

Production Part Approval Process (PPAP) Requirements

The required Production Part Approval activities and documents will be specified by the Green Industrial representative. The requirements are determined by the Quality Plan Level (See Table Below) submission and retention requirements. Unless otherwise specified, Green Industrial requires Level 2 of the AIAG PPAP to include the requirements listed in the table below.

After the PPAP documents have been submitted, Green Industrial reviews the data and either Approves or Rejects the Verification Warrant. Approval is required prior to shipping production parts including all builds. Conditional Approval may be granted to authorize limited production shipments when there are outstanding PPAP requirements.

Production Part Approval Requirements by Quality Plan Level

Requirement		AIAG Level 2	GIS Quality Plan Level					Complete By
			0	1	2	3	4	
1.	Design Record	S						
	- for proprietary components / details	R						Prior to production
	- for all other components / details	S						Prior to production
2.	Engineering Change Documents, if any	S						First production
3.	Customer Engineering approval, if required	R						Prior to production
4.	Design FMEA (Failure Modes and Effects Analysis)	R					S	Prior to complete design
5.	Design Review						S	Prior to complete design
6.	Design, Process, & Assembly Review (DPAR) – Initiated by John Deere				S	S	S	Prior to production
7.	Functional Geometry Review					S	S	Prior to production
8.	Process Flow Diagrams / Process Map	R				S	S	Prior to production
9.	Process FMEA	R				S	S	Prior to control plan
10.	Control Plan (including Checking Aids)	R			S	S	S	Prior to production
11.	Measurement System Analysis Studies – Gage R & R Studies for Key Characteristics	R			S	S	S	Prior to use
12.	Initial Sample Inspection Report - ISIR (Dimensional Results)	S		S	S	S	S	Prior to production
13.	Material / Metallurgical / Functional / Performance Results (as appropriate)	S		S	S	S	S	Prior to production
14.	Initial Process Studies – Capability Studies	R			S	S	S	Prior to control plan
15.	* Qualified Laboratory Documentation	S						Prior to production
16.	Appearance Approval Report, if applicable (for JD Class A parts)	S				S	S	Prior to production
17.	Verification Warrant	S		S	S	S	S	Prior to production
18.	Experimental Part Inspection (Engineering)				S	S	S	Prior to production
19.	Supplier Functional Verification Testing Results					S	S	Prior to production
20.	* Sample Product	S						
21.	* Master Sample	R						
22.	* Records of Compliance With Customer-Specific Requirements	R						

S = The supplier shall submit to GIS and retain a copy of records or documentation items at appropriate locations.

R = The supplier shall retain at appropriate locations and make available to GIS upon request.

* If requested by GIS, provide documentation.

Change Request and Verification Warrant Form

Part and Supplier information

- Part Number or Numbers
- Part Name
- Decision Number
- Revision Level
- Supplier Name
- Supplier Number
- Address

Reason for submitting request for manufacturing process and product change authorization

- Design/Material Change
- Process Change
- Location Change
- Tooling Change
- Supplier Change
- Other

Reason for proposed change

- Improve Product Quality
- Increase Manufacturing Efficiency
- Reduce Lead Time
- Other
- Describe proposed change and the quality plan to ensure the quality of product will not be adversely affected. Attach all supporting information.
- Proposed implementation date.
- Changes that deviate from drawings or specifications
- Explanation
- Supplier Signature and Title
- Date

Supplier not to proceed until it receives authorization from GIS.

This authorization to proceed is granted upon the understanding that it is advisory in nature and in no manner changes the Supplier's original responsibility for ensuring that all characteristics, designated in the applicable engineering specifications, and/or inherent in the samples as originally tested and approved, are maintained. Supplier accepts full responsibility for the changes of types of changes listed above; and should such changes result in failure to meet customer requirements, Supplier shall be expected to fully reimburse GIS for all expenses incurred to correct the deficiency.

Submission of Change Request should be submitted electronically via Email to Quality@grnind.com

GIS is responsible for providing a follow up date for any conditional approvals.