APQP 4 Wind®

APQP4Wind Assessment Tool

Advanced Product Quality Planning Assessment Tool for the Wind Industry

Company:	
Site:	
Date:	
Lead Assessor:	
Assessor Team:	
Company Representative:	
Assessment Area:	
Comments:	

APQP4Wind Assessment Tool, Version 1.1 - March 2024
Based on APQP4Wind Manual Version 1.3 - March 2024

For more information, please go to: APQP4Wind.org

Phase 1: Plan, Define & Scope Quality Program - Approach

Ref.	Requirements	Maturity score of 1	Maturity score of 3	Maturity score of 5	Maturity score of 7	Maturity score of 9	Observations	Achieved Score
1.1	Voice of Customer (VoC)	- VoC is solely based on sales experience.	- VoC analysis is planned to include lessons learned internally in the company.	- VoC analysis is made before start of project. - The VoC includes Things Gone Right (TGR), Things Gone Wrong (TGW), and lessons learned records.	- VoC analysis is made before start of project. - The VoC includes TGR, TGW, lessons learned records, Customer surveys, and stakeholder interviews presented in the VoC list. - Procedure is included in company Business Management System.	- VoC analysis is made before start of project. - The VoC includes TGR, TGW, lessons learned records, Customer surveys, and stakeholder interviews presented in comprehensive form and prioritized based on Customer input. - Quality Function Deployment (QFD) is used as a tool. - Solid procedure is included in company Business Management System.		
1.2	Design Goals (Relevant for Design Responsible Organisation)	- Design Goals are not formalized.	- Design Goals are formalized and documented, but without reference to VoC.	- Design Goals are documented and contain measurable as well as non-measurable goals, all with reference to VoC.	- Design Goals are comprehensively described and aligned with Customer. - Benchmarking includes products and competitors.	- Design Goals are comprehensively described in full compliance with VoC and benchmark data. - Design Goals are visualized, and reviews contain one-to-one verification of goal inclusion in project. - Standardization according to international standards is sought.		
1.3	Product & Process Benchmark Data	- No benchmarking is done.	- Benchmarking is occasionally done against direct competitors.	- Benchmarking is done for all new designs, including direct competitors and general industry. - Benchmarking is documented.	- Benchmarking is done for all new designs, including direct competitors and best-in-class industry. - Learnings serve as input for design goals. - Benchmarking is documented.	- Benchmarking is done for all new designs, including direct competitors, best-in-class industry as well as testing of similar products. - Learnings serve as input for design goals. - Method of measuring successful benchmarking is maintained. - Benchmarking data is comprehensively documented.		
1.4	Product & Process Assumptions	- Assumptions are made, but not recorded.	- Assumptions are made and documented, but not planned to be validated or verified.	- Assumptions are well-defined, described and included in the test plan. - Assumptions in both process and product design are included. - Assumptions are subject to design validation and verification.	- Assumptions are well-defined, described and included in the test plan as well as communicated to Customer. - Assumptions in both process and product design are included. - Assumptions are subject to design validation and verification.	- Assumptions are well-defined, described and included in the test plan as well as communicated to Customer. - Assumptions in both process and product design are included. - Comprehensive work to eliminate need for assumptions has been made. - All assumptions are input for the quality plan and verified. - Assumptions are used as input for FMEA's.		

