



Product Lifecycle Management

A Department of Defense Manufacturing Company

Case
Studies

Abstract

A multibillion-dollar Department of Defense (DoD) manufacturing company was awarded a major DoD contract to assemble trucks with a new requirement to utilize the AIAG Production Part Approval Process (PPAP) on all supplier components. TPS was engaged to lead a collaborative effort with the Manufacturer to establish a PPAP implementation strategy and overall plan that managed incoming product from over 300 suppliers while generating PPAP approval on over 5,000 component and assembly part numbers.

Challenge

- The Program timeline was extremely tight with no opportunity for re-timing.
- Most of the value-add suppliers had little to no experience with the AIAG PPAP Process.
- Many of the Manufacturer's Supplier Quality Engineers, Product Engineers, and Purchasing personnel had little to no experience with the AIAG PPAP Process.
- Cross functions and program management did not include advanced quality planning or PPAP into their timing.

Execution

- Developed a PPAP approval methodology specifically for the customer utilizing both TPS and the Manufacturers Supplier Quality Engineers to review and approve PPAP documentation & parts in the lab and on site at selected supplier locations.
- Provided on site AIAG PPAP training to suppliers and client SQE's where required.
- Implemented a PPAP database that tracks PPAP submissions and approvals by supplier location, SQE, and approval status.

Result

The Program was transferred and entrusted to the client during the acceleration phase of the launch with the following performance statistics achieved: Over 4000 initial PPAP submissions were received and processed generating a 100% Saleable PPAP approval status for all launched vehicles which included a 91% Full PPAP approval rating across all incumbent suppliers within the program.