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1. PLM Basics

1.1 What is Product Lifecycle Management concerned with?

Integrated concept for the IT-supported organization of product data and information.

- All information about your products is always available at the relevant points in the company.
- The diverse information needs are integrated and satisfied.

Knowledge is stored and reused for successor products and product innovations.

• By creating transparency, master the complexity of your products; - accelerate "time to market".



1.2 Product Lifecycle Management - Two core processes in the company



1.3 What is a PLM system?

A PLM system is a tool for administration:

- of the processes
- of the applications
- and the required information for the
 - Construct
 - Manufacture
 - Support
- The product during its life cycle

The advantage of such a tool is the creation of a single common interface.

- to the administration
- to access

all data within an organization.

1.4 Advantages of using a PLM system

The following advantages result from the use of a PLM system:

- Reduction of multiple data
- Easy retrieval and distribution of data
- Quick and easy display of models
- Particularly useful for checking changes
- Revision control ensures working with the most up-to-date data
- Management of assemblies and relationships between components

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- · Easy creation of modifications of parts lists
- Storage of the entire product history
- Establishes relationships between parts, including requirements and specification
- Provides access control and auditing to ensure data integrity

2. Basics Teamcenter

2.1 User Interface

Teamcenter Rich Client provides a product interface with a rich feature set that includes product management capabilities and application management configurability in one platform. The complexity and robustness of the features available make this interface more suitable for advanced users and application administrators.

The rich client interface has a standard menu bar and toolbar with options that can include different elements depending on the active application perspective. Position the cursor on a rich client toolbar button to display a tooltip description.



3	Search field	The Quicksearch offers predefined searches for dataset, element ID, element name or keyword as well as advanced search functions.
4	Navigation Window	Navigation Window provides quick access to your frequently used data. In addition to searching, organizing, and accessing data, you can configure the Teamcenter display and icons in the navigation pane to display only the perspectives you regularly use to perform tasks, in addition to searching, organizing, and accessing data. Click the Reorder button above the Search field to display the Order dialog box in the navigation pane , where you can hide areas in the navigation pane or change the order of the areas.
5	Application window	The application window displays the application perspectives open in your Teamcenter session. By default, the "First Steps" application perspective displays a single view First Steps . Application Perspectives consist of views that can be moved within the Teamcenter window or to the desktop. Such separate views remain associated with Teamcenter and continue to work in unison with other views.
6	Application button First Steps	Provides access to the "Getting Started" application.
7	Application Buttons	Application Buttons provide access to your most frequently used Teamcenter application perspectives.
8	Application Button Bar	The application button bar allows you to access Teamcenter application buttons that do not fit into the application button area of the navigation pane.
9	Clipboard button	The "Clipboard" button displays the Clipboard content dialog box. This window contains references to objects that were cut or copied from your workspace. The total number of objects in the clipboard is displayed to the right of the icon.

2.2 Cut, Copy, Paste and Delete

Cut	The cut function does not remove the object from the database, but only the reference to the file.
Сору	Copies the reference to the data. The data itself is not duplicated or copied.
Paste	The paste function is the same as in Microsoft Windows.
Delete	Removes data from the database
Drag and Drop	Drag and Drop has the same function as in Microsoft Windows.

2.3 Organization

2.3.1 Access privileges & organization

• Persons

Real existing persons in the company with first and last names. One person can have multiple users.

⇒Max Mustermann

• User

Is the identification of a user in the system. Users can belong to several groups. \Rightarrow Max Mustermann \Rightarrow Administrator & User

• Groups

Corresponds to summaries of users. Group = Corresponds to a department or a project. Groups can also be structured hierarchically (according to the company organization). \Rightarrow Administrator \Rightarrow dba, project administrators,...

• Roles

Activities of users in the organization (e.g. admin, employees, project managers, ...). A user can be assigned different roles.

A role corresponds to certain rights that the user has.

2.3.2 Access rights & organization

Groups and roles can be used for:

- To manage the access rights (read, write, delete) per group and role
- Definition of control/approval instances (for workflows) based on groups and roles
- Organization of data according to the group you created.



