

# PRODUCTION PART APPROVAL FOR PURCHASED PRODUCT

#### **INTRODUCTION**

Effective Advanced Product Quality Planning (APQP) by Harley-Davidson and their suppliers is critical to timely and successful launch of new products. APQP also assists in ensuring the quality of new products meets or exceeds customer expectations during the life of the product.

A vital phase in the Harley-Davidson OE Product Development Methodology (M9) is product and process validation. Harley-Davidson Purchasing has embraced the Automotive Industry Action Group (AIAG) Production Part Approval Process (PPAP) to validate and approve purchased parts and materials for use in production. Successfully completing PPAP is the result of effective advanced product quality planning.

#### **GENERAL REQUIREMENTS**

Harley-Davidson Tier I suppliers shall utilize the AIAG Production Part Approval Process (PPAP) for all production vehicle programs, (Model Year 2000 forward) to validate and approve:

- 1. Newly developed purchased parts / materials
- 2. Existing "current" production parts / materials that have undergone a product and/or process change.

Parts / materials include the following:

- > Production original equipment
- > Production raw materials
- > Hardware items that are unique Harley-Davidson design
- > Off-the-shelf items that have Harley-Davidson specified KPC's and/or cosmetic requirements
- > Current production replacement parts

[For suppliers who only provide parts to Harley-Davidson's Parts and Accessories or General Merchandise areas, contact these units for specific requirements. Special vehicle programs that have been deemed outside the scope of Harley-Davidson's current quality system may be excluded.]

Tier I Harley-Davidson suppliers shall successfully complete and submit the requirements of PPAP as defined in the latest edition of AIAG's PPAP Manual and applicable Harley-Davidson purchasing document(s). Suppliers are urged to perform a complete review of Harley-Davidson purchase order(s) / document(s) prior to acceptance to ensure a complete understanding of the PPAP requirement. Suppliers are also required to adequately communicate the requirements throughout the supplier's organization and value chain. The appropriate PPAP data and product samples (if requested) must be submitted to the specified Harley-Davidson location/personnel on or before the specified date.

Timing for new product PPAP is controlled by Harley-Davidson's M9 Process. The PFMEA and Control plan are developed and approved during the Process Planning portion, after the Design Validation (DV) Build. The PPAP is submitted and approved during the Process Readiness portion, prior to the Production Validation (PV) Build.



The Tier I supplier is responsible for formally flowing down the requirements of PPAP through their supply chain to the degree necessary for obtaining applicable supporting data to adequately complete the PPAP submittal.

All supporting processes / methodologies necessary to complete PPAP shall be performed in accordance with the latest edition of AIAG's applicable publication(s). These publications

are: > Advanced Product Quality Planning (APQP) (including Control Plan)

- > Failure Mode & Effects Analysis
- > SPC (addressing process capability studies)
- > Measurement System Analysis (addressing Gage R&R)

All AIAG publications can be obtained through their customer service or website:

Automotive Industry Action Group (AIAG) 26200 Lahser Road Suite 200 Southfield, MI 48034 (248) 358-3570 www.aiag.org

## ePPAP

PPAP, from MY'05 submissions forward, must be submitted electronically to the purchasing representative requesting. Submissions must be in Microsoft Office or Adobe .pdf format and may be emailed, on electronic media, or submitted using file transfer protocol. When the submission has been reviewed and approved, a copy of the ePPAP cover (a "screen shot") showing approval will be provided to the supplier and will be equivalent to a signed warrant.

## HARLEY-DAVIDSON ePPAP FORMS

Warrant, Dimensional Results, Material Test Results, Performance Test Results, Process FMEA, Control Plan, and Cosmetic Validation forms are available in *Doing Business with Harley-Davidson* as a downloadable Excel file and may be used for submission.

Note: It is acceptable to use other AIAG formatted warrants and forms or AIAG-compliant software for submission. Submissions for ePPAP must be in Microsoft Office or Adobe .pdf format.

Other sources of forms:

www.aiag.org www.thequalityportal.com/g forms.htm

## **PPAP - REVIEW GUIDE**

A downloadable checklist that can be used for PPAP review is available in *Doing Business with Harley-Davidson*.



## HARLEY-DAVIDSON UNIQUE REQUEMENTS

#### Submission Checklist

Harley-Davidson utilizes a submission checklist, sent from purchasing to the supplier, to define requirements for PPAP submission. This form, together with the PPAP Warrant and associated documents, is submitted to Harley-Davidson purchasing for review and approval. The Harley-Davidson submission checklist signed by the H-D representative must be included with PPAP submission.

## PPAP Warrant Form

It is acceptable to use any AIAG compliant automotive warrant (Truck OEM warrants are not acceptable).

#### Cosmetic Validation Report (CVR)

In lieu of the AIAG Appearance Approval Report (AAR), Harley-Davidson suppliers of "cosmetic" parts shall complete the Cosmetic Validation Report (CVR). This form and instruction for completion can be found in the ePPAP forms attached to this section of *Doing Business with Harley-Davidson*.

#### Significant Production Runs

Suppliers shall conduct PPAP on production samples that are selected from a significant production run as defined in the AIAG – PPAP manual. This production run shall be representative of the actual production environment at run at quoted rates. In those cases where AIAG recommended run sizes are not feasible or practical, the supplier is required to notify the appropriate Harley-Davidson purchasing representative to obtain authorization to perform PPAP using a reduced run size. The supplier shall provide the following information:

- 1. Reasons for a reduced size run
- 2. Recommended run size
- 3. Approach(s) that will be used to collect data and perform statistically valid calculations necessary to support PPAP

Variance from the significant production run defined in the PPAP manual must be agreed to in writing and signed by the supplier and H-D purchasing representative and that documentation provided in the PPAP package being submitted.

## Family PPAP

A PPAP for a family of parts may be submitted where:

- > multiple parts are manufactured by a common process, of common materials, and
- a <sup>3</sup>/<sub>4</sub> common DFMEA, PFD, PFMEA, and Control Plan are applicable, and

> minimal changes occur between parts (ex. cable lengths, labels with same construction) A "*Primary Part Number*" is designated and associated to "*Related Parts*" through a matrix. Common documentation applies to all parts; full submission is made for the "*Primary Part Number*", "*Related Parts*" require verification and submission of the differences between parts as documented through the matrix. The matrix should be developed through collaboration between the supplier and H-D representative.

Any questions, comments or concerns regarding PPAP requirements should be directed to your Harley-Davidson purchasing representative. October 2013