Higher quality is synonymous with increased product safety.

The primary objective is to improve quality and reduce cost.

A common process up and down the supply chain removing wasted effort and mis-communications.

Products reach faster maturity with fewer engineering changes and defects in the early stages of production and product use.

Proactive toolbox to focus cross-functional teams on risk identification and mitigation early in the process.

Provides a foundation for successful ongoing change management – design modification, works transfers, changes to manufacturing method.
Application within Rolls-Royce of AS13100/9145 APQP and PPAP

Ourselves…Rolls-Royce Civil Aerospace is fully committed to APQP, PPAP and Cross functional working.
Our Customers…they are asking for this.
Our Suppliers…AS13100 APQP and PPAP means we have significantly reduced our Customer Specific Requirements.

AS13100 APQP & PPAP Timing Chart

Rolls-Royce Management System
Our Journey to APQP

2010

Quality Improvement drivers
- Build in Quality

Quality Management Processes
- PPAP
- IPPR

Quality Planning Activities
- SPC
- CCF > KCF
- PFMEA
- DFMEA
- KPC/CI

2017

APQP Early trials

2021

Adoption of Industry Standards

2022

APQP and PPAP
- Zero Defects

Quality Improvement drivers
- Build in Quality
- Zero Defects

Quality Planning Activities
- SPC
- CCF > KCF
- PFMEA
- DFMEA
- KPC/CI

SABRe

#1
- NPI Requirements
- No industry std
- RR Specifics (extensive)

#2
- APQP & PPAP
- No industry std
- RR Specifics (lots)

#3
- APQP & PPAP
- AS9145
- RR Specifics (fewer)

#4
- APQP & PPAP
- AS13100/ AS9145
- RR Specifics (min.)
Self reflection on our APQP implementation

Pillars of success:

1. **Leadership** engagement, organisational commitment and management support

2. **Cross-functional teams** – it’s a team sport of more than one function/department

3. **Effective project planning and Managing** the project to ensure on-time completion of defined deliverables and outputs

Leadership:
- Senior Sponsorship & engagement in concepts
- Business Plan Deployment alignment
- Novel learning practices:
  - APQP Games & simulations
  - Video bite size learning

Cross Functional Teams:
- Launch framework
- Define RACI for activities and Elements
- Building “User Case” value streams (network diagram)
- Functional coaches (DE, ME, PM, Purchase)
- Adopting AS13100 (RM13145) tools:
  - APQP / PPAP Timing Plan
  - Application Matrix

Project Planning & Management:
- Alignment of APQP and PPAP Events to business change management decisions
- RAPID Decision making for Events
- Visual Management / Kanban Boards for the teams.

Foundations

Sponsor (right shadow), Champions (remove barriers), Function Leaders (develop their people) and Core Team (right practices & tools)
Your Winning Cards – Steps to Successful Deployment

**Project Planning & Management**
- Confirm decision makers – RAPID for each APQP & PPAP Event.
- Define practices for concern management

**Develop Leaders of Change**
- Est. Deployment Champion(s) – to remove barriers to success.
- Est. Functional Leads – to develop their people capability.
- Est. Core team – to ensure the right practices and tools are available.

**It’s a Team Sport**
- Clear cross functional accountability – RACI for each Planning Deliverable and APQP Element.

**People Process**
- Availability of capable people – Maintain Training plan and people planning process

**Each time you start**
- Upfront requirements capture – Establish and confirm these as early as possible with Customers & stakeholders

**Progress with a Plan**
- Utilise RM13145 – Applications matrix act as your menu… Events, deliverables & Elements
- APQP & PPAP Timing Plan gives you a Planning template.
Let's Grow our Community

Search LinkedIn “AESQ Community of Practice”

APQP & PPAP
- Zero Defects Tools
- Measurement System Analysis
- Problem Solving
- Human Factors
- Etc

Use “RM13145” it contains a volume of good practices

Raise questions, share ideas & good practices