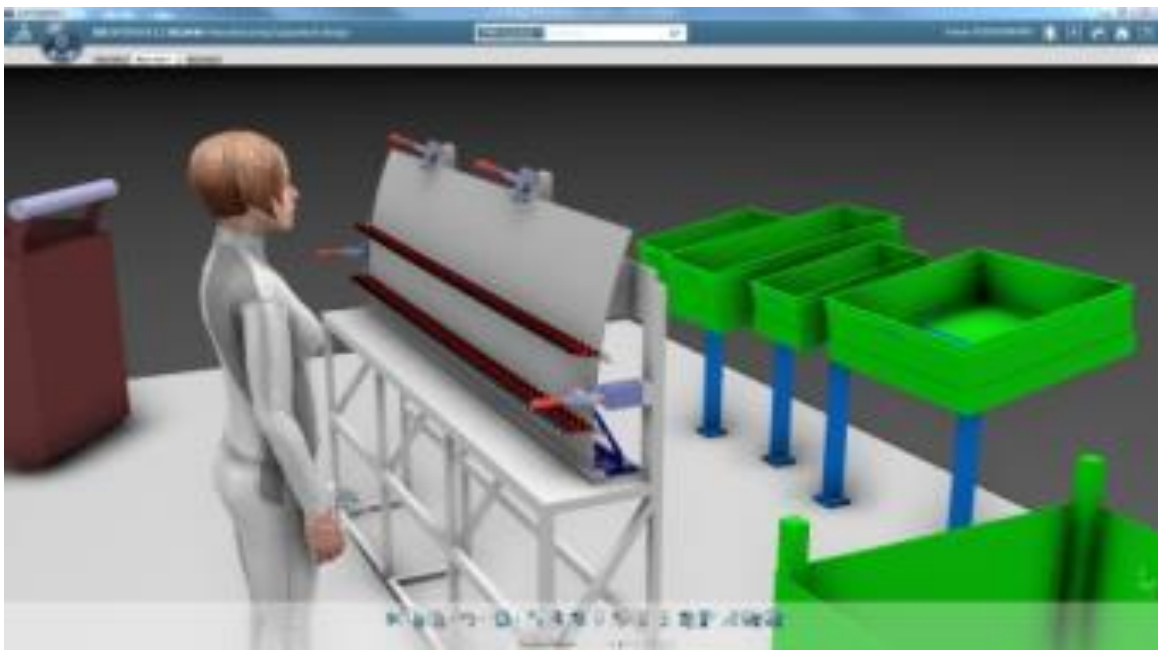
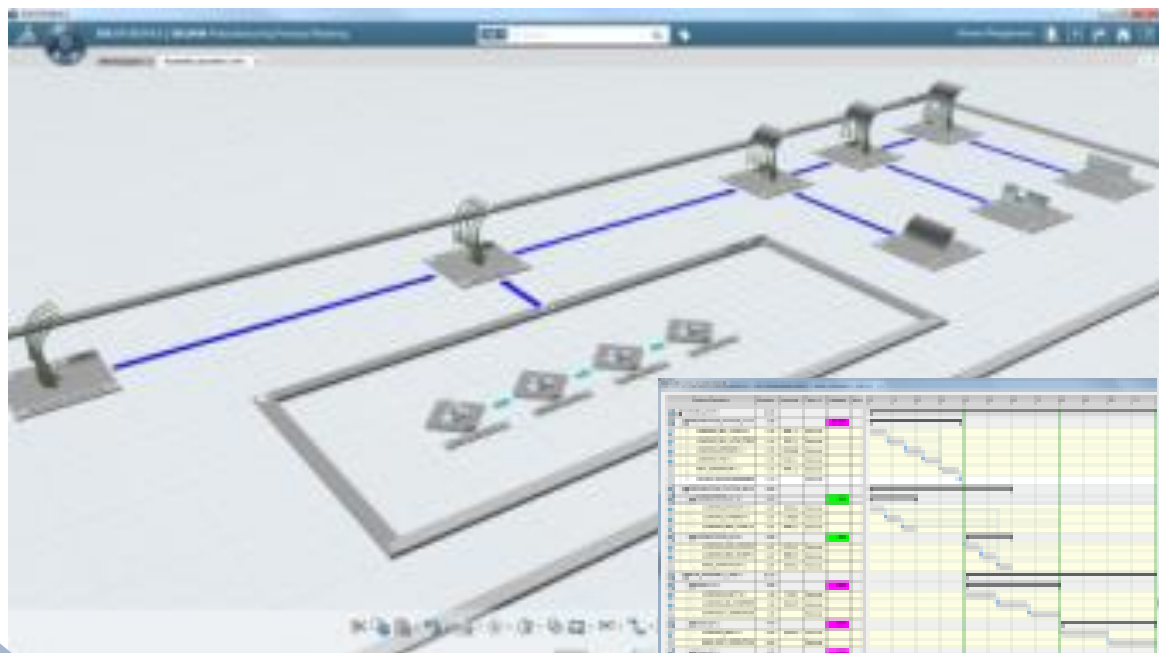
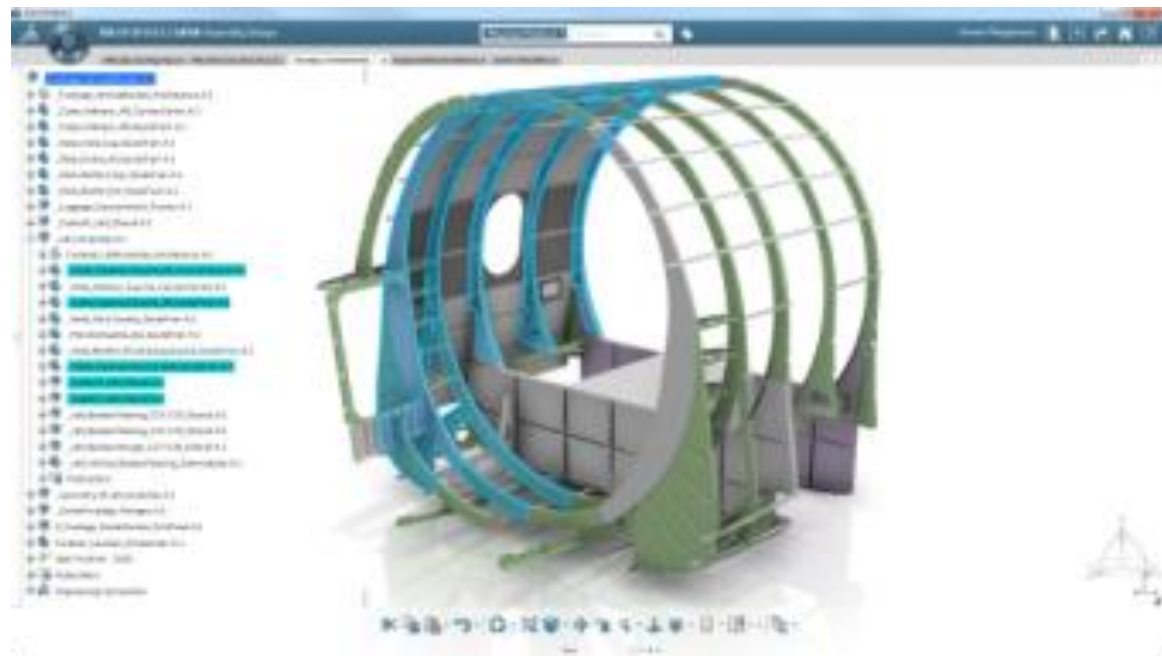


Process Engineering
von EBOM zu MBOM

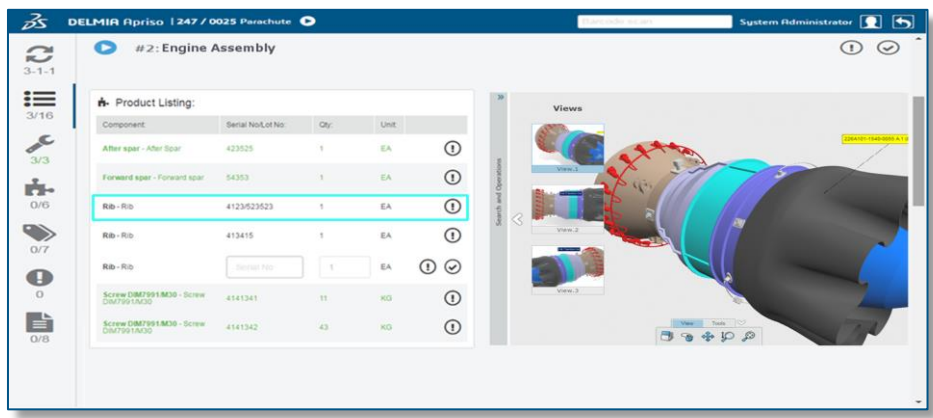
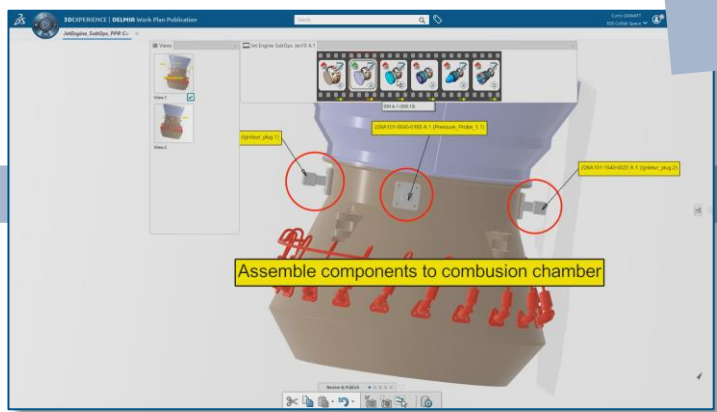
Process Engineering

