



ADVANCED PRODUCT QUALITY PLANNING

2022



APQP = ADVANCED PRODUCT QUALITY PLANNING

The APQP method ensures that the product meets the customer's requirements by means of advanced quality planning during product development. During the individual project phases, preventive work is carried out to avoid errors. Through a continuous improvement process, findings and measures are quickly implemented.

The structured process of advance product quality planning uses standardized methods and tools (e.g. FMEA, production control plan) to ensure that the required process steps are finalized on time. The chronological sequence, the method application and the execution of the individual steps can vary. The result of APQP represents the basis for the preparation of production control plans.

In this respect, APQP is an expression of the fact that quality is not only regulated and validated later in series production, but already during the definition and development of a product. Since 75% of errors occur in the development and planning phase of the product, avoiding errors comes to the fore.

The advantage of APQP is the increase in customer satisfaction, increased transparency, planning security, permanent improvement of products and processes as well as constant exchange of information between customer and supplier.

TERMS

Advanced product quality planning:

APQP

Measurement system analysis:

MSA

Failure mode and effects analysis:

FMEA

Statistical process control:

SPC

Control plan:

PLP

Statistical process capability:

CPK

Capacity rating:

RUN@RATE

Statistical machine capability:

CMK

Production part approval process:

PPAP

Special-/Critical characteristics:

SC / CC

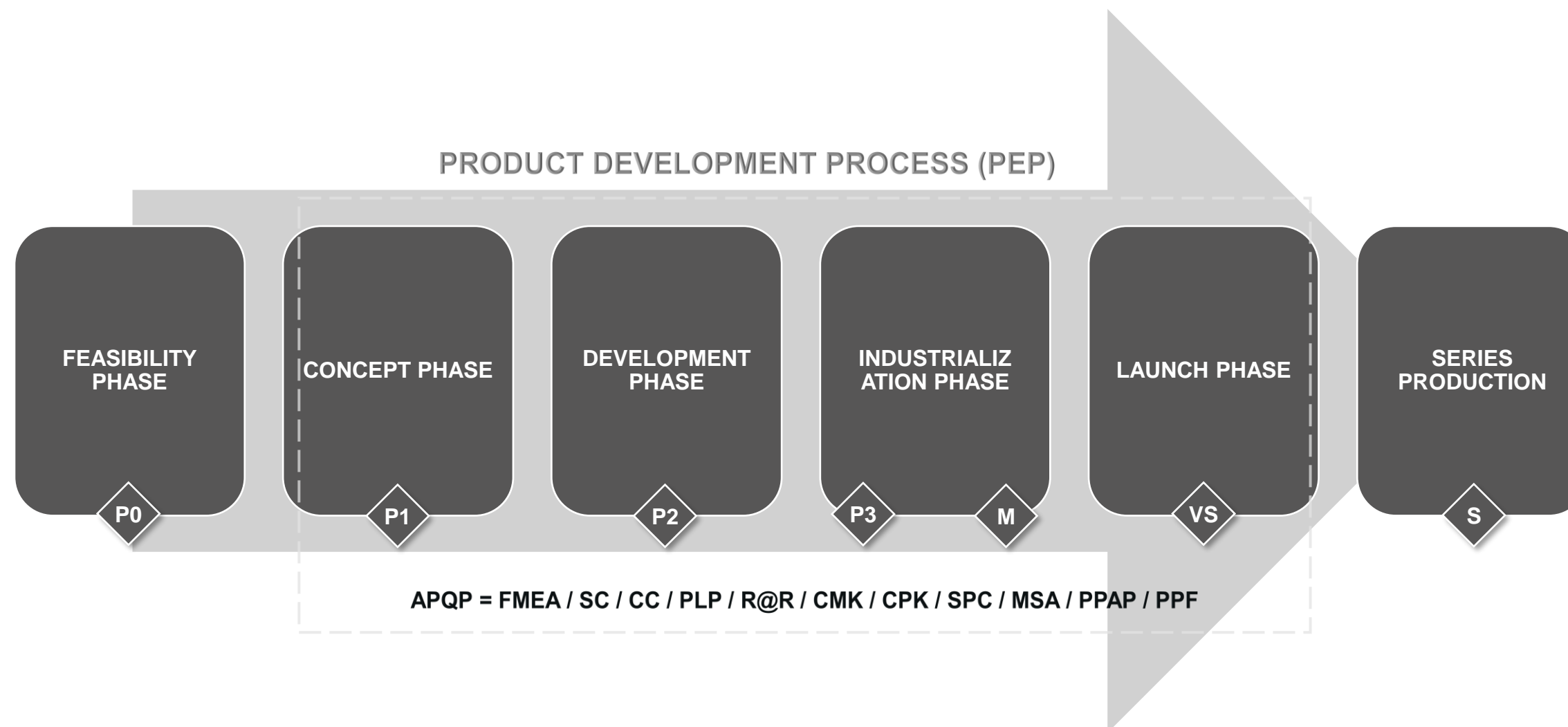


PRODUCT & PROCESS DEVELOPMENT

In order to ensure that our capacity and quality requirements are met, you will be guided by the KTM advanced product quality planning (APQP) method during the product development process as well as monitored via audits.

After the offers have been received, KTM begins its awarding process. The decision regarding whether a contract is granted is made by the Purchasing, Quality Management and Development departments based upon the criteria catalog.

Depending on the product group, technology or supply chain, there are different APQP levels, which are individually determined by the quality management. The information about the required APQP Level will be communicated to the supplier via the initial PPAP order.