2.4 The most important Teamcenter applications

• My Teamcenter

- Is the work area for the use and administration of product information (articles, documents, parts lists, specifications, requirements ...)
- $\circ\,$ Is the main point of use for many standard functions such as
 - Search and find PDM data
 - Create and modify PDM objects
 - Check-in / Check-out of objects
 - Administration of my tasks
 - Starting and monitoring of processes / workflows
 - Execute queries
- Structure Manager

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- $\,\circ\,$ For creating, displaying, and changing product structures (BOM)
- Visualization tools
 - Embedded Teamcenter Viewer
 - Lifecycle Visualization
- Workflow Viewer
 - $\circ\,$ To display an active or completed workflow process
- Project
 - Create and manage Teamcenter projects including security rules at project level
- Classification(currently not used)
 - $\circ\,$ Classification and categorization of Teamcenter objects according to a global or company-internal standard
- Change Manager
 - Creating, administering, displaying, approving and executing product change requests and product change orders

2.5 Items & Items Revision

2.5.1 Basic information about the item data model

An item in Teamcenter is a structure of a connected object. The basic structure of each item consists of the following two objects:

4	X.0000.3311 STAENDERBAUGRUPPE Item Image: Constraint of the state of
ltem	Collects data that is generally applicable to all revisions of the article.
Item Revision	Gather data applicable to a single revision of an article.
Dataset	The dataset forms the direct connection to the record on the Vault.

2.5.2 Item

- Items are basic objects used to manage information
- They represent physical or conceptual entities that enable audits and information changes.
- Imagine an item as the top level containing all information about a particular object or product.
- The element ID is composed as follows here in the example for the European MAG locations X.0000.0000
- No two items may have the same item ID. An item ID is always unique!
- An item provides access to all the information needed to design a part, including any changes, together.
- When creating an item, Teamcenter also automatically creates an Item Master Form.

2.5.3 Item Revision

- Item revisions manage the changes to an item and save the changes within the item.
- When you create an item, Teamcenter automatically creates the Item Revision.
- There must be at least one item revision for each item.

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- Item revisions are the items that receive a release status.
- Contains the SAP master form this is the link between the SAP material number and the item in Teamcenter.
- Contains the dataset.

2.6 Datasets

2.6.1 Datasets Objects

Files that are started from Teamcenter with non Teamcenter applications (e.g.: NX, Word, Excel,...) are managed by Teamcenter \Rightarrow Dataset Objects.

Here are a few examples:

Symbol	Туре	File	Application
A state	Text	.txt	Text Document
P	MS Word	.doc	MS Word Document
1	MS Excel	.xls	MS Excel Table
2	Direct Model	.jt	3D Visualization Model
i a	UGMASTER	.prt	NX Partfile

2.6.2 Importing a dataset

- You can insert datasets in Teamcenter under your item revisions.
- If the datasets are not yet stored in Teamcenter, you can import the dataset.
- If you import the dataset under your item revision, keep in mind that the dataset is not located under the item revision, but only under the item revision.
- The revisions that are revised from this item revision also have the dataset reference in the item revisions.
- You can also create a completely new dataset directly in Teamcenter.

2.7 Relations

- Much information describes an article or is associated with the item that has revision
- Teamcenter uses relations to define the relationship between data objects and items/revisions. Automatically defined relation types:

Revision

JTSession & 3DMarkup

BOM view & BOM view revision

IMAN_Drawing

Relation between UGMaster & UGPart

2.7.1 User-defined relation types

(e.g. when copying / pasting objects into an item / revision)

• Specification Relation

Documents of a revision. Are checked and locked accordingly when released (e.g. 3D master, drawings, NC programs,...).

• Requirement Relation

Contains criteria that must be met by the design, but do not define how the design is performed. (e.g. specifications)

• Altreps

(alternative representation) - Alternative description of the component (e.g. spring tensioned / not tensioned). As this is only a description of the condition, these will not appear in parallel in parts lists.

• Manifestation Relations

Relationship of documents with only explanatory character. These have no meaning in the sense of a relevant or legal product description (e.g. internal presentations, films, photos...).

• Reference Relation

General, undefined relationships between data objects and items / revisions. (e.g.: field reports, technical articles, laboratory reports, notes...)