Kundentag
04.11.2025

Digitales Product-Process-Resource Modell (ppr)

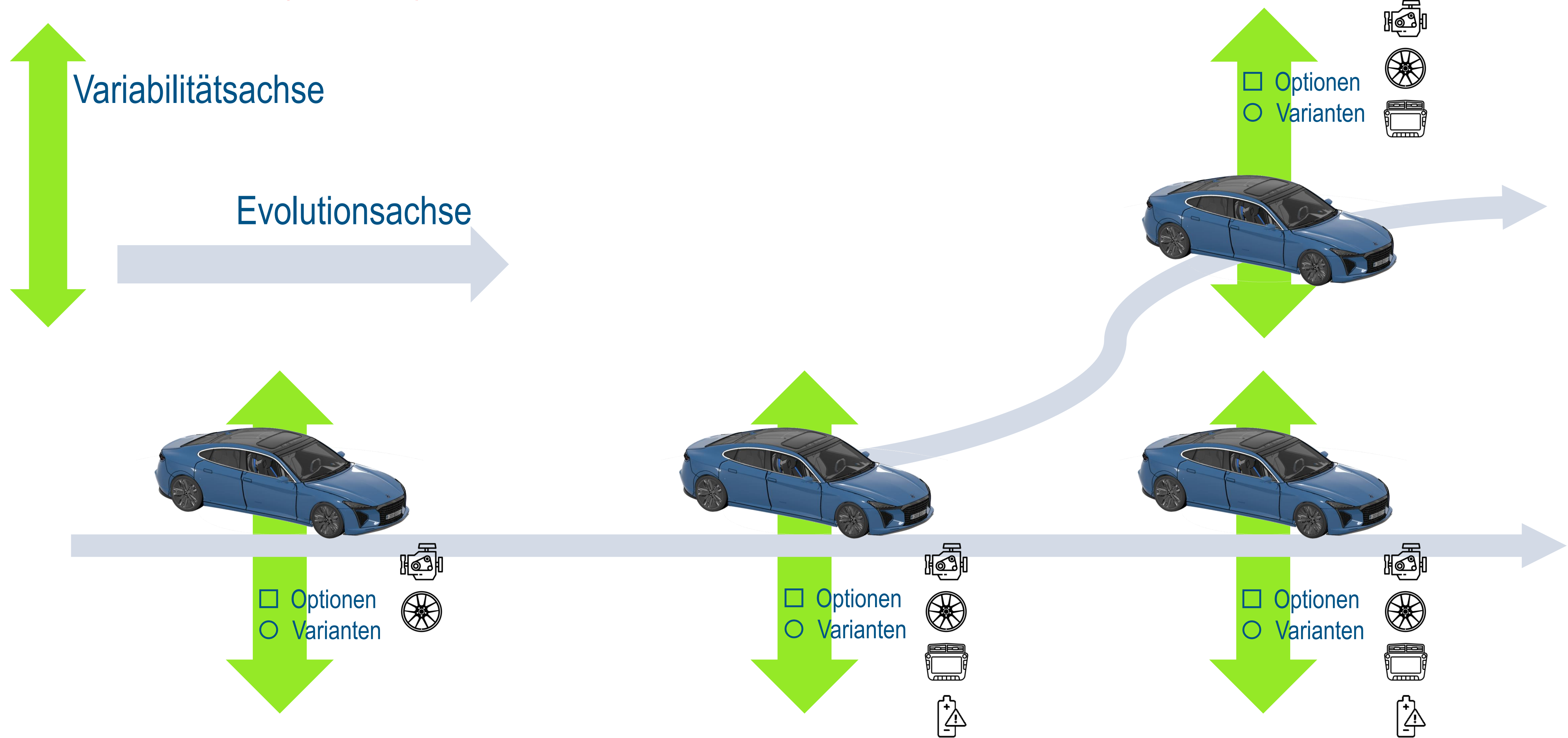


Arbeitsanweisungen



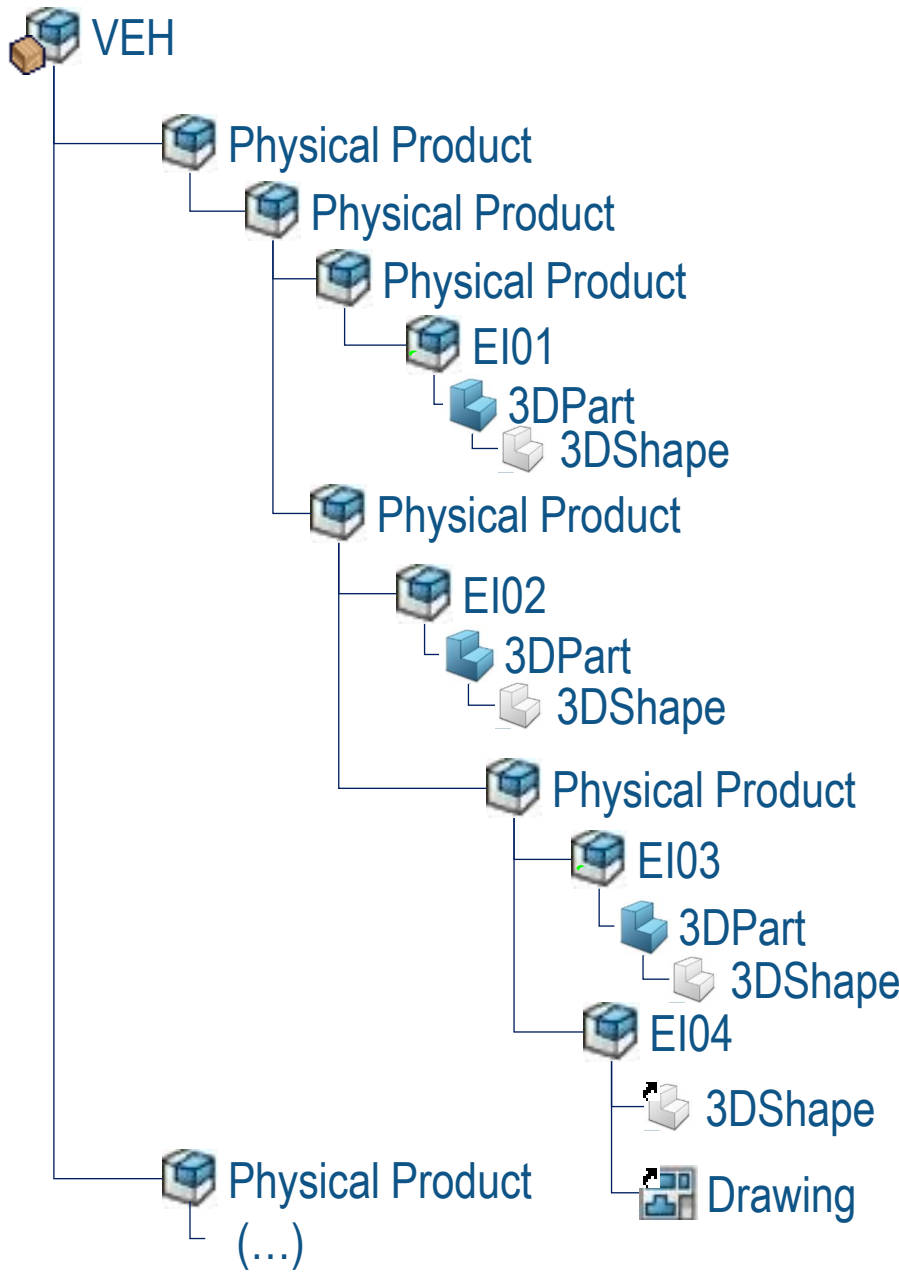
Produktion

Konstruktion (EBOM)



