H-D Safe Launch FAQ

1. Why is H-D implementing a Safe Launch strategy?

The Safe Launch strategy is intended to further improve the quality of the products during the initial launch phase through enhanced process controls and in-process verification at the suppliers.

2. How does the new safe launch strategy integrate into the MX Methodology?

The safe launch strategy overall supports launch readiness activities within MX Methodology. The risk rating driving the levels of Escalated Control Plan required come out of existing Supply Risk Assessment Phases within MX.

Below is a visual of the MX methodology.

Blue Box = Timing of Supply Risk Assessment Phase 2.

Output = Determination of risk level to align with risk levels in Supply Quality Manual & initiation of safe launch requirement planning.

Blue Arrow = Continued refinement to details of safe launch planning with H-D team (critical dimensions/frequency/etc)

Purple Box = Timing of Supply Risk Assessment Phase 3.

Output = Finalization of risk level and understanding of any changes to safe launch planning needed post PV learnings.

Purple Arrow = Execution of safe launch strategy.

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3. How does the Supplier Risk Assessment work? What influences the rankings?

The Supplier Risk Assessment Process has 3 phases where the overall risk to the component and the supply of that component are assessed. The goal of each phase is to identify risk, align on mitigation plans, and appropriately scale focus and work moving forward with that component. Below is a description of the risk rating at each phase. Note that these are guides and if the project team deems that there is more inherent risk than what can be called out below they may choose to increase the risk rating.

Phase 1 - Evaluate <u>current</u> Supply Base to determine if we have a Supplier to produce the intended architecture.

High	Medium	Low
New H-D Supplier Required	New H-D Supplier Preferred due to Current Supply Base capability/performance concerns	Current Supply Base capable
	-or-	
	Work needed with current	
	supply base to improve capability/performance	

Phase 2: Assess development risks of Primary Path Supplier in relation to the comp	olexity of
design	

High	Medium	Low
. New Technology	. All other parts including but not	Software Updates Only
. New Process /	limited to:	Fasteners/Bearings/Gaskets
Finish	. Corrective Actions at Plants	Length Only Change (no new
. New Material	due to process-related root	tooling to accommodate)
. New Tier 1	cause.	Tool Refurb/New or
Supplier	. H-D driven changes to	Additional Tool on
. New Software	current product	current product.
Architecture	. Supplier-requested Process	. Kitting Only
. Supplier PPM >	Improvement	
Goal	. Finish changes (both finishes are existing)	
	. Supplier-requested changes	
	to improve for NCM/QMR	
	. Material change (proven	
	material)	
	. Tool move	

Quality, Timing, etc . New Software Function

Phase 3: Determine launch risk by component - PV Readiness, Post-Production Validation, and SOP Readiness.

High	Medium	Low
Phase 2 HIGH or Phase 2	Phase 2 HIGH risk	Phase 2 MEDIUM or LOW
MEDIUM risk	rating <u>without</u> Build/PPAP/Test Findings	risk rating <u>without</u> Build /
rating <u>plus</u> Build/PPAP/Test	related to Fit, Form or Function.	PPAP / Test Findings
Findings related to Fit,		related to Fit, Form or
Form or Function.	-OR-	Function
-OR-	Phase 2 LOW risk	- AND -
	rating <u>plus</u> Build/PPAP/Test Findings	
Cost increase putting	related to Fit, Form or Function.	No known cost/timing
business case at risk		issues.

4. How does the safe launch strategy compare to APQP, PPAP, and Escalated Control Plan?

APQP = Advanced Product Quality Planning (APQP).

APQP and Control Plans reduce the complexity of product quality planning for customers and suppliers by allowing customers to easily communicate their product quality planning requirements to their suppliers. Suppliers gain an understanding of basic industry requirements for achieving part approval from their customer. Control Plans summarize the identified process and product parameters required to maintain product conformity. ("(APQP) Advanced Product Quality Planning" *AIAG Automotive Industry Action Group*, https://www.aiag.org/quality/automotive-core-tools/apqp)

PPAP = Production Part Approval Process

Production Part Approval Process (PPAP) is the industry standard that ensures engineering design and product specification requirements are met. ("(PPAP) Production Part Approval Process" *AIAG Automotive Industry Action Group*, <u>https://www.aiag.org/quality/automotive-core-tools/ppap</u>)</u>

ECP = Escalated Control Plan

Escalated Control Plan is a documented launch control plan that is an additional control plan above and beyond the Supplier's production control plan. The ECP should take into consideration all known critical conditions of the part, as well as potential areas of concern identified during the PPAP. The ECP will consist of additional controls and inspection audits, and will factor in the production process (set-up, machinery, fixture, tooling, operation, material/components, preventative maintenance, labor, and climate). Other variations of control plans that companies may chose to use include Prototype, Prelaunch, and Production.

Safe launch planning utilizes all of the documentation and efforts of the project teams during APQP and PPAP development and expands upon it for a limited time during the launch of a new product. It enables a more detailed focus on critical characteristics and continues to ensure that production is stable during the initial ramp up period. ECP is one portion of a safe launch plan. Other examples may include additional preventative maintenance, layered process audits, Run @ Rate activities, etc. The exact items in a safe launch plan will be commodity dependent. Exit criteria should be pre-determined so that all parties are aware of when they will be exiting the safe launch period.

5. What if my company already has a safe launch plan? Do we need to do a separate plan for H-D?

As long as a supplier's safe launch plan encompasses the minimum requirements in the Supplier Quality Manual there is no need to create a new or different safe launch plan.

6. When does this go into effect?

MY22.5/ADM22 and beyond for both P&A and OE new product parts.