

To define Quality Planning and Documentation requirements from suppliers when First Article and PPAP (Production Part Approval Process) are requested. This documentation **must** be submitted when the conditions specified in section 1.3 of this document are present for all commodities and parts identified in Section 3.

Reference:

Production Part Approval Process (PPAP) Manual – Third Edition
Crenlo LLC issued Purchase Order.
Crenlo Engineering Standard ES 225 and ES 229

1. Plan Definition

1.1 First Article Only:

(Default submission or if identified on Purchase Order)

- Inspect two pieces for all dimensions, technical standards and notes on the print. The parts are to be clearly identified by sample number. Parts and documentation of inspection results are to be submitted to Crenlo. Blanket statements of conformance do not meet this requirement.
- An ISIR (dimensional report) material certification, and numbered print to identify the inspection results.
- Submission must be identified with the Crenlo part number, revision level and include numbered drawing.
- All dimensions must meet the specification or have written approval for deviation prior to shipment to Crenlo. The written deviation request should include a corrective action plan to achieve specification.
- Approved non-conformances are to be clearly identified in the documentation and a copy of the approval is to be included with the shipment of product. Refer requests for deviation to the Supplier Management Specialist to coordinate approval.

1.2 PPAP Required:

(Identified on Purchase Order)

Crenlo LLC default PPAP is found in Section 1 Paragraph 1.4, Level 4 of the PPAP Manual. The Truck OEM-Specific PPAP Requirements are to be applied.

The item number below refers to PPAP Retention/Submission Table 1.4.1 found in the PPAP Manual.

Unless otherwise specified the following items are to be submitted to Crenlo.

- Item 1 - Design records of saleable material.
- Item 2 - Engineering Change Documents (if any)
- Item 3 - Customer Engineering Approval (if required)
- Item 4- Design FMEA (If supplier has design responsibility)
- Item 5 - Process Flow Diagram
- Item 6 - Process FMEA

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- Item 7 – First Article Dimensional Results from 2 parts. Requirements described in Section 1.1 above.
- Item 8 - Material Performance and Test Results
- Item 9 - Initial Process Study from 30 parts. (Features identified with key feature note or otherwise communicated.)
- Item 11 - Qualified Laboratory Documentation (If applicable)
- Item 12 – Process Control Plan
- Item 13 - Part Submission Warrant (PSW) North America Truck Industry.
- Item 14 - Appearance Approval Report (If applicable)
- Item 15 - Bulk Material Requirements Checklist (If applicable)
- Item 16 – Sample Product – See Item 7 above.

All other items not identified above are to be retained by the supplier and available upon request.

1.3 Documentation Submission:

Supplier is to submit/resubmit the above documentation for the following conditions.

- New and revised parts, Includes prototypes and parts made from non production tooling. **(Note: Approval from Crenlo Quality Assurance is needed for deviation from PS 222 requirements.)**
- Source Change or location of source
- Change in subcontractor source
- Design or Material Change
- Process Change
- Correction of discrepancy
- Tooling Change (Except perishable)
- Reinstatement of a shipment suspended for quality issues
(NOTE: In the event of an engineering change or reinstatement due to quality issues, the submission may be limited to only the features affected.)

2 Submission of Documentation Requirements:

- Sample parts being submitted are to be clearly identified as First Article Samples. The parts are to be marked with a tag or other means that does not render the part as unusable indicating the sample number corresponding to the inspection results.
- A paper copy of the documentation is to accompany the product if it is not received at Crenlo prior to the parts being shipped.
- The documentation may be submitted as paper copy with the shipment of parts or electronic media. Electronic submissions may also be completed via email. Send these to qadocs@crenlo.com.
- Electronic formats of the data may be submitted in Word, Excel, JPG, PDF or other common software. If unsure contact the Crenlo Supply Management Specialist.
- Crenlo does not require that specific forms be used for the submission of this information. Data should be supplied on the forms described in the PPAP manual or other equivalent type forms developed by the supplier.

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3 Commodities affected by this standard and specific requirements for a commodity to include but are not limited to:

3.1 Hardware:

Fasteners, Catalog Standard Parts, Non-Hardened & Hardened Fasteners, Latches, Hinges, Casters, Sliders,

3.2 Manufactured:

Weld Assemblies, Blanks and Formed Parts

3.3 Machining:

Drilled, Milled and Tapped, Blocks or Bosses

3.4 Fabricated Blanks:

(Rops & Non-Rops): Laser/Plasma Cut, Stamped blanks

3.5 Formed Tubing:

Grab Handles, Formed Tubing,

- Inspection target points must be identified so the report information is related to the process gage points.

3.6 Non-Metallic Material:

Gaskets, Die cut Foam, Glass, Molded Plastic Parts, Plastic Parts with Holes & Trim Operations, Serial Numbers, U.L. Labels,

3.7 Supplier Process Parts:

(Examples: Paint, Plating, Heat Treating, Silk Screening)

- Inspection to verify the following properties and workmanship conditions of the surfaces. Color match, Cleanliness, Texture, Voids, Blisters, Scale, etc. Document all information required in the appropriate workmanship standards. Characteristics such as: Dry Film Thickness, Gloss, Hardness and Adhesion to be performed on 2 parts. AAR document form to be used when PPAP is required.

3.8 Wired Assemblies:

Wire Harnesses, Air Conditioners, and Blowers

Inspection to include but not limited to electrical-testing certification along with lot identification.

3.9 Word Drawings:

Inspection to include but not limited to verification of parts conforming to text specifications.

3.10 Tempered Glass:

Supplier to submit results from the break pattern test in addition to normal dimensional and material requirements.

4. Requirements for Raw Material:

For commercial metal: steel sheet, plate, aluminum, etc. refer to the individual line item description on the purchase order for specific requirements.

Submission of ROPS (charpy controlled) steels to conform to Crenlo Standards ES 229 and ES 225.

5. Requirements when ROHS Compliance is specified on the drawing or PO:

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Crenlo requires sources of product carrying the ROHS certification requirement to submit documentation stating the product conforms to the EU Directive 2002/95/EC. This can be submitted along with First Article documentation required for the item. This can also be supplied as a separate document or can be part of the material cert or First Article form.

The Crenlo part number must be referenced on the document along with the statement of conformance. Automated forms and certificates as part of the quote or packing list are not accepted.

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