3. working in Teamcenter

3.1 Search queries

3.1.1 Search tools in Teamcenter

Query type

- Standard query
- Customer-specific query

Execution of query via

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- Quick Search functions
- Advanced search

3.1.2 Quick Search Function

(* * * My Teamcenter (Doe, John) • Search • Search • Tenter the Item ID to search • Complete or with wildcards • (wildcards for n characters)(• (wildcards for 1 character) • (wildcards for 1 character) • Perform search Here you can choose what to search for: • Dataset Name • (tem ID) • (tem Name) • (tem Name)<

Quick search results cannot be added to your saved searches.

3.1.3 Advanced search

Note:

	💆 🎽 🕫 🕶 🖾 🚺				
	e) - EI.FFG / Design - [int02] [00002] [] [] [])			785	
	😓 Home 🔍 Search 🔀	🛛 🔍 🚽		2 🖉 🗔 🖵 🛃 🌀	
	FFG Item Revision	4	00	General FFG Item Revision	
	Item ID:]	٩	FFG Standard Part Revisions	
	Revision: Name:			More	3
1	Call advanced search	1]		
2	Enter search criterion		1		
3	Selection of preconfigured / defined searches		1		
1	Call / Selection of past searches				
5	Saves the search in "my saved searches"				
5	Sort search result				
7	Search repeat				
3	Deleting all search criteria				
10	$D _{The search can be performed by pressing the}$	ENTER key.			

3.2 Check-Out & Check-In

3.2.1 Basics for check-in and check-out

You can check items into and check them out of Teamcenter while retaining exclusive access permissions so that other users cannot make changes to the data.



- The **Check out** option locks an item in Teamcenter so that only you can change it. However, other users can still view the item.
- The Check In option unlocks the item, allowing other users to access it.

3.2.2 Checking out a construction

Before you make any changes to your design, you must first check it out. This locks the element and prevents other users from making changes at the same time.

- 1. Select the element you want to update.
- Click Check out ¹
 The Information window displays the object whose Checked out property is set to Y.

🎽 Summary 🔀 😭 Details 📩 Auswirkungsanalyse 👓 Viewer 🔮 JT	Preview 🖏 Pro
	🌤 🛶 🛛 Send T
X.0001.8972 BACKING Owner: Date Modified: Buehler, Christoph (cbuehler) 02-Aug-2019 06:44	Release Status 4
Overview Related Datasets Audit Logs Change History	
✓ Available Revisions	✓ Preview
X.0001.8972-00 BACKING UNTERLAGE	
✓ Item Properties	
Description:	
Owner: <u>Buehler, Christoph (cbuehler)</u> 🔻	—
Group ID: 🍇 <u>EI.FFG</u> 💌	
Last Modifying User: 🙎 <u>dcproxy (dcproxy)</u>	
Checked-Out: Y	 Actions
Checked-Out By: 🙎 <u>Doe, John (jdoe)</u> 🔻	Copy
More Properties	Save As
✓ Classification Properties	™V° <u>INEW WO</u>
۲ III	
💼 🛃 👘 👘	out

Now you can open the item and make changes.

If you have made a change to your design, you must then check it in. This unlocks the item so that it can be checked out and changed by other users.

- 1. Select the item you want to check in.
- 2. Click **Check In** on the toolbar 🔛.

The **Checked out** property is updated.

😕 Summa	ary 🔀 督 Details 📩	Auswirkungsanaly	/se 👓 Viewer 🚦	JT Preview 🖏 Pr	ozessverlauf 📂 Übers	icht	
				🌤 😔 Send	To 🔻 🗟 🔻	s 🖻	
a X.00	004.7713-00 CC	OVER PLATE	ABDECKP	LATTE			
Overview	Document Properties	Title Block EPlan	Related Datasets	Available Revisions	Audit Logs		
Class 1:		Class 2:	Class 3:		Class 4:		
Manufa	cturer ID:		Note	es GER:			
Manufa	cturer Name:		Note	es ENG:			
Mandat	ory Manufacturer: Fals	e	Int.Ir	Int.Info:			
Distribut	tor Order Nr.:		SAP	SAP Name (DE):			
Eng.Are	a:		SAP	Name (EN):			
Design F	Resp.:		Imp	ort from:			
Evaluati	on class:		Afte	r Sales Part:	False		
Replace	d By:		Q-C	ode:	К		
XLO Par	t ID:		G&L	Product Line:			
XLO Dra	w. No.:		G&L	G&L Shared Part (Sheffield): False			
Last Rel	ease Status: <u>No Val</u> u	ue Owner:	Do	e, John	Project (EAC-ID):	00002	
Approve	ed By:	Last mod	lified by: Do	e, John	Project (EAC owner):	MAG Intern	
Approva	al Date:	Creation	Date: 23-	Aug-2019 09:57	Checked-Out:		
Change	No:	Date Mo	dified: 27-	-Aug-2019 14:22	Checked Out By:		
•	<u>الا</u>						
င် Check Ou	ut Check In Save	اللہ الح and Keep Checke	x d-Out Cancel Cl	heckout			