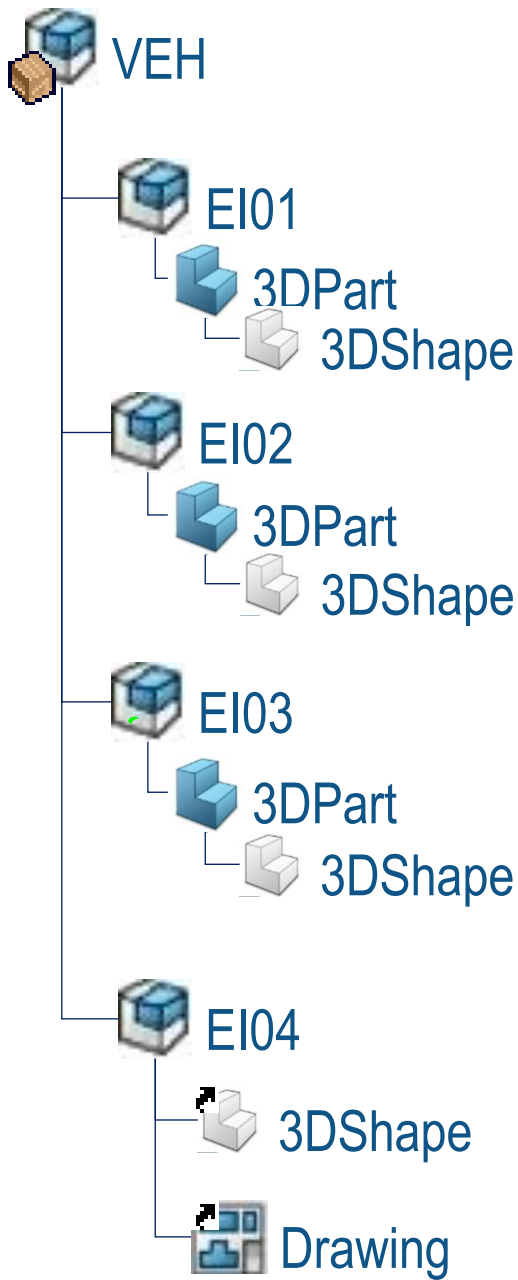
Konstruktion (EBOM)

