



# Product Lifecycle Management

## A Department of Defense Manufacturing Company

### Case Studies

#### Abstract

A Department of Defense (DoD) manufacturing company was awarded a major contract to assemble trucks with a new requirement to utilize the AIAG Production Part Approval Process (PPAP) on all supplied components. TPS was engaged to lead a collaborative effort with the Manufacturer to establish a PPAP strategy and an overall plan that tied incoming product from over 300 suppliers to a PPAP approval status 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 Buyers had little to no experience with the AIAG PPAP Process.
- Cross functions and program management had not included advanced quality planning or PPAP into their program management and timing requirements.

#### 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 and 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 tracked PPAP submissions and approvals by supplier location, Supplier Quality Engineer, 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 parts used in the vehicles as launched. Ultimately the program generated a 91% Full PPAP approval rating across all parts and incumbent suppliers within the program.