3.3 Structure Manager

3.3.1 Introduction

Structure Manager allows you to create common product structures that can be configured to display the product structure at a specific time or for a specific unit, such as:

• The current manufacturing design of the product

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- The product structure that was valid on a particular date.
- A specific customer variant

By creating a single generic structure that can then be configured according to individual user requirements, assembly structures do not need to be duplicated. This avoids associated problems such as maintenance, redundant information and search complexity.

Structure Manager displays your product structure in a multi-level list format with indentations that you can easily browse. This list is similar to the bill of materials used by design departments to list manufacturing information.

Structure Manager works with other applications that define or use the product structure, such as Platform Designer, Design Context, Multistructure Management, Manufacturing Process Planner and Part Planner.

3.3.2 Opening the Structure Manager

The Structure Manager can be started via the navigation window.



This opens the application with a new and empty window.



3.3.3 Opening the Structure Manager

To open an existing BOM View Revision (BVR) in the Structure Manager, use one of the following options:

• Double-click on the BOM view (View)

ER ER

- Select the view (View) & (Ctrl+O) or from the File Open menu.
- Right mouse button on selected view Send to structure management



3.3.4 Overview structure manager

Struktur-Management 🔀

X.0000.3311-00 STAENDERBAUGRUPPE (Ansicht) - Latest Working - Datum - "Heute"					
Stücklisteneintrag	Regel konfiguriert v	Elementänderungsstatus	Pos.	Maßeinheit Refe	
X.0000.3311-00 STAENDERBAUGRUPPE (Ansicht)		ER			
🖨 💞 X.0000.3011-00 SCHMIERUNG (Ansicht)	Hat Status(Beliebig	ER	10	jede	
X.0000.3638-00 VERSCHLUSSSCHRAUBE	Hat Status(Beliebig	ER	10	jede	
- T.0000.3638-00 VERSCHLUSSSCHRAUBE	Hat Status(Beliebig	ER	20	jede	
🖨 🞻 X.0000.2875-00 GEGENLAGER (Ansicht)	Hat Status(Beliebig	ER	20	jede	
	Hat Status(Beliebig	ER	10	jede	
	Hat Status(Beliebig	ER	20	jede	
🖶 💣 X.0000.3390-00 TEMPERATURSENSOR (Ansicht)	Hat Status(Beliebig	ER	30	jede	
🖨 💣 X.0000.3136-00 STOERKONTUR (Ansicht)	Hat Status(Beliebig	ER	40	jede	
🖻 💣 X.0000.2959-00 STOERKANTENAUFRISS (Ansicht)	Hat Status(Beliebig	ER	10	jede	
🖶 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	10	jede	
🖨 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	20	jede	
	Hat Status(Beliebig	ER	10	jede	
🖶 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	30	jede	
🖶 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	40	jede	
🖶 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	50	jede	
🖶 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	60	jede	
🖶 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	70	jede	
🖶 🞻 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	80	jede	
🖶 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	90	jede	
🖮 💞 X.0000.3141-00 (Ansicht)	Hat Status(Beliebig	ER	100	jede	
🗄 💣 💞 X.0000.3459-00 LINEARFUEHRUNGSSYSTEM (Ansicht)	Hat Status(Beliebig	ER	50	jede	

- Display of the assembly structure in the form of expandable tree diagrams in list form
- Corresponds to the design structure coming from CAD, but components without geometry (additive, auxiliary materials...) can also be stored.

3.4 Workflows

3.4.1 Introduction

All objects in progress go through several processes until they are completed.