Geometrie

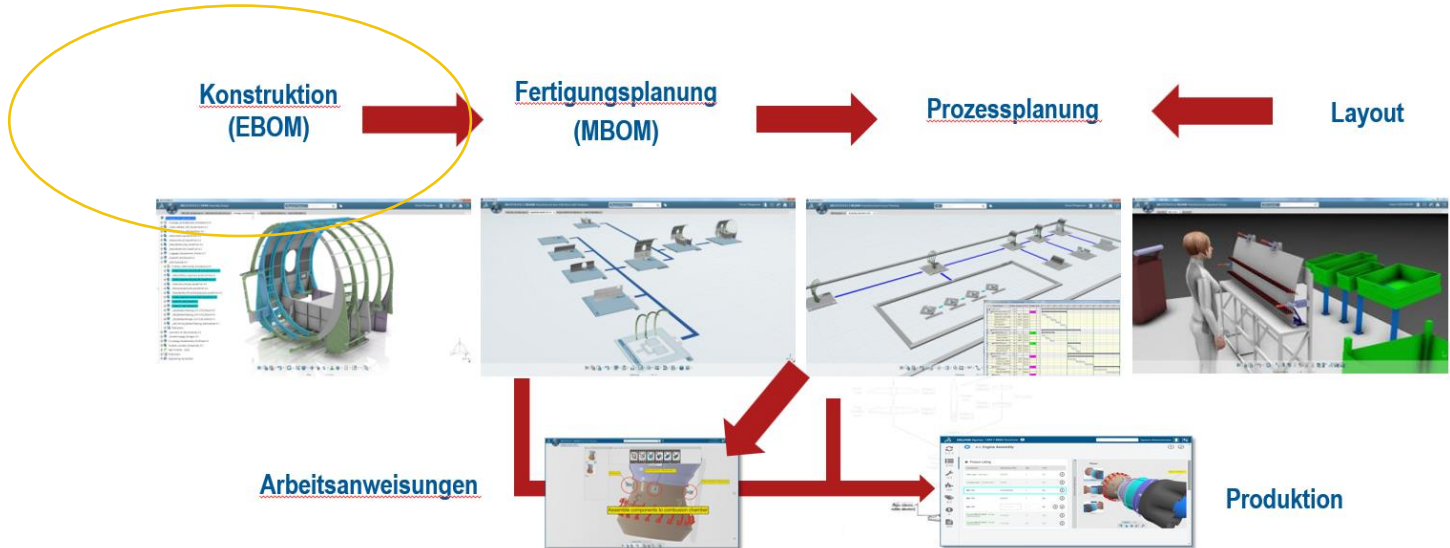


Geschachtelte Struktur

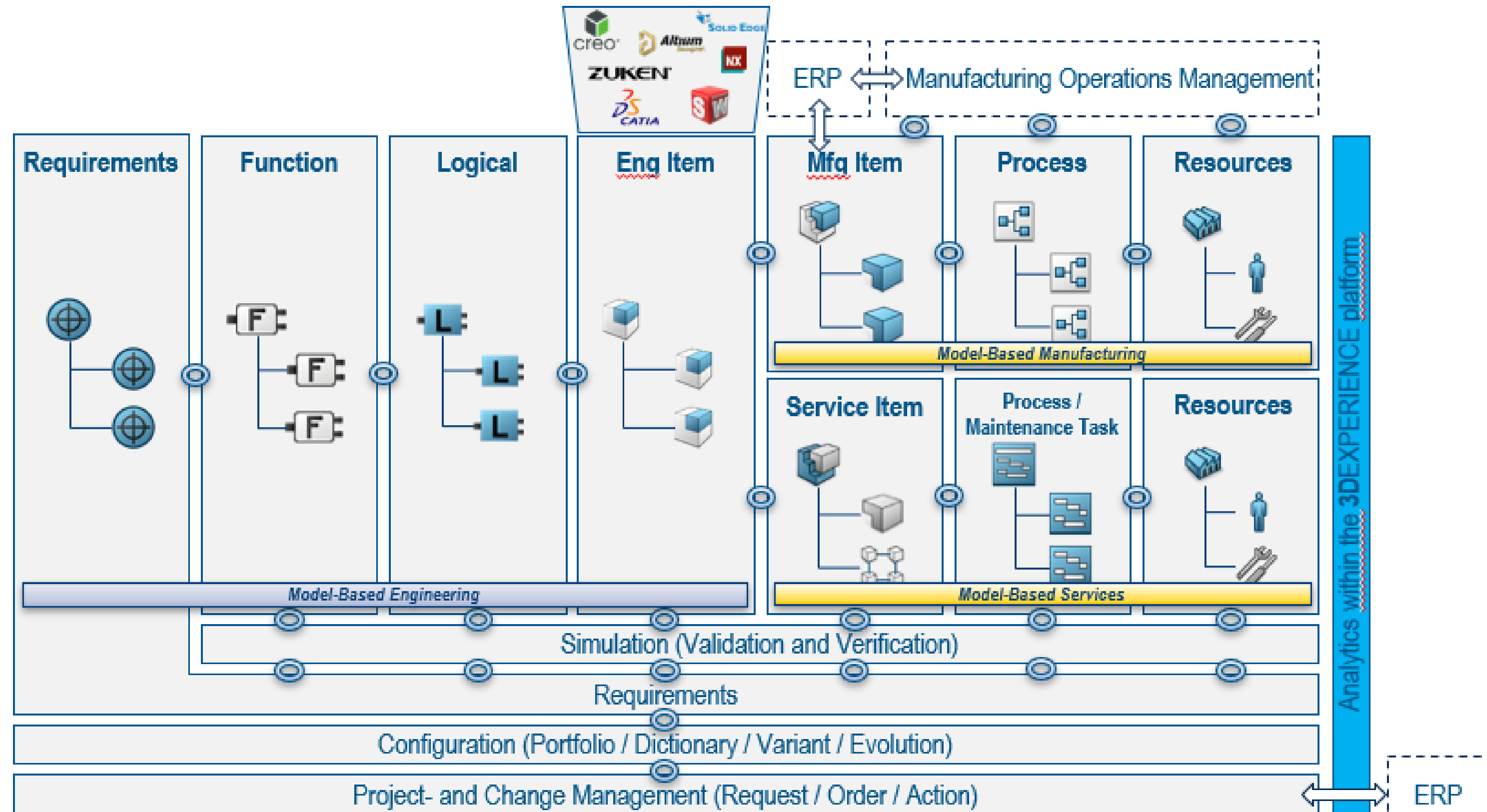
Ontologies TAG / Libraries