1.5	**Historical Data & Quality Information**	- No historical data or quality information is available.	- Limited historical data is available, including fragments of claims, warranty issues and Customer rejections.	- Historical data and quality information based on claims, warranty issues and Customer rejections is available.	- Historical data and quality information based on claims, warranty issues, Customer rejections, Supplier information, reliability, corrective action reports (CAPA) and product analysis reports is available. - Data is presented in list form.	- Historical data and quality information based on claims, warranty issues, Customer rejections, Supplier information, reliability, problem resolution reports, as well as product and process analysis reports including corrective action reports (CAPA) is available. - Data is visualized with reference to severity for product.		
1.6	**Sub-Supplier Screening**	- No mapping of processes to be outsourced is done.	- Some mapping of processes to be outsourced is done. - Screening of Potential Sub-Suppliers' capability and capacity is not done.	- Potential Sub-Supplier screening and mapping of processes to be outsourced are done. - Minimum screening of Suppliers' capability and capacity is done. - Potential Sub-Suppliers are screened for APQP4Wind capabilities.	- Comprehensive mapping of potential processes to be outsourced is done. - Potential Suppliers are mapped, and their capability, capacity and competence are included in the mapping. - Sub-Suppliers are screened for APQP4Wind capabilities, and Suppliers of critical components are compliant with APQP4Wind.	- Comprehensive mapping of potential processes to be outsourced is done. - Potential Suppliers are mapped, and their capability, capacity and competence are included in the mapping. - Capability and capacity are verified, either on actual product or on similar product, which will be outsourced. - Sub-Suppliers are screened for APQP4Wind capabilities, and they are compliant with		
1.7	**APQP4Wind Kickoff Meeting**	- APQP4Wind Kickoff Meeting is not performed.	- APQP4Wind Kickoff Meeting is performed, but with limited content. - Output from meeting is not documented.	- APQP4Wind Kickoff Meeting is performed as a formal meeting called by Customer. - All available data is reviewed. - Plans as well as time frames are communicated. - The content of PPAP is agreed upon. - Minutes of meeting are documented by Supplier. - Product Quality Plan (PQP) is agreed upon.	- APQP4Wind Kickoff Meeting is performed as a formal meeting called by Customer or Supplier. - All available data is reviewed. - Plans as well as time frames are communicated. - The content of PPAP is agreed upon. - Communication plan between Customer and Supplier is included, and follow-up meetings are scheduled. - Minutes of meeting are documented by Supplier. - PQP is agreed upon.	- APQP4Wind Kickoff Meeting is performed as a formal meeting called by Customer or Supplier. - All available data is reviewed. - Plans as well as time frames are communicated. - The content of PPAP is agreed upon. - All agreed demands are measurable. - No open unclarified Customer demands are at hand. - Communication plan between Customer and Supplier is included, and regular follow-up meetings are scheduled. - Escalation plan is included. - PQP is agreed upon and signed off.		
1.8	**Product Quality Planning Team**	- Specific Team Lead for Product Quality Planning Team is not appointed.	- Specific Team Lead for Product Quality Planning Team is appointed. - Roles and expectations for Team Lead are defined and documented, but not for the entire team.	- Specific Team Lead is defined for the Product Quality Planning Team. - The team is cross-functional with all relevant stakeholders included. - Roles and expectations for all team members are defined, documented and communicated.	- Specific Team Lead is defined for the Product Quality Planning Team. - The team is cross-functional with all relevant stakeholders included. - Roles and expectations for all team members are defined, documented and communicated. - Product Quality Team is presented to Customer.	- Specific Team Lead is defined for the Product Quality Planning Team. - The team is cross-functional with all relevant stakeholders included. - Roles and expectations for all team members are defined, documented and communicated. - Product Quality Team is presented to Customer and participating in follow-up meetings with Customers when needed.		

1.9	Product Quality Plan (PQP)	- PQP is made with minimal content, but not revised and kept alive.	- PQP is made with minimal content and regularly revised but not communicated to stakeholders.	- PQP is established and contains as a minimum: product/process description, responsibility, timeline and due dates as well as status. - PPAP deliverables are identified. - PQP is communicated internally. - PQP is reviewed regularly which assures adherence to plan.	- PQP is established and contains all information needed: product/process description, responsibility, timeline, and due dates as well as status. - PPAP deliverables are identified. - PQP is communicated internally as well as to Customer. - PQP is reviewed regularly, which assures adherence to plan.	- Comprehensive PQP is established and contains all information needed: product/process description, responsibility, timeline, critical path, due dates, status, and actions to be done in order to compensate for delays. - PQP contains all deliverables for PPAP and internal verifications and validations. - PQP is visualized and maintained in the form of a Gantt chart or similar. - PQP is communicated internally and to Customer and serves as a communication platform regarding progress of project. - PQP is reviewed regularly which assures adherence to plan.		
							Total Phase 1 Approach	#DIV/0!

Phase 2: Product Design & Development - Approach

Ref.	Requirements	Maturity score of 1	Maturity score of 3	Maturity score of 5	Maturity score of 7	Maturity score of 9	Observations	Achieved Score
2.1	Engineering Design Review (EDR) (Relevant for Design Responsible Organisation)	- EDR is not performed or only performed to a minimum and solely with involvement from engineering. - EDR contains specifications, drawings and calculations done. - Minutes of meeting are documented by review leader.	- EDR is performed cross-functionally with involvement from engineering and sales. - EDR contains specifications, drawings and calculations done. - Minutes of meeting are documented by review leader.	- EDR is performed cross-functionally with involvement from engineering, sales, manufacturing, and quality function. - EDR contains design requirements and all specifications, drawings, calculations, and analysis work done. - Minutes of meeting are documented by review leader.	- EDR is performed cross-functionally with involvement from engineering, sales, manufacturing, quality, and other relevant functions. - EDR contains design requirements and all specifications, drawings, calculations, and analysis work done, including potential modeling and information from similar designs. - Minutes of meeting are documented by review leader.	- EDR is performed cross-functionally with involvement from engineering, sales, manufacturing, quality, other relevant functions, and potential Customers and Suppliers. - EDR contains all specifications, drawings, calculations, and analysis work done, including modeling and information from similar designs. - Big data is used for artificial input where relevant. - Minutes of meeting are documented by review leader.		