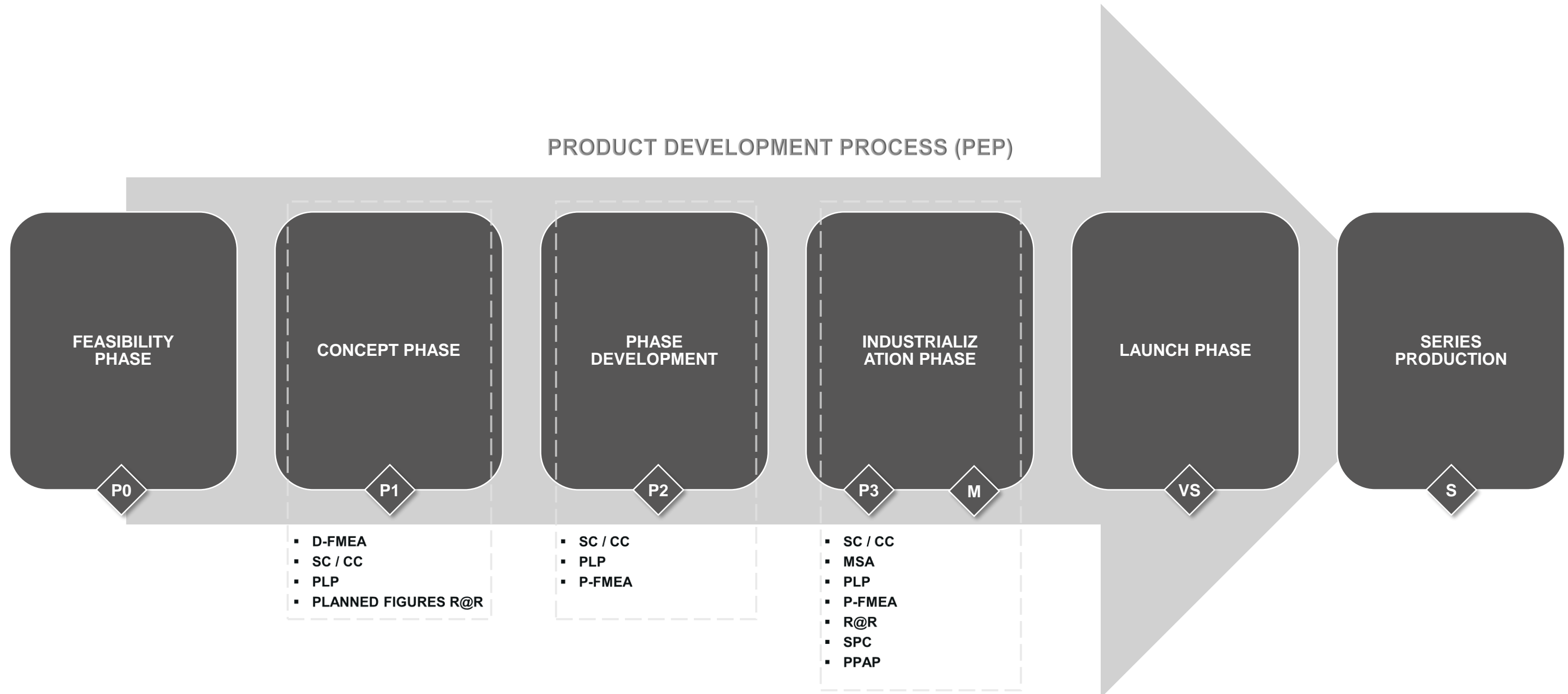
APQP LEVEL MATRIX

MATURITY VEHICLE & PRODUCT					
APQP LEVEL	VEHICLE: P1 PRODUCT : A-SAMPLE	VEHICLE: P2 PRODUCT : B-SAMPLE	VEHICLE: P3 PRODUCT : C-SAMPLE	VEHICLE: M PRODUCT : D-SAMPLE	RESPONSIBILITY SUPPLIER / KTM
1	<ul style="list-style-type: none"> DESIGN FMEA SC / CC PLP PLAN FIGURES RUN@RATE 	<ul style="list-style-type: none"> SC / CC PLP PROCESS FMEA 	<ul style="list-style-type: none"> SC / CC MSA PLP PROCESS FMEA PRE RUN@RATE 	<ul style="list-style-type: none"> SPC (CMK,CPK) PLP RUN@RATE PPAP 	SUPPLIER: TRANSMISSION OF VERIFICATION KTM: COUNTERCHECK OF VERIFICATION & AUDIT (PROCESS & R@R)
2	<ul style="list-style-type: none"> SC / CC PLP PLAN FIGURES RUN@RATE 	<ul style="list-style-type: none"> SC / CC PLP PROCESS FMEA 	<ul style="list-style-type: none"> SC / CC MSA PLP PROCESS FMEA PRE RUN RUN@RATE 	<ul style="list-style-type: none"> SPC (CMK,CPK) PLP RUN@RATE PPAP 	SUPPLIER: TRANSMISSION OF VERIFICATION KTM: COUNTERCHECK OF VERIFICATION & AUDIT (PROCESS & R@R)
3	<ul style="list-style-type: none"> PLAN FIGURES RUN@RATE 	<ul style="list-style-type: none"> PROCESS FMEA 	<ul style="list-style-type: none"> PLP PROCESS FMEA PRE RUN RUN@RATE 	<ul style="list-style-type: none"> PLP RUN@RATE PPAP 	SUPPLIER: TRANSMISSION OF VERIFICATION KTM: COUNTERCHECK OF VERIFICATION & AUDIT (PROCESS & R@R)
4				<ul style="list-style-type: none"> PPAP 	SUPPLIER: TRANSMISSION OF VERIFICATION KTM: COUNTERCHECK OF VERIFICATION



EXAMPLE REQUIREMENT APQP LEVEL 1

PRODUCT DEVELOPMENT PROCESS (PEP)





**WORK HARD
IN SILENCE,
LET SUCCESS
MAKE THE NOISE**