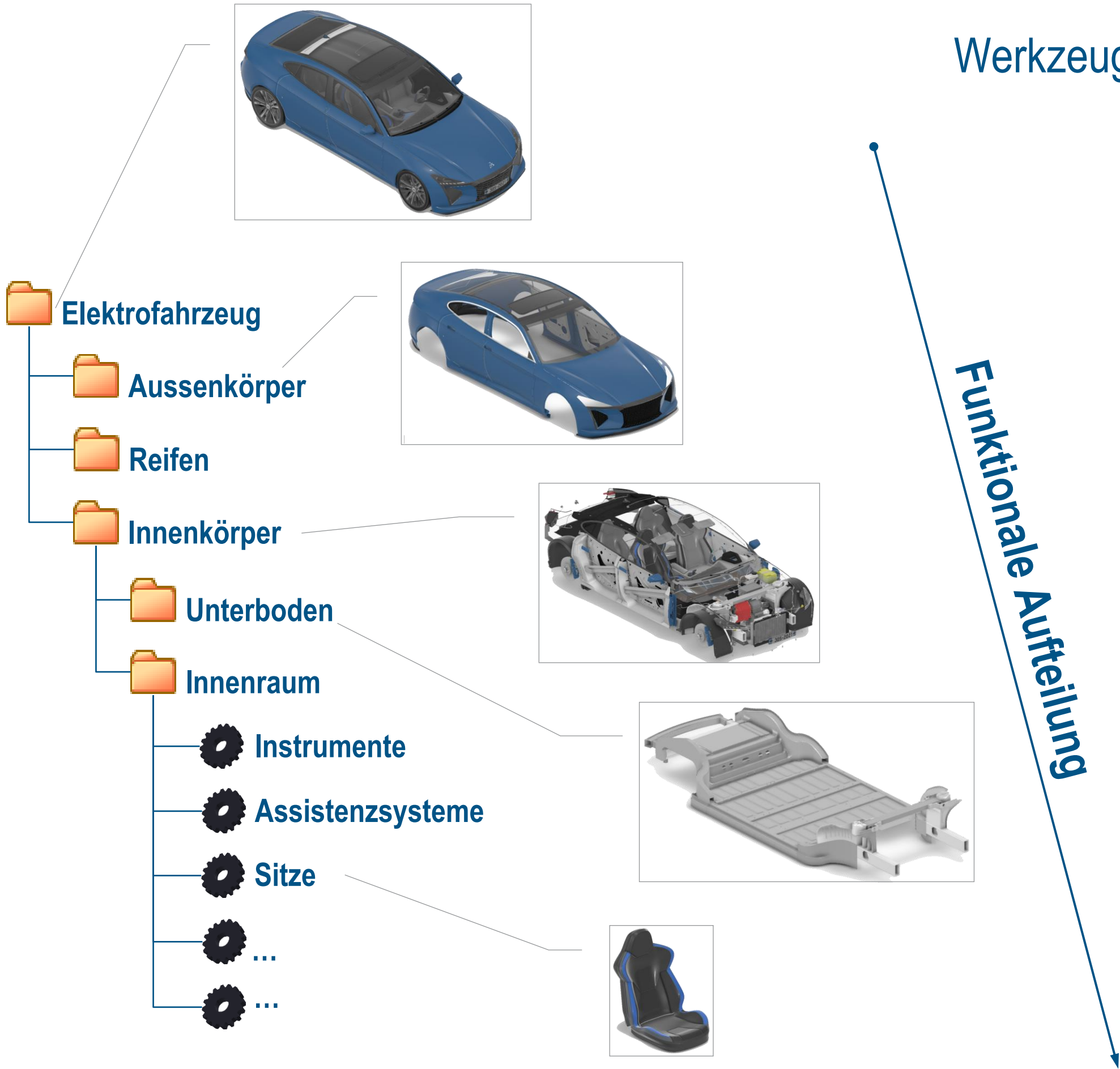
Flache Struktur



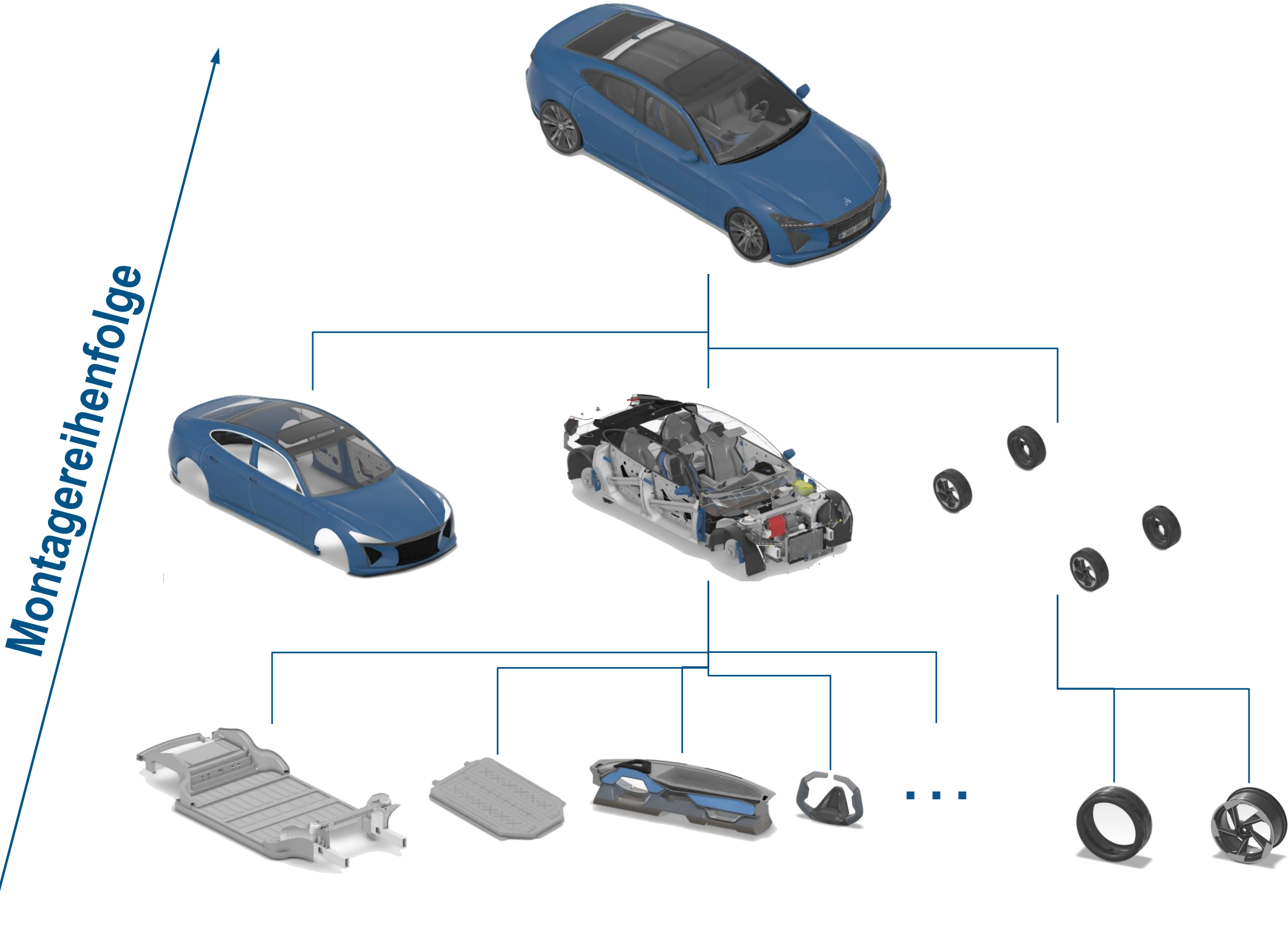
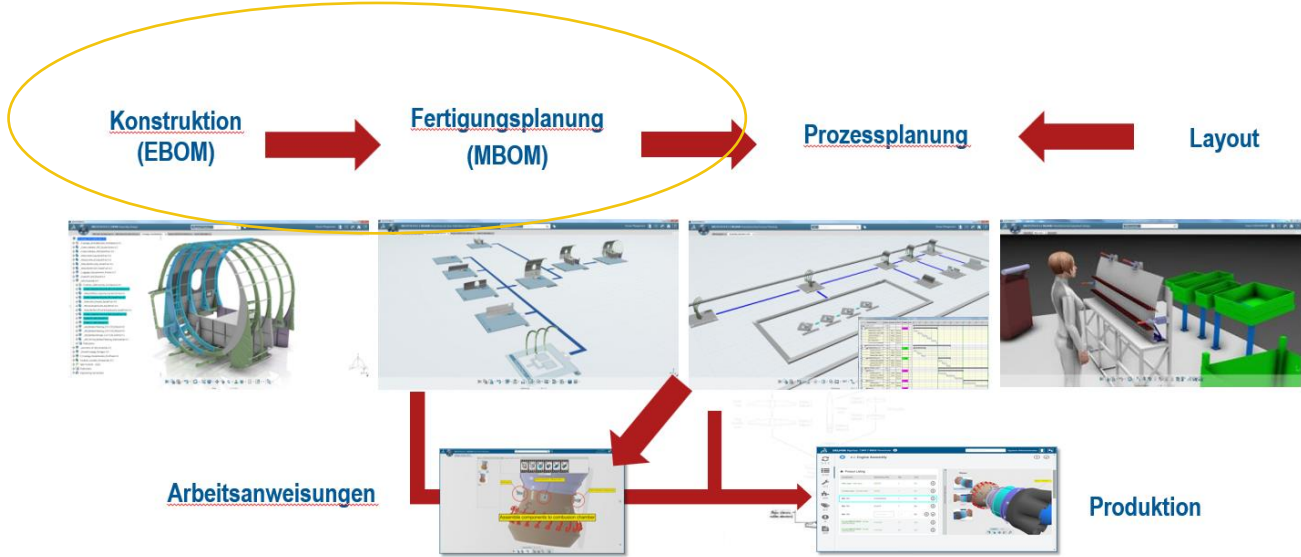
3DEXPERIENCE[®] strategisches Datenmodell



