RPS / significance of dimensions

Designation	Explanation	DIN 406	GRAMMER "Off- Road"	BMW	VW	Daimler Chrysler	Comment
Reference dimension	A1-A3/ B1-B2/ C1	x	for RPS etc.	derived from DIN 406 / BMW specification	not according to standard / VW specification	X	for RPS at GAG "Off-Road"
Functional dimension	determination of shape, size, position etc.	x	process specification 1.33 (target Daimler Chrysler: 2 !)	Have to be equated with the test masses. Process capability and machine capability analyses have to be proven.	Entire tolerance can be utilized! No process instruction.	X	
Auxiliary dimension	in parantheses	no integral part of the contract	measured in the ISR / not part of machine capability and process capability analyses	information for largest dimension (stock-keeping etc.)	information for largest dimension (stock-keeping etc.)	for information; (according to DIN 406)	definition for RPS (dimensions for machine capability analysis) still required !!
Coordinate dimensioning		x			determination of the part in free space	x	
Dimensioning by means of tables		parts and shaped elements marked with figures/ characters	x	determination of the part in free space. Including measuring plan and alignment (RPS data), measured in the ISR.	Specification areas for VW drawing / free dimensional tolerances etc.	not used	definition for RPS still required !! Not clear for VW classification "intrinsic / not intrinsic" !
Theoretically precise dimension	square frame / no tolerance indication	indication of the geometrically ideal / theoretically precise position or shape of the dimensioned shaped element	x / for RPS etc.	according to DIN	determination of the part in free space	x	
Test dimension	rounded frame	x	-/-	process capability and machine capability analyses have to be proven	dimensions in test table are evaluated by means of the machine capability analysis	proof of process capability during sampling	not used for GAG "Off-Road" / definiton and number of test dimensions (control plan) still have to be clarified within the framework of RPS test dimensions are defined under the direction of the production together with Q and development departments / new definition required in case of change of supplier !
Underline	presentation diverges from the part	x	-/-			"fake" dimensions are not admissible	not used for GAG "Off-Road"
Squared bracket	designation for base dimensions and processing dimensions	x				not used	
Brace	summary of associated indications	x				not used	
Framework for the indication of reference points (A1 etc.)	DIN ISO 7083	x	for RPS marking	indicated with RPS 1-3	auxiliary means for RPS	indication according to DIN IS0 1101	
Inspection plan	table in drawing with coordinate dimension			x	x	not used	
Shape tolerances	DIN EN ISO 1101		x	x	x	x	
Profile tolerances	DIN EN ISO 1101		x	x	x	x	
Positional tolerances	DIN EN ISO 1101		x	x	x	x	