- Workflow
 - Sequence of **processes**
 - Performed on 1:n Object(s)
- Process
 - 1:n Activities / Tasks
 - Performed by different resources (e.g. users) in different roles.
- Result
 - e.g. status change of objects

3.4.2 Starting a workflow process

沙 New Process Dialog	23
x.	
Process Name: X.0000.3749-00 PIN BOLZEN *	
Description:	
Process Template: FFG 01 Engineering Release	
	Process Template Filter: 🔘 All 💿 Assigned
🎓 Attachments 🛛 🔁 Process Template 🛛 Assign All Tasks	
Task Attachments Targets X.0000.3749-00 PIN BOLZEN References	
ОК Са	ncel

- Select the object(s) [of an item revision]
- Start process dialog <STRG>+<P>
- Process definition in the dialog window "New process "
- Process template: "FFG 01 Engineering Release"
- Process start → "OK"

3.4.3 Process indicators

• **Objects** which are currently in a workflow are marked as follows:



- **Objects** that are in a workflow and you need to share are displayed in \mathbb{N} .
- After starting the workflow you can select the desired neutral formats of all objects (part or

structure) in the workflow in R. As shown in the screenshot below, you must double-click on R ProcessControlForm and perform a check-out. Then you can edit the "ProcessControlForm", save it and check it in again.

-
a 💊 My Worklist
🔺 🛅 Doe, John (jdoe) Inbox (11)
🔺 🛅 Tasks To Perform
X.0000.3749-00 PIN BOLZEN (Review Selection)
o Targets
References
ProcessControlForm
b 🛅 Tasks To Track
b 🛅 Schedule Tasks
b Construction Messages

V ProcessControlForm	23
Process Control	
Control Flag 0:	
Create DWG: 🔘 True 🔘 False	
Create DXF: 🔘 True 💿 False	
Create IGES: 🔘 True 💿 False	
Create JT: 💿 True 🔘 False	
Create PDF: 💿 True 🔘 False	
Create STEP: 🔘 True 💿 False	
Create TIFF: 🔘 True 💿 False	
Plant: EI	
Sap System:	
General	
Save and Check-In Save Cancel Check-Out Close	<u></u>

ect _____ @ ▼

• Then select "Perform task" through. Here you can now send further task instructions to the employee in the next step when you perform a "Peer Review". When performing a "Self Review", you are the final releaser of the engineering release - then the desired neutral formats are created.

4. Teamcenter Integration for NX

4.1 Teamcenter Navigator

- The Teamcenter Navigator shows the current folder structure of the user.
- The columns can be adjusted as required.

Style						🖅 Tree	•
bject 🔺	Number	Revision	Description	Туре	Checke	Statuses	Date Modif
🍑 Teamcenter							-
主 🚷 Home			jdoe	Home Folder			23-Aug-2
🖃 🎽 Newstuff			jdoe	Newstuff Fol			27-Aug-2
🕂 🔁 Use Cases				Folder			29-Jul-20
표 🔒 X.0000.0003 PI	X.0000.0003			FFG Engineeri			26-Aug-2
🕀 🔒 X.0000.0004 H	X.0000.0004			FFG Engineeri			23-Aug-2
🕀 🔒 X.0000.3646 M	X.0000.3646			FFG Engineeri	Bauer, K		17-Jul-20
🛨 🚼 X.0000.3749 PI	X.0000.3749			FFG Engineeri			04-Sep-2 ≡
🗉 🔒 X.0000.9028 SC	X.0000.9028			FFG Engineeri			29-Jul-20
🛨 🚼 X.0000.9030 SC	X.0000.9030			FFG Engineeri			29-Jul-20
🗉 🔒 X.0003.0032 M	X.0003.0032			FFG Engineeri			27-Aug-2
🛨 🚼 X.0004.7715 SH	X.0004.7715			FFG Engineeri			27-Aug-2
🛨 📋 Clipboard							
🛨 🔯 My Searches							
🗉 😭 Projects							
+ 🕒 Recent							-

• The following file operations are possible with RMT:

	Object 🔺	Number	Revision	Description	Туре	Checke	\$		
	🕀 🎽 Newstuff			jdoe	Newstuff Fol				
	🖃 🚘 Testbaugruppen				Folder				
	🕀 🥵 X.0000.3311	X.0000.3311			FFG Engineeri				
		Defrech			FFG Engineeri				
	🕀 🥵 X.0000.3	Kerresn			FFG Engineeri				
	🕀 🔒 X.0000.3	Open		FFG Engineeri					
	🛨 🚱 X.0000.3	Cut			FFG Engineeri				
	🕀 🥵 X.0000.3				FFG Engineering	Item			
	+ 🔒 X.0000.9.	Add Component 2 Projects 3 Show Requirement Links			FFG Engineeri				
	🛨 🚼 X.0001.8				FFG Engineeri				
	+ 🔒 X.0001.8				FFG Engineeri FFG Engineeri				
	🛨 🚼 X.0001.8								
	🛨 🥵 X.0004.4:				FFG Engineeri				
<u> </u>					Folder				
Cut and	Copy has the same effe	ct as in the "	My leam	icenter" envir	ronment				
Opens	the "Add Component" dia	log							
Add the	e object to a project								

Cut

4.2 Teamcenter Navigator Search

Teamce	nter Navigator							
View Style						F	Tree	•
Object 4	•	Number	Revision	Description	Туре	Checke	Statuses	Date Modifi
+	🞽 Newstuff			jdoe	Newstuff Fol			27-Aug-2 🔺
	🔁 Testbaugruppen				Folder			06-Aug-2
	🗄 🚱 X.0000.3311	X.0000.3311			FFG Engineeri			18-Jul-20
	🛨 🥵 X.0000.3763	X.0000.3763			FFG Engineeri			25-Jul-20
	🛨 🛃 X.0000.3908	X.0000.3908			FFG Engineeri			25-Jul-20
	🕂 🛃 X.0000.3936	X.0000.3936			FFG Engineeri			01-Aug-2
	🗄 🚱 X.0000.3958	X.0000.3958			FFG Engineeri			02-Aug-2 E
	🗄 🔥 X.0000.3978	X.0000.3978			FFG Engineeri			26-Jul-20
	± 🛃 X.0000.9515	X.0000.9515			FFG Engineeri			23-Aug-2
	🗄 🔥 X.0001.8631	X.0001.8631			FFG Engineeri			15-Aug-2
	🗄 🚼 X.0001.8972	X.0001.8972			FFG Engineeri			02-Aug-2
	🗄 🚱 X.0001.8973	X.0001.8973			FFG Engineeri			08-Aug-2
	🗄 🔥 X.0004.4123	X.0004.4123			FFG Engineeri			06-Aug-2
+	🚽 Use Cases				Folder			29-Jul-20
+··	Ŋ X.0003.0032 M	X.0003.0032			FFG Engineeri			27-Aug-2
	N.0004.7713 CO	X.0004.7713			FFG Engineeri			27-Aug-2 *
Search X.000*			0					^
Advance	d Search							
Browse Fi	ter							^
Detail Level	Full							•
Revision	All							-
Туре	All							-
Assembly	Load Options							2 ^
🔲 Load Sti	ructure Only							
Option Pa	rtially Load		-					
Revision Ru	le/Configuration Co	ntext						
	lie e							
Latest wo	king		• Lo	ad Options Dial	og			
Proviow								•
TIEVIEW								~
				, , ,	3 2 3			

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1 Search with wildcards like in the Teamcenter area

