


Work Instruction: Handling of Special Characteristics	ASD-C45-3-01_EN	Revision 01	
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Title:	Handling of Special Characteristics	Effective Date: 2019-10-02
Applies to / Scope:	Handling of Special Characteristics at ZF Active Safety Division Suppliers Plants.	
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Changes from the previous version are identified with a vertical line at the left margin of the regulation



1. Purpose

The purpose of this document is to communicate ZF Active Safety Division's requirements regarding handling of special characteristics in supplier plants. It is the expectation of ZF Active Safety Division, that all suppliers of Direct Material comply with all the requirements and expectations documented in this specification.

This document is an extension of ZF Directive DCF 17-02 Regulation of Special Characteristics available for download on the ZF Internet website (See QD83 1.9 Special Characteristics).

2. Scope

This Work Instruction applies to all employees in Division A of ZF Friedrichshafen AG.

3. Responsibilities

This internal regulation applies to each employee who is responsible to communicate special characteristics for Division A Products to Suppliers.

4. Definitions

Acronym	Definition
C	Critical Characteristic
S	Significant Characteristic
PTC	Pass Through Characteristic
SPC	Statistical Process Control
CTP	Customer Touch Point



5. Content

Characteristics classification	Characteristic Identifier	Symbols in other documents	Description of characteristics	Characteristic Qualification. Basic Requirements
Critical Characteristic	Cxx	C	<p>A Critical Characteristic is a feature, dimension, or note, which may directly affect:</p> <ul style="list-style-type: none"> safe vehicle/system operation or compliance with authorities/ government regulations. or safe transportation and handling or operator's safety 	<ol style="list-style-type: none"> Compliance to the required process Short Term capability: min≥2,0 Long Term capability: min≥1,67 Or Process Poka Yoke Or 100% Automatic Detection <p>SPC as appropriate and First/Last Piece Archiving and Retention min. 15 Years after end of production</p>
Significant Characteristic	Sxx	S	<p>A Significant Characteristic is a feature, dimension, or note, which establishes</p> <ul style="list-style-type: none"> the principal function (primary and secondary) in the vehicle/ final product or the subsequent assembly process at customer side. 	<ol style="list-style-type: none"> Compliance to the required process Short Term capability: min≥1,67 Long Term capability: min≥1,33 Or Process Poka Yoke Or 100% Automatic Detection <p>SPC as appropriate and First/Last Piece. Archiving and Retention min. 3 Years after end of production.</p>
Pass Through Characteristic	PTCxx	PTC	<p>A Pass-Through Characteristic is a feature or note,</p> <ul style="list-style-type: none"> which establishes the existence of customer relevant connection characteristics or functional elements with direct effect to assembly or test processes. <p>and</p> <p>is already prefabricated by TIER 1-n and not modified or further used in manufacturing or assembly processes at TIER 1 side.</p>	<ol style="list-style-type: none"> Process Poka Yoke Or 100% Automatic Detection SPC as appropriate at both supplier and ZF. (PTC, not CTP) 200% visual inspection (appearance items only) <p>Archiving and Retention min. 3 Years after end of production.</p>

Supplier is responsible to ensure that all drawing/specification component requirements are met.

Capability Studies according to one of automotive standards VDA Volume2, VDA Volume 4 or AIAG book SPC.

CTP (Customer Touch Point) are managed with Special Characteristic Matrix as an attribute to Characteristic Classification.

If CTP is neither "C" or "S" characteristic it shall be treated as a PTC



6. Related Documents

DCF 17-02 Regulation of Special Characteristics (SC) within the ZF Group

QD83 Global Supplier Quality Directive Edition 2018

7. History and Change Log

Chapter	Page	Type of revision	Revision	
			No.	Date
all	all	New edition	1	2019-11-01