2.2	**Drawing & Specification Review**	- Drawing and Specification Review is done to a minimum in sales with support from engineering. - Customer drawings and specifications are reviewed with the purpose of understanding and evaluating ability to fulfill. - Process contains safety regulations, governmental regulations, and restricted substances when known upfront. - Reviews are documented, and necessary actions are mapped.	- Drawing and Specification Review is done between sales and engineering where Customer drawings and specifications are reviewed with the purpose of understanding and evaluating ability to fulfill. - Process contains safety regulations, governmental regulations, and restricted substances when known upfront. - Reviews are documented, and necessary actions are initiated.	- Drawing and Specification Review is done in a cross-functional process where all Customer drawings and specifications are reviewed with the purpose of understanding and evaluating ability to fulfill. - Process contains safety regulations, governmental regulations, and restricted substances. - Reviews are documented, and necessary actions are initiated.	- Drawing and Specification Review is done in a cross-functional process where all Customer drawings and specifications are reviewed with the purpose of understanding and evaluating ability to fulfill. - Process contains safety regulations, governmental regulations, and restricted substances. - Reviews are documented. - Conclusion meetings are performed, and necessary actions are initiated and potentially clarified with Customer. - Output is used as input for Team Feasibility Commitment.	- Drawing and Specification Review is done in a cross-functional process where all Customer drawings and specifications are reviewed with the purpose of understanding and evaluating ability to fulfill. - Potential Sub-Suppliers are involved in the review. - Process contains safety regulations, governmental regulations, and restricted substances. - Reviews are documented. - Conclusion meetings are performed and necessary actions are initiated and time-bound as well as clarified with Customer in a meeting where all questions are discussed and evaluated. - Output is used as input for Team Feasibility Commitment.		
2.3	**Team Feasibility Commitment (TFC)**	- Team Feasibility is committed as a result of internal sales review. - It is confirmed that product can be manufactured, tested, packed, and delivered. - Delivery and fulfillment plans are reviewed and committed, but with reservations.	- Team Feasibility is committed as a result of internal reviews between sales and engineering, including use of risk models. - It is confirmed that product can be manufactured, tested, packed, and delivered at a satisfying level for Customer. - Delivery and fulfillment plans are reviewed and committed.	- Team Feasibility is committed as a result of internal reviews, including FMEA's or other risk models. - It is confirmed that product can be manufactured, tested, packed, and delivered at a satisfying level for Customer at the right price. - Delivery and fulfillment plans are reviewed and committed. - In case of non-compliance, correction plans are made.	- Team Feasibility is committed as a result of internal reviews, including FMEA's or other risk models. - It is confirmed that product can be manufactured, tested, packed, and delivered at a satisfying level for Customer at the right price. This includes Supplier information as well. - Delivery and fulfillment plans are reviewed and committed. - List of tools and full review of own and Suppliers' capacity are made available for review by Customer.	- Team Feasibility is committed as a result of internal cross-functional reviews, including FMEAs or other risk models. - It is confirmed that product can be manufactured, tested, packed, stored, and delivered at a satisfying level for Customer at the price requested by Customer. - Delivery and fulfillment plans, including that of Suppliers are reviewed and committed. - List of tools and full review of own and Suppliers' capacity and Run@Rate are offered to Customer.		
2.4a	**Capacity Planning**	There is no objective evidence of Capacity Planning. There's a lack of strategic foresight and systematic analysis of future needs.	Some recognition of the need for Capacity Planning is evident, but it's in the early stages. There might be basic projections or estimations, but they lack a comprehensive strategy. Forecasts are created in spreadsheets using manual methods. Information is not timely, accurate, or integrated.	The company has a structured and formalized approach to Capacity Planning. There's a clear process in place to assess current capacities and project future needs, although this might not cover all areas of the business. Forecasts are created and integrated into ERP systems with built-in planning	Capacity Planning is well-deployed and widely communicated throughout the company. Most areas or departments adhere to the established contingency planning protocols effectively.	Capacity Planning is 100% deployed and continually developed to include state-of-the-art tools and methods.		
2.4b	**Contingency Planning**	Contingency Planning is reactionary, ad hoc, and lacks a formal structure. There's no standardized process for identifying or addressing risks.	Initial steps towards establishing a contingency plan are evident. There might be some recognition of potential risks, but the approach lacks formalization and structured methods.	The company has a formalized approach to Contingency Planning. There are established procedures to identify and assess risks	Contingency Planning is well-integrated into the company's operations. The approach covers a wide range of potential risks.	The company has a proactive and innovative approach to Contingency Planning. It covers a broad spectrum of risks and continuously evolves the methodologies, incorporating advanced risk analysis, predictive modeling, and adaptive strategies. The approach is ingrained in the organizational culture and spans all levels of the business.		