2 Advanced Search

3 Load options for assemblies

4.3 Teamcenter Navigator Advanced Search

Advanced Search		•							
fine Search	∧ Browse	3							
ok For: Any Object 👻	Look In 🔎 Last Search	- Q 🖻							
Search Criteria	∧ Object ▲	Number	Revision	Description	Туре	Checke	Statuses	Date Modified	Projec
- 101	🕂 🚱 X.0002.7234-00 FLUIDKOMPON	IENTEN X.0002.7234	00		FFG Engineeri			05-Aug-2019	00002
Search String	A .0002.7776-00 UMSETZER	X.0002.7776	00		FFG Engineeri			05-Aug-2019	00002
Id X.000*	+ 🛞 X.0002.7830-00 BLECH	X.0002.7830	00		FFG Engineeri			05-Aug-2019	00002
Name	+ 🖂 X.0002.8026-00 SCHILD	X.0002.8026	00		FFG Engineeri			05-Aug-2019	00002
Description	🕂 🚳 X.0002.8433-00 SCHILD	X.0002.8433	00		FFG Engineeri			05-Aug-2019	00002
	🕂 🖂 X.0002.8780-00 FEDERBLECH	X.0002.8780	00		FFG Engineeri			05-Aug-2019	00002
Revision	+ 🖂 X.0002.8809-00	X.0002.8809	00		FFG Engineeri			05-Aug-2019	00002
Date Criteria	A 4 6 X.0002.8814-00 WERKZEUGTRA	EGER X.0002.8814	00		FFG Engineeri			05-Aug-2019	00002
	+ 🚱 X.0002.8827-00	X.0002.8827	00		FFG Engineeri			05-Aug-2019	00002
Date Criteria None	 + 🖂 X.0002.8971-00 SCHLAUCH 	X.0002.8971	00		FFG Engineeri			05-Aug-2019	00002
Owner	÷ 🚱 X.0002.9374-00 STECKER	X.0002.9374	00		FFG Engineeri			05-Aug-2019	00002
owner	• 🗞 X.0002.9704-00 LADEHILFE	X.0002.9704	00		FFG Engineeri			05-Aug-2019	00002
Owning User	▼ 💿 🍪 X.0002.9840-00 DICHTKOPF	X.0002.9840	00		FFG Engineeri			05-Aug-2019	00002
Owning Group	🗸 🕕 🍪 X.0003.0165-00 ENERGIEKETTE	X.0003.0165	00		FFG Engineeri			05-Aug-2019	00002
	📃 💿 🚳 X.0003.0287-00 SCHLAUCH	X.0003.0287	00		FFG Engineeri			05-Aug-2019	00002
Status	▲ + 🏤 X.0003.0334-00	X.0003.0334	00		FFG Engineeri			05-Aug-2019	00002
Release Status	+ 🏤 X.0003.0509-00 WERKZEUG	X.0003.0509	00		FFG Engineeri			05-Aug-2019	00002
	Recult				•	More	Reculto		
	Number	Revision:	Nam	ne:		Prev	rious (1-3	0 of 52697) Net	vt (
Find Now New Search Save As							1003	100000000000000000000000000000000000000	<u> </u>
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Search criteria									
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Coarches caved in	My Taamaantar"								
Searches Saved In	MV reamcenter								

4.4 Teamcenter functions in the assembly Navigator

• Keep all Teamcenter information up to date

Assembly Navigator

Object 🔺	Number
🖃 🗹 🚱 X.0000.3311-00 STAENDERBAUG	
🕀 🗹 🚱 X.0000.3414-00 STAENDER	Select Assembly
🕀 🗹 🚱 X.0000.2986-00 HAUPTLAGER	Refresh Teamcenter Information
🕀 🗹 🚱 X.0000.2986-00 HAUPTLAGER	Onen
🕀 🗹 🚱 X.0000.3567-00 ANSCHLAG	
🕀 🕢 🚱 X.0000.3567-00 ANSCHLAG	□ Up <u>d</u> ate Structure
🕀 🕢 🔂 X.0000.2875-00 GEGENLAGER	Set Precise On Save
🕀 🕢 🔂 X.0000.2875-00 GEGENLAGER	de annenet.
🕀 🕢 🔂 X.0000.2862-00 ENDANSCHLAG	
🕀 🕢 🔂 X.0000.2862-00 ENDANSCHLAG	Navigator Order
🕀 🕢 🔂 🕀 X.0000.3059-00 ENDBLOCK	Hide
🕀 🗹 🚱 X.0000.3274-00 MOTORBAUGRU	IP
🕀 🕢 🛃 X.0000.3369-00 MOTORBAUGRU	IP Show
🗉 🗹 🚱 X.0000.3475-00 MOTORBAUGRU	jp 🚯 Show Only 🛛 🕘
🗹 🍞 X.0000.3083-00 ANBAUTEILE	Projects
	IP 🏤 Propert <u>i</u> es
1 Update information from Teamcenter	
2 Add the object to a project	

4.5 Create and save parts

• The creation of a new item in Teamcenter is performed in NX as follows:

Step 1:



- The creation of a new item as master part is visible as relationship "master" and contains the model.
- The creation of a new non-master part is visible as relationship "specification" and contains the DrawingPart.

