

# **Datenaustauschrichtlinie**

**Data Exchange Guideline**  
of the Department Mechanical Design

## **Part 2: Short Infos and Checklists**

Procedures for machine construction internal / external

**DARL**

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## Document Information

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A	R. Lotz	28.02.2013	Page 3: Introduction not to apply, two columns in the chart escaped
B	R. Lotz	26.11.2015	div. adaptations of the text in the document / amendments in the chapters: 5.1, 6.1, 7.1, 10.1

## Responsibility

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## Relevant Documents

- Design Guideline ( KRL of the Department Mechanical Design )

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## 1 General

The document at hand, the data exchange guideline part 2, serves for the exchange of important information around the data exchange between customer and contractor.

After the data have been completed jointly according to chapter 2 to 8, the basis for a functional data exchange process is created. Customer and contractor each receive a completed copy.

Starting from chapter 9 the basic demands are summarized. The following check lists shall support the process of checking the completeness.

## 2 Contact Details

### 2.1 Contact Persons at the Customer

Department	Contact Person	Telephone	E-mail
Change Management			
Purchasing / Procurement			
IT			
Mechanical Design			
Project Management			
Quality Assurance			

### 2.2 Contact Persons at the Contractor

Department	Contact Person	Telephone	E-mail
Change Management			
Purchasing / Procurement			
IT			
Mechanical Design			
Project Management			
Quality Assurance			



## 5 Used CAD-Systems

### 5.1 CAD-Systems at the Customer

Mechanical Engineering			
CAD System	used	Status	Note
CATIA V5	<input checked="" type="checkbox"/>	Release 23	
Electrical Project Management			
EPLAN	<input checked="" type="checkbox"/>	EPLAN Electric P8 in the respective latest version	

### 5.2 CAD-Systems at the Contractor

Mechanical Engineering			
CAD System	used	Status	Note
CATIA V4	<input type="checkbox"/>		
CATIA V5	<input type="checkbox"/>		
AutoCAD	<input type="checkbox"/>		
Pro/ENGINEER	<input type="checkbox"/>		
I-DEAS	<input type="checkbox"/>		
Unigraphics	<input type="checkbox"/>		
Inventor	<input type="checkbox"/>		
SolidWorks	<input type="checkbox"/>		
OneSpace Designer	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
Electrical Project Management			
EPLAN	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
Further			
	<input type="checkbox"/>		
	<input type="checkbox"/>		

## 6 Used PLM/PDM-Systems

### 6.1 PLM/PDM-Systems at the Customer

PDM System	used	Status	Note
SAP CDI ++	<input checked="" type="checkbox"/>	CDI 3.6.0.1	
EDMS	<input checked="" type="checkbox"/>		

### 6.2 PLM/PDM-Systems at the Contractor

PDM System	used	Status	Note
eMATRIX	<input type="checkbox"/>		
Pro/INTRALINK	<input type="checkbox"/>		
Windchill	<input type="checkbox"/>		
TeamCenter	<input type="checkbox"/>		
mySAP/PLM	<input type="checkbox"/>		
Agile	<input type="checkbox"/>		
EnoviaVPM	<input type="checkbox"/>		
SmarTeam	<input type="checkbox"/>		

## 7 Further used Software and Systems

### 7.1 Further used Software and Systems at the Customer

Office Software			
Program / System	used	Status	Note
MS Office	<input checked="" type="checkbox"/>	2003 und 2010	
Operating Systems			
MS Windows	<input checked="" type="checkbox"/>	Windows XP, Windows 7 ( 32 bit; 64 bit )	
Linux	<input checked="" type="checkbox"/>	Debian, Release 7 ( Wheezy )	
Project Management Software			
MS Project	<input checked="" type="checkbox"/>	2010	
Programs for the Data Exchange			
Program / System	used	Status	Note
EnCo (Enterprise Connector)	<input checked="" type="checkbox"/>	Version 5	