Vom EBOM zum MBOM



EBOM – Varianten, Wiederverwendung, substituierende und/oder alternative Bauteile

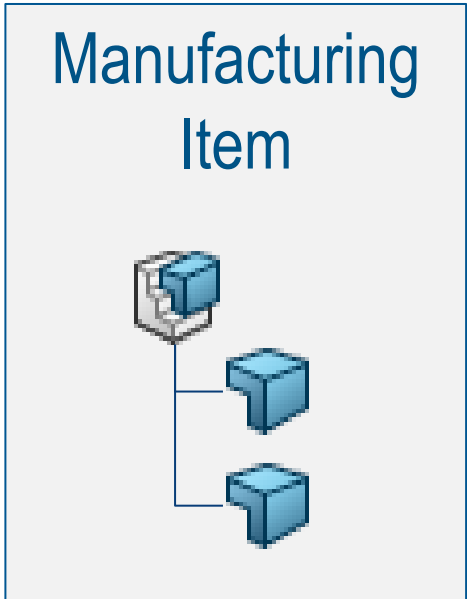
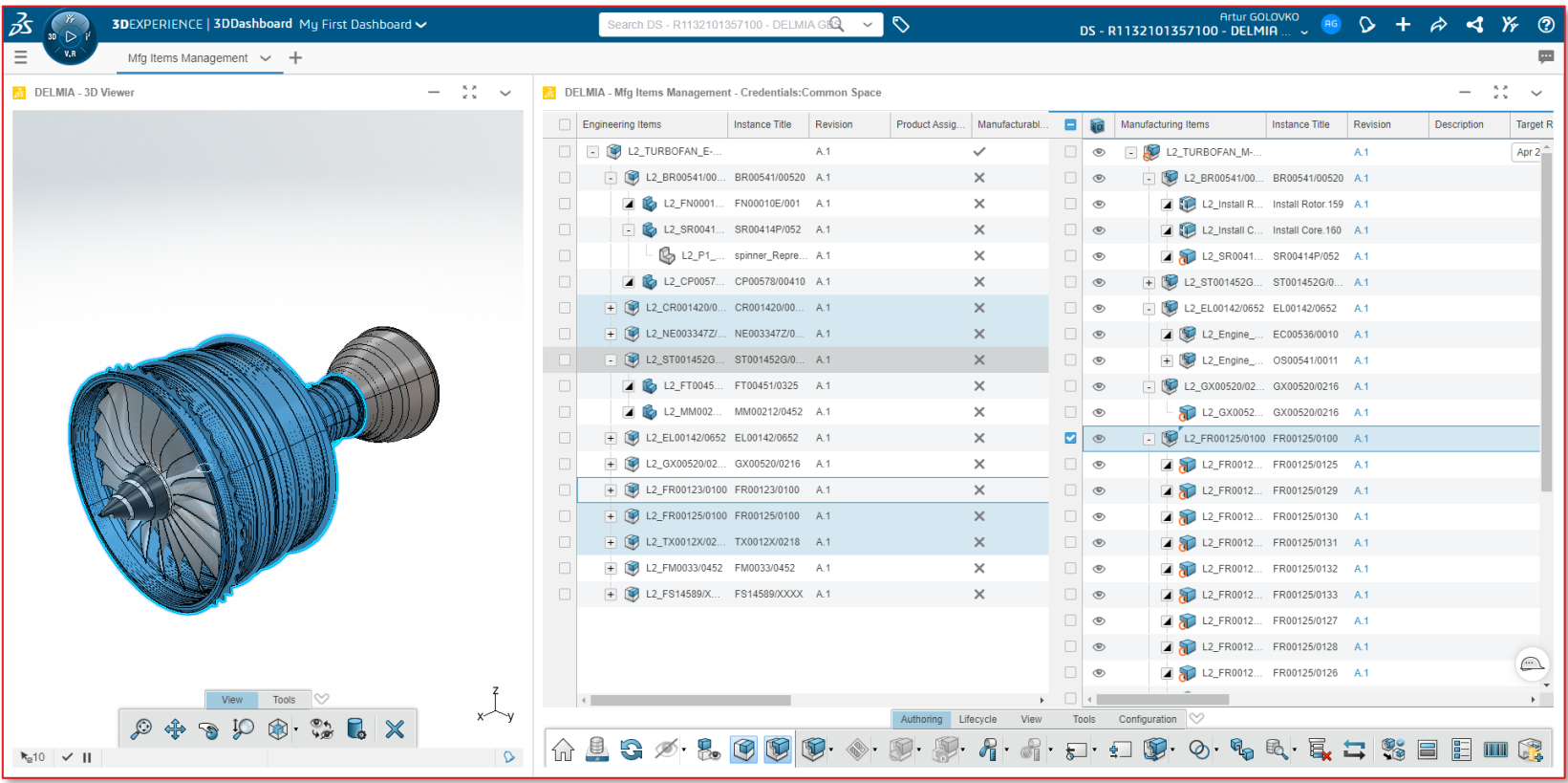


MBOM – Produktaufbau, Verbrauchs- und Verpackungsmaterial, Logistik, ...

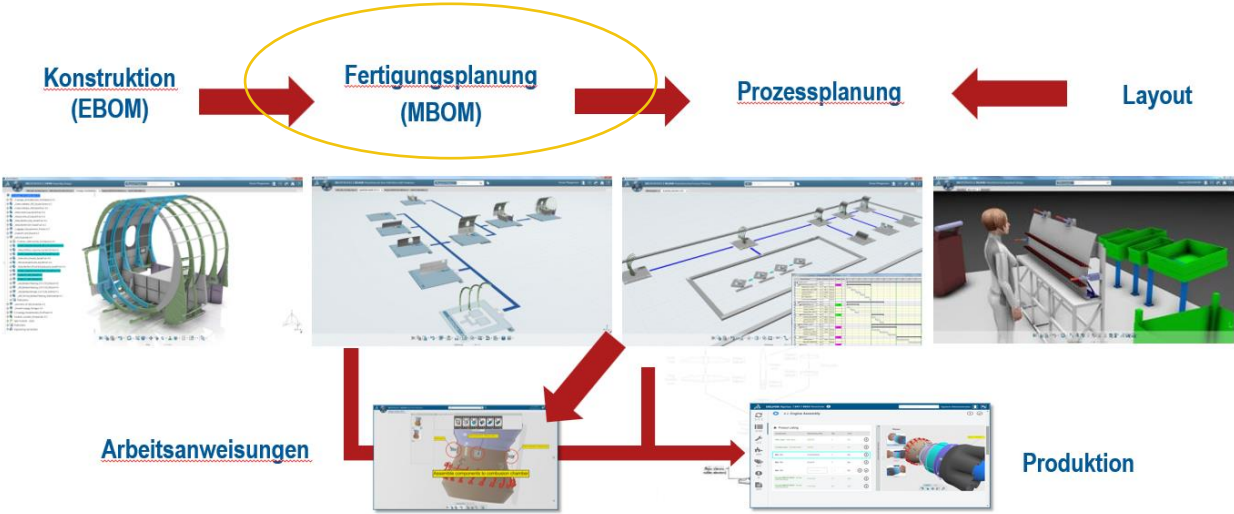
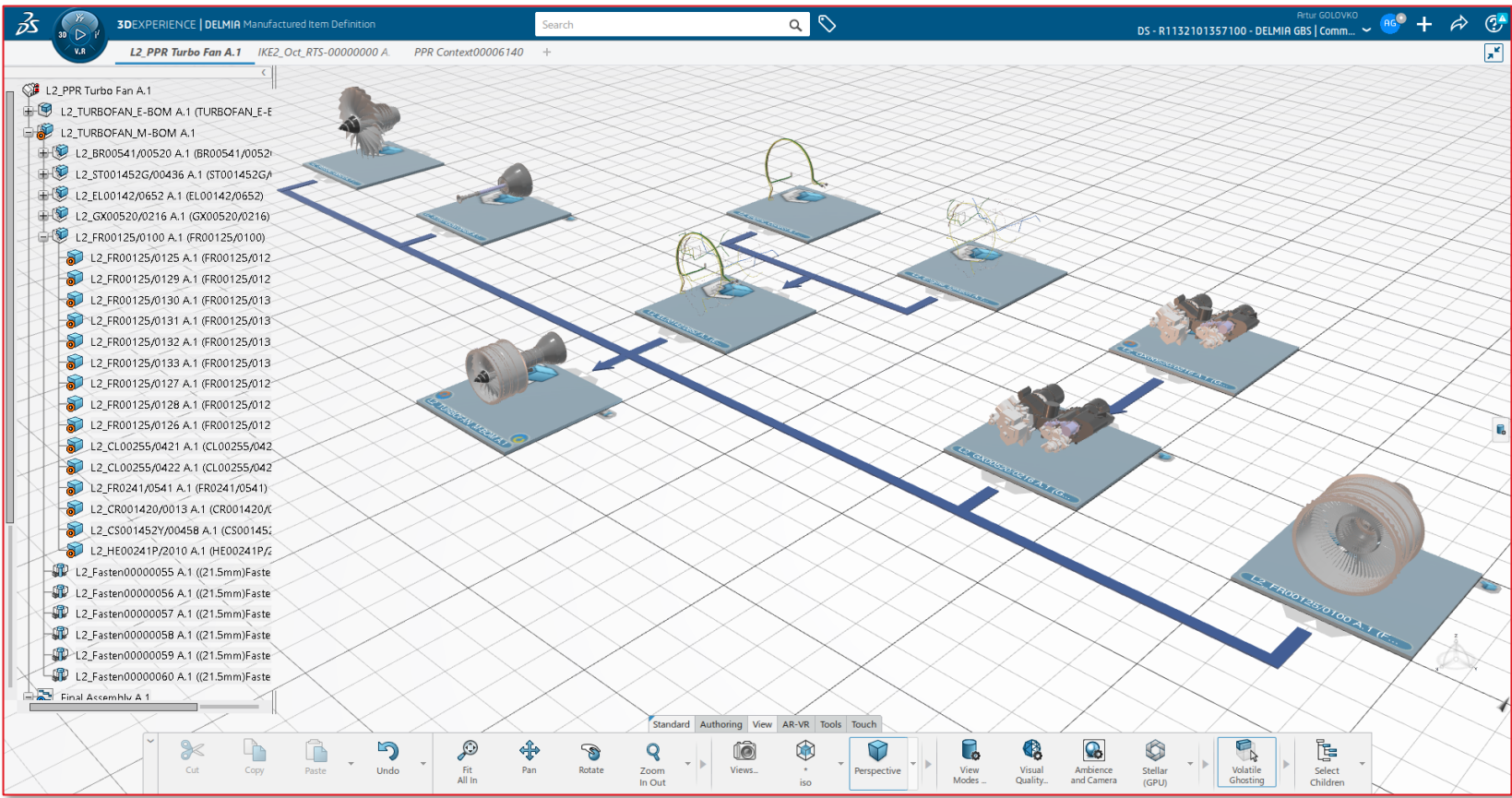
Fertigungsplanung (MBOM)

Werkzeuge: Wizzards, Filter

Webbasierte Planung



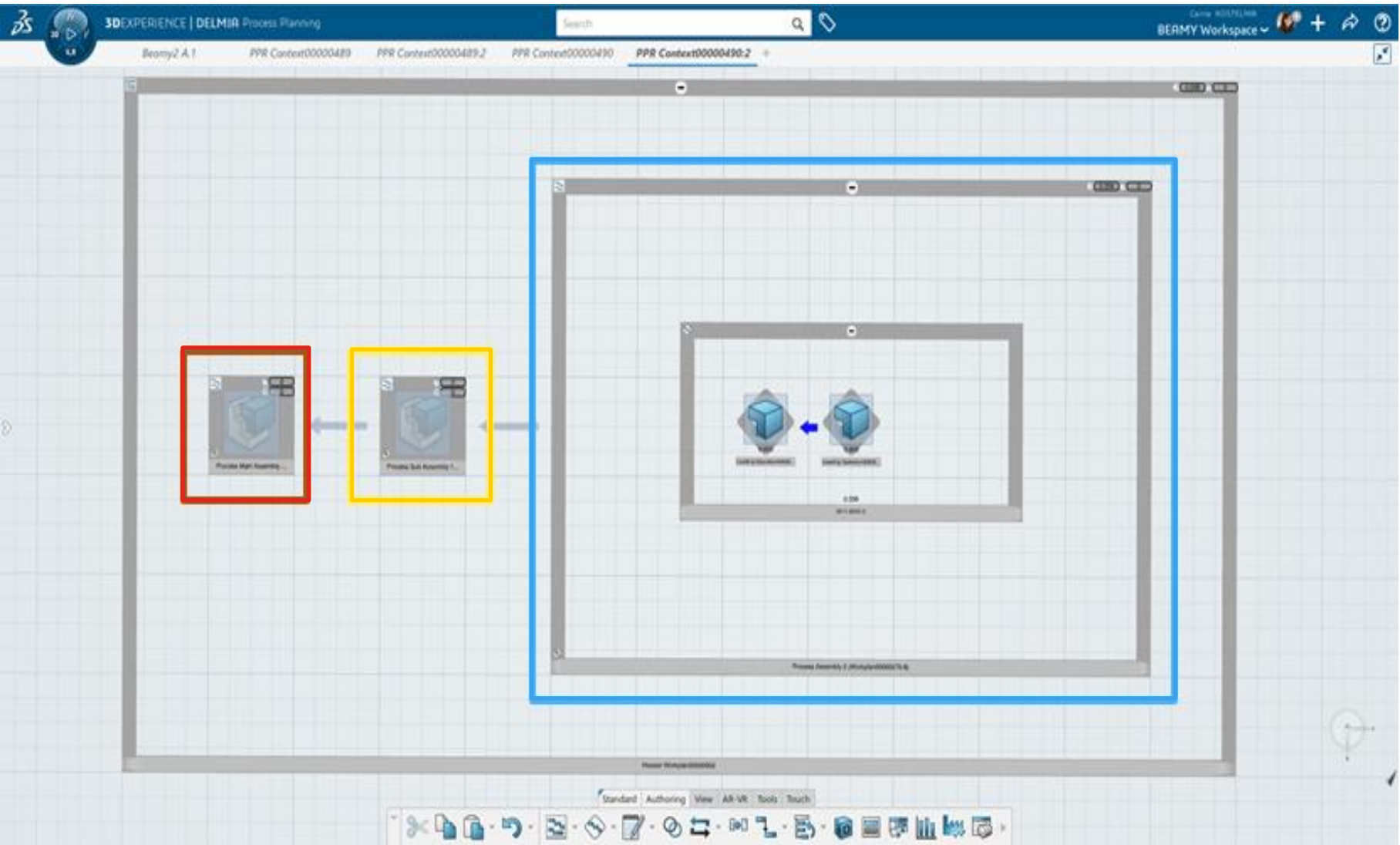
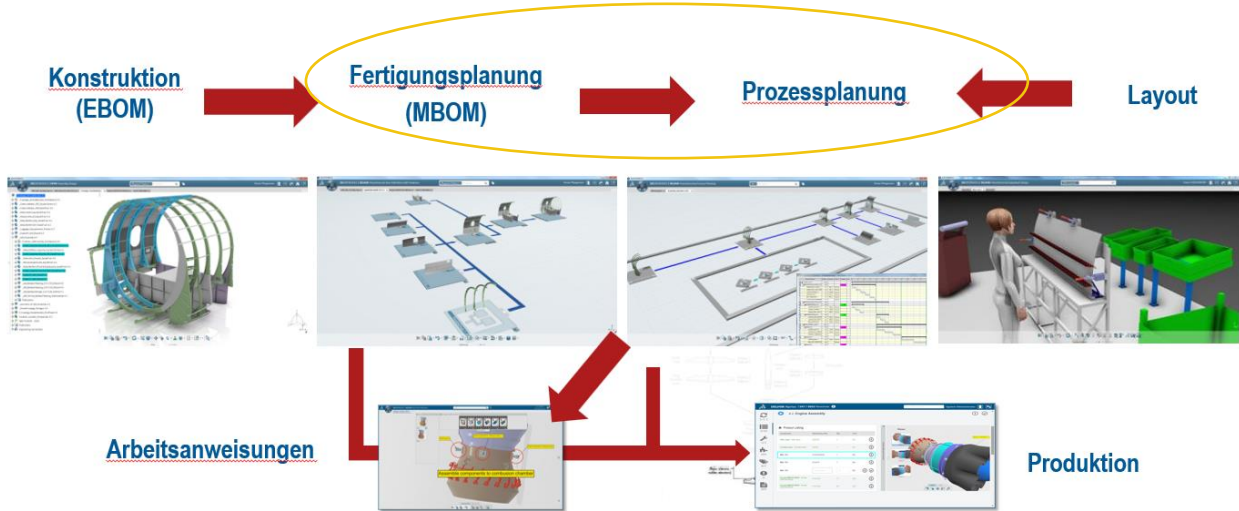
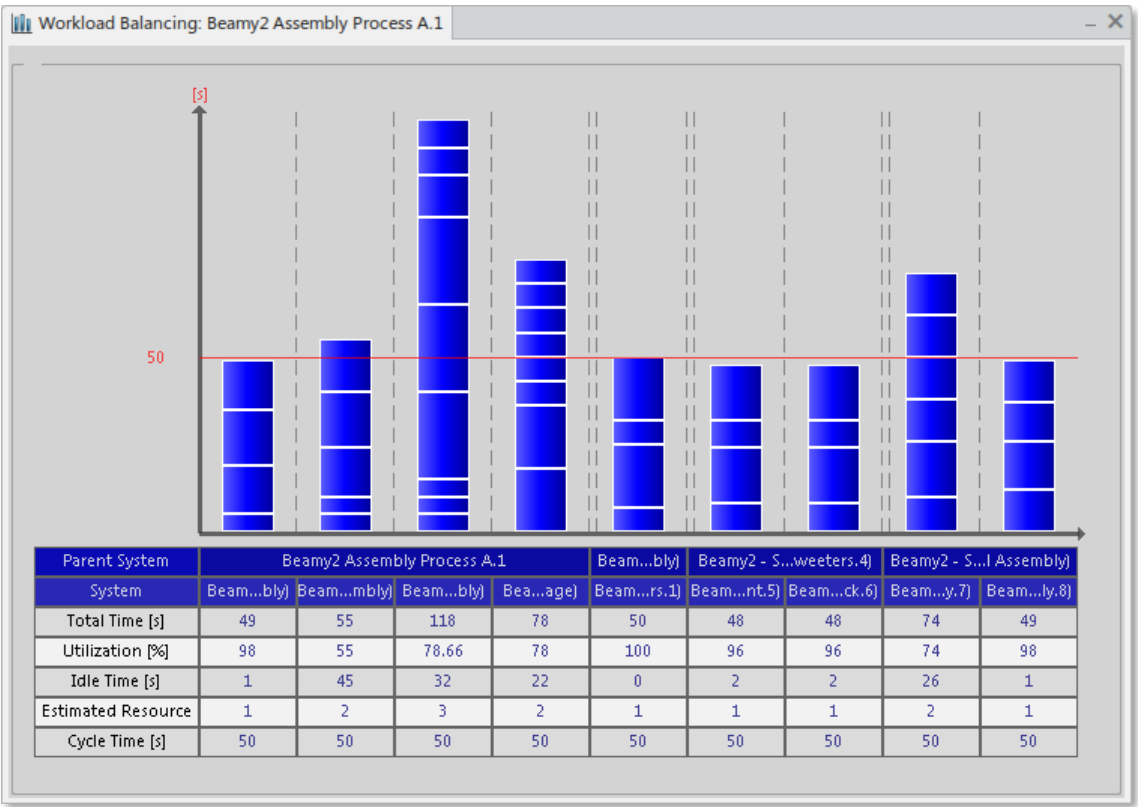
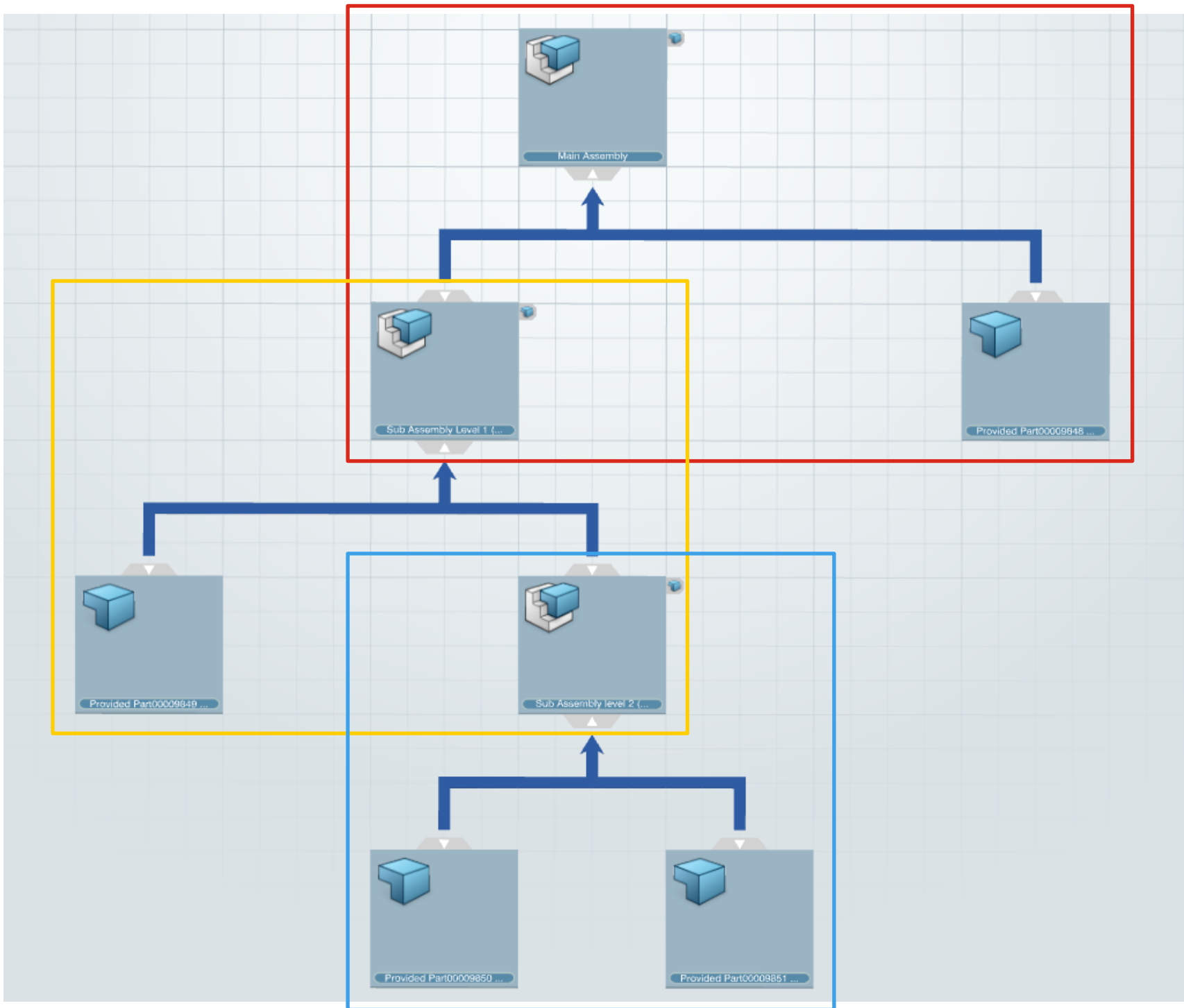
3D gestützte Planung



Nutzen: Komplexitätsbewältigung, Effizient,
Schnelle Planungsanpassung, Transparenz