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orlagen					^	Vorschau	^
			E	inheiten mm	•		
Name	Тур	Einheiten	Beziehung	Eigentümer	Elementtyp		
FFG - nx120_mag_model	Konstruktion	mm	master	infodba (d	FFG Engineerin		
Leer/ohne Vorlage	Konstruktion	mm	Kein	Kein	Kein		
Leer/ohne Vorlage	Baugruppen	mm	Kein	Kein	Kein	Keine Vorschau möglich	
		m			4		
Later March				1			
ne und Attribute							
	Wert			Andere Param	eter		^
Name	* Doppelk	licken Sie, um die	e Zuweisung durch				
Name	Doppeklicken Sie, um die Zuweisung durch			Alternative IDs	5		0
Name Ma ID Mänderungsstand	* Doppelki	Dopperinden Sie, um die Zuweisung aurch					-
Name 10 Ö Änderungsstand	* Doppelka	icken Sie, um die	e Zuweisung durch				
Name D Ä Änderungsstand Name fo4materialType	* Doppelki * Doppelki	licken Sie, um die	e zuweisung aurch				
Name 10 Anderungsstand Name fg4materialType	* Doppelka * Doppelka HALB	licken Sie, um die	e zuweisung aurch •	Ordner			
Name D Anderungsstand Name fg4materialType Indäre Attribute	* Doppelk * Doppelk HALB	licken Sie, um di.	e zuweisung auran •	Ordner :Newstuff			
Name ID Ä Änderungsstand Name fg4materialType undäre Attribute	* Doppelk * Doppelk HALB	licken Sie, um di	e zuweisung auran v	Ordner :Newstuff			

4.6 Revise and save parts

- The revision of Master parts takes place with: Menu File → Save → Save as...
- Create as new change state (revision)
- Save as new element creates a new part under a new part number
- Save as Alt-Rep creates a new dataset with altern. Geometry presentation under the current part / revision master.

Save Parts As								ુ v x
Select Parts	^	N	ame and Attribut	es				^
Save As Scope	Work Part 👻			FFG Engin	eering Item	ingineering Item Rev		
Action			Object Name	🛃 ID	Name	🛐 Revision	Projects	
Save As	New Revision 🗸	1	1 X.0000.3311-	X.0000.3311	STAENDERBAUG	★ Double-dick t	00002	
Other Parameters	New Item New Revision					2		
Dependent Files Save As option	Save All 🔹						· · · ·	
			•					•
		S	econdary Attributes					
		E	dit Non Masters to C	ору				D
		P	rojects					
						0	K	Cancel
1 Save as action - Ne	w element / New	ch	ange status					
2 Double-click to assi	ign a new revision	S	tatus numbe	r to the Iten	n Revision.			

• If an item revision contains dependent files in addition to the master part, the documents to

be adopted can be selected if this is defined in the preferences.

4.7 Assemblies in Teamcenter Import or Export

Fil	e Home	Assemblies	Analys	Import Assembly into Teamcenter	×
	<u>N</u> ew		Ctrl+N	Default Settings A Name and Attributes for Part A	
	Open		Ctrl+O	Item Type 2 FFG Engineering Item 👻	
	Open Unmanage	ed Part		Use Type from Part file Name and Attribute Conversion	
	Open Boo <u>k</u> mark. <u>C</u> lose		۶.	Numbering Source Part ID Generator Default Name \${DB_PART_NAME} Default Description \${DB_PART_DESC}	н
	Advanced Teamo	enter Searc <u>h</u>		Components	
	<u>S</u> ave		•	 ✓ Include Component Parts ✓ Include Dependent Parts 	
	<u>P</u> references		•	Find Components: From Folder	
	Add Alternate ID	s		Parts to Import	
2	Print			Select Assemblies or Parts	
	Plot		Ctrl+P	Select Log File to Set Up Import	
•	Import Assembly	into Teamcenter.		Import from Folder	
8,	Export Assem <u>b</u> ly	outside Teamcen	ter	Other Parameters	
	I <u>m</u> port		•	Save Parameters	-
	Export		•	OK Cancel	

1 Call the import/export function via file \rightarrow BGR to TC imp. / BGR except from TC export.

2 The element type must always be FFG Engineering Item.

If you want to import an unloaded assembly completely to TC, select the function "Import from folder". Then a dialog appears and select the highest assembly node.

To import drawings of the assemblies and individual parts, you must check the option "Include dependent parts".

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