## 7.2 Further used Software and Systems at the Contractor

Office Software			
Program / System	used	Status	Note
MS Office <sup>1</sup>	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
Operating Systems			
MS Windows	<input type="checkbox"/>		
Linux	<input type="checkbox"/>		
UNIX (AIX, HP-UX, Sun-UX)	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
Project Management Software			
MS Project <sup>2</sup>	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		

<sup>1</sup> at least Version 2003

<sup>2</sup> at least Version 2007

## 8 Information Concerning Network Technology

### 8.1 Network Technology at the Customer

		Note
Antivirus software used	yes <input checked="" type="checkbox"/> / no <input type="checkbox"/>	
Band width max	100 MBit	
E-mail	Max. size per e-mail: 100 MB	
Firewall	yes <input checked="" type="checkbox"/> / no <input type="checkbox"/>	
Encoding	https	

## 8.2 Network Technology at the Contractor

		Note
Antivirus software used	yes <input type="checkbox"/> / no <input type="checkbox"/>	
Band width max		MBit
E-mail	Max. size per e-mail:	MB
Firewall	yes <input type="checkbox"/> / no <input type="checkbox"/>	
Encoding		

## 9 CAD Accuracy

The level of accuracy, chosen below, must be adjusted in the settings of the used CAD-systems and must be applied in the creation of the single parts and assemblies.

CAD-Accuracy	used	Note
1mm	<input type="checkbox"/>	
1*10 <sup>-1</sup> mm	<input type="checkbox"/>	
1*10 <sup>-2</sup> mm	<input type="checkbox"/>	
1*10 <sup>-3</sup> mm	<input checked="" type="checkbox"/>	Standard
1*10 <sup>-4</sup> mm	<input type="checkbox"/>	
1*10 <sup>-5</sup> mm	<input type="checkbox"/>	
1*10 <sup>-6</sup> mm	<input type="checkbox"/>	

## 10 Data Formats and File Extensions

### 10.1 Allowed Data Formats

Formats		
Application	Native-Format	Neutral Format
3D model	relevant native-format	STEP AP214
drawings	relevant native-format	PDF/A Note: A separate PDF/A document ( e.g. _1, _2, ... ) must be created for every drawing sheet.
part lists	Excel	PDF/A
written documents	Word	PDF/A
tables	Excel	PDF/A
CAE / calculations / tests	by arrangement	PDF/A
print data	by arrangement	PDF/A, PDF/E, TIFF-G4
NC	by arrangement	by arrangement

### 10.2 Allowed File Extensions

File Extensions	
Application	File Extension
3D models	CATpart, CATproduct, stp, step
drawings	CATdrawing, pdf
tables, texts, documentation	xls, xlsx, pdf, doc, docx
print data	pdf, tif, tiff

## 11 Check List

Action	Transfer Format ( s )	done
3D/2D-CAD-native data transferred to the partner	Relevant native format	<input type="checkbox"/>
3D-CAD-neutral format data transferred to the partner	STEP AP214	<input type="checkbox"/>
drawings	PDF/A	<input type="checkbox"/>
drawings	CATdrawing or IGES	<input type="checkbox"/>
part lists	Excel	<input type="checkbox"/>
part lists	PDF/A	<input type="checkbox"/>
master data sheets	Excel	<input type="checkbox"/>
master data sheets	PDF/A	<input type="checkbox"/>
		<input type="checkbox"/>
If so, further documents must be transferred, as far as agreed or if statutory.		
certificates	PDF/A	<input type="checkbox"/>
written guarantees	PDF/A	<input type="checkbox"/>
declarations of conformity	PDF/A	<input type="checkbox"/>
mounting instructions ( if not on the drawing )	PDF/A	<input type="checkbox"/>
instruction manuals	PDF/A	<input type="checkbox"/>
production memos ( if not on the drawing )	PDF/A	<input type="checkbox"/>
maintenance plans	PDF/A	<input type="checkbox"/>
inspection plans	PDF/A	<input type="checkbox"/>
calculations	by arrangement	<input type="checkbox"/>
NC-data	by arrangement	<input type="checkbox"/>
further documents	by arrangement	<input type="checkbox"/>
further documents	by arrangement	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

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## 12 Space for Notes

A series of horizontal dotted lines providing space for notes.