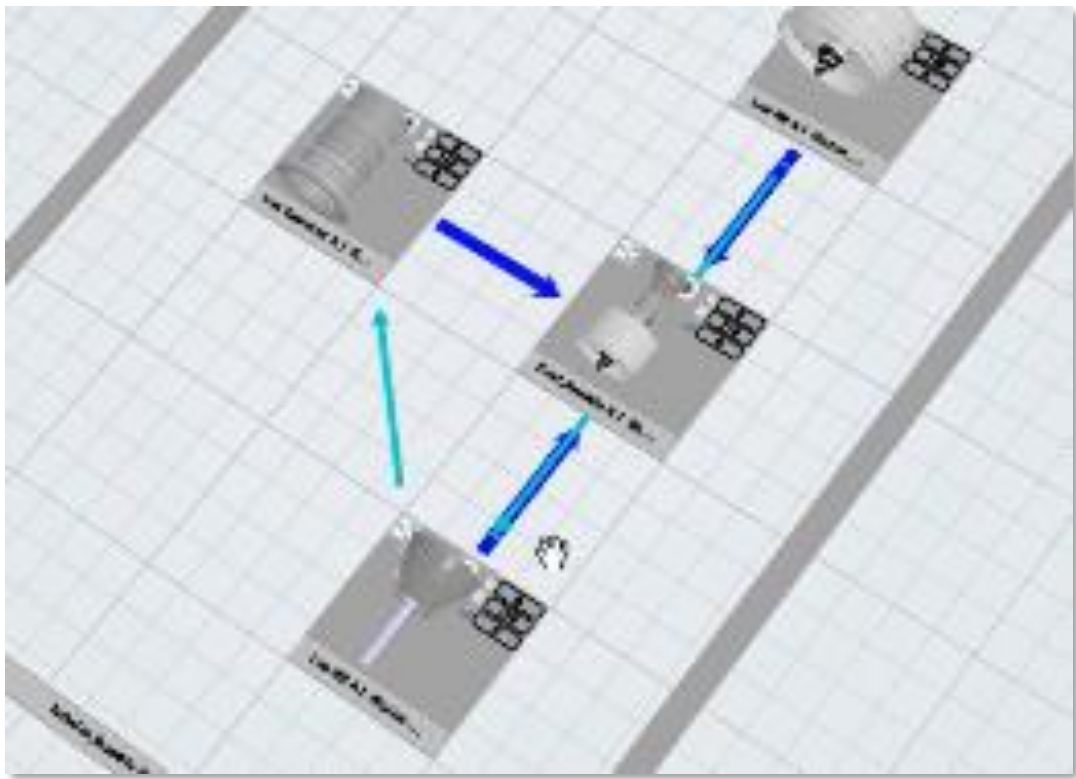
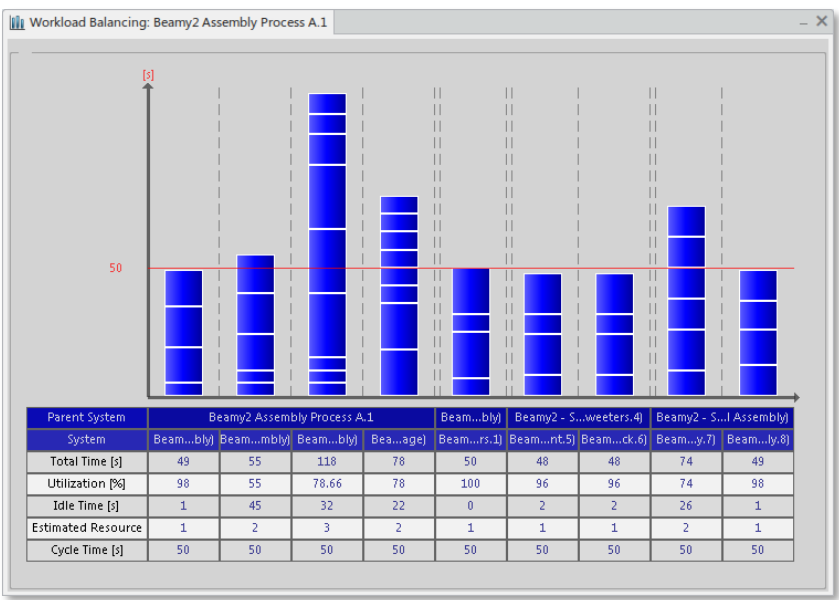
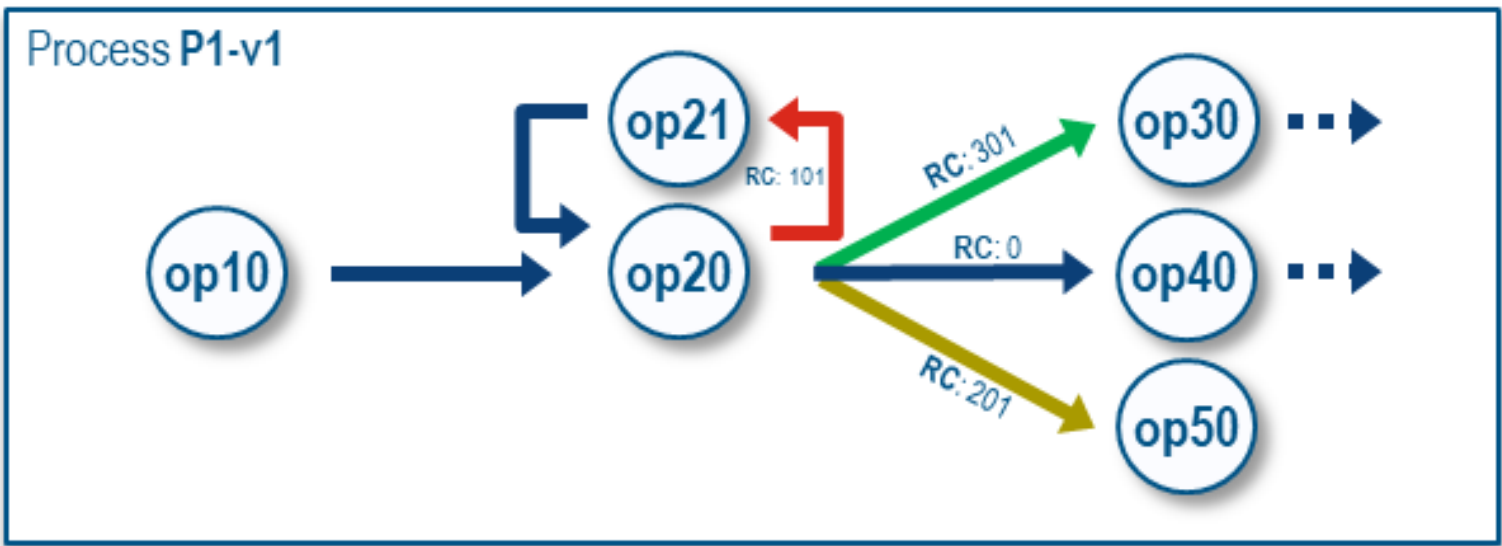
Vom MBOM zur Prozessdefinition

Montagefolgeplanung, Austaktung



Schnittstelle zur Simulations- und Planungssoftware für Zeitbestimmung:
Zeitwirtschaft für Montageprozesse, Robotersimulation, NC Simulation.
Materialflusssimulation, ...

Von der Prozessdefinition zur Produktionsplanung



Constraint Properties

OP 10 → OP 20

Delay Mode: Minimum Delay

Delay: 0s

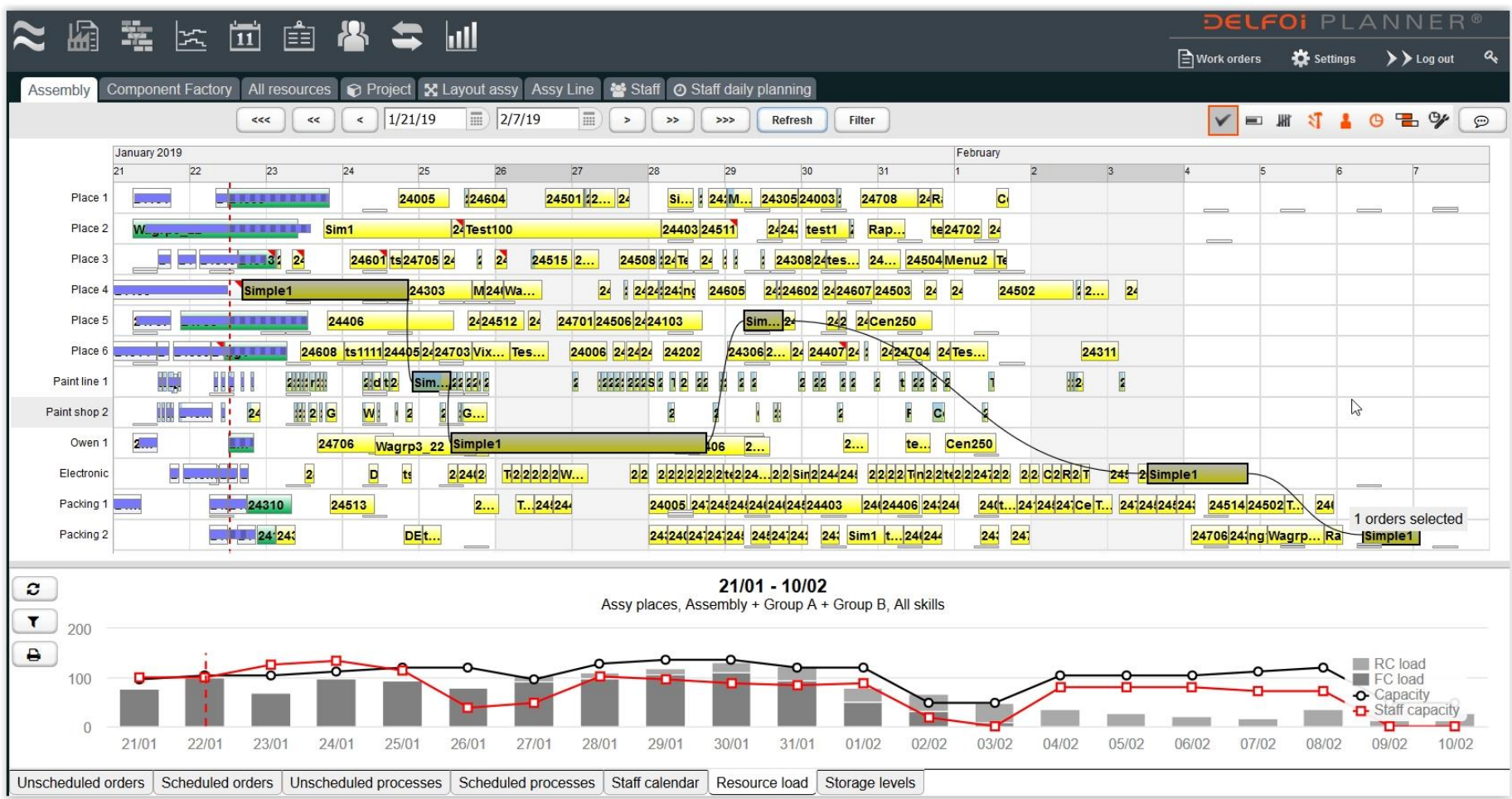
