

1 Purpose

Definition of a method to determine special characteristics and their treatment in the projects.

2 Procedure

2.1 General procedure

These characteristics are defined as functional or safety-relevant characteristics on behalf of the customer in specifications by special symbols. If no special characteristics are determined by the customer,

- They will be defined in accordance with the customer or
- They will be defined in accordance to similar products or SELZER's own experience (FMEA)
- The surface hardness of the heat treatment is basically a special characteristic

2.2 Marking of special characteristics

- Product characteristics or parameters which affects the safety of a product or which influence the compliance with legal regulations are marked with the symbol § and with the characteristic specified by the customer (if required by the customer).
- Product characteristics or process parameters which influence the fit / function of a product or need to be controlled and documented for other reasons (customer requirements) are marked with the symbol ↔ and with the predefined characteristic by the customer (if requested by the customer).

2.3 Details

To comply to the special characteristics specified by the customer, the special characteristics must be defined for each single process step.

Examples:

- Pre dimensions for the subsequent heat treatment
- Pre dimensions for the subsequent surface treatment
- Tightly tolerated mounting diameter
- Fineblanking parameters (clear cut surface, breaks, etc.)

2.4 Steering of special characteristics

The "special characteristics" are recorded by the Project Manager / Product Manager in the "Project Information sheet" and if necessary even by the Key Account Manager.

For in-house production, the "special characteristics" must be adopted by the responsible industrial engineering planner in the work instruction and must be marked with a defined characteristic.

For purchased parts, the Project Manager / Product Manager is responsible for including the "special characteristics" in the drawing, even at external processing in the work instruction.

The special characteristics must be considered as a highest priority in the context of continuous improvement. If deviations or errors occur in these characteristics, they must be handled according to a priority plan. If some deviations occur in a product or process, the Quality Management must be informed, if one of the deviations is based on a special characteristic and is not subject to 100% control. This deviation should be treated as the highest priority by Quality Management. All special characteristics have to be included in the production control plans. Characteristics have to be marked with the customer's symbols or SELZER characteristics in accordance with the work instruction. The marking must be made continuously from the drawing via work instruction to the test documents.

2.5 Special characteristics of purchased parts

Special characteristics must be marked in the order drawings as described under 2.2. The supplier must provide the preliminary process capability $Ppk = 1.67$ and long-term capability $Cpk = 1.33$ for the special characteristics. The preliminary process capability Ppk must be verified with PPAP.

3 Terms and abbreviations

FMEA	=	Failure Mode and Effects Analysis
Ppk	=	Preliminary process capability
Cpk	=	Long-term process capability
PPAP	=	Production Part Approval Process

4 Custom marking of functional and safety-relevant characteristics

Besondere Merkmale / special characteristics

Lfd. Nr.	Kunden Name Customer name	sonstige Merkmale other characteristics	wichtiges Merkmal important characteristics	Signifikantes Prüfmerkmal * significant characteristics*	Kritisches Prüfmerkmal * critical characteristics*	Kundenforderung customer requirement	Bemerkung notice
1	Norm standard	Prüfmaß nach DIN 406 (ISO 129)					
2	Selzer "intern"				§		
3	Daimler		KC*		DS DZ	MBST 14/06 (in MBST 2016) VAM00223* (TRUK)	
4	BMW				L	GS 91011	
5	-Getrag Operation (GO) -GFT -Getrag Asia Pacific (GAP)			<M>	<M>	G_023013_4	Für Neuprojekte for new projects
6	Getrag			<M>	<C>	GCG_803001	Für bestehende Projekte for existing projects
7	GFT/GJT			Produkt-FMEA: <YM> Prozess-FMEA: <M>	Produkt-FMEA: oder <YC> Prozess-FMEA: oder <C>	GCG_803001	Für bestehende Projekte for existing projects
8	MAGNA			<M>	<C>	G_00_03_S_0002 part 4	
9	Continental		F*	" W "	" D "	QV_22_03 TST N 001 00.02*	
10	Continental Grünstadt					GQAS FOR TURBOCHARGER	
11	ZF TRW					GSQM allg. (GSQM_100A)	
12	WABCO			<2>	<1>	QAA Chapter 8	
13	Audi & VW				D/TLD	Formel Q-Fähigkeit	
14	BLACK & DECKER						
15	John Deere			<KC>	 oder	JDS-G113.2 (Supplier quality manual JDS-G223)	
16	GKN Driveline					320011_B	
17	Deutz					H0759	
18	Bosch			F	S / G	CDQ306-Anlage1	
19	Punch Powertrain					W/Q/027/01	
20	VOLVO			[SC]	[CC]	STD 105 105-0007	

* Die verwendeten Begriffe der Kunden können variabel sein. / * The terms used by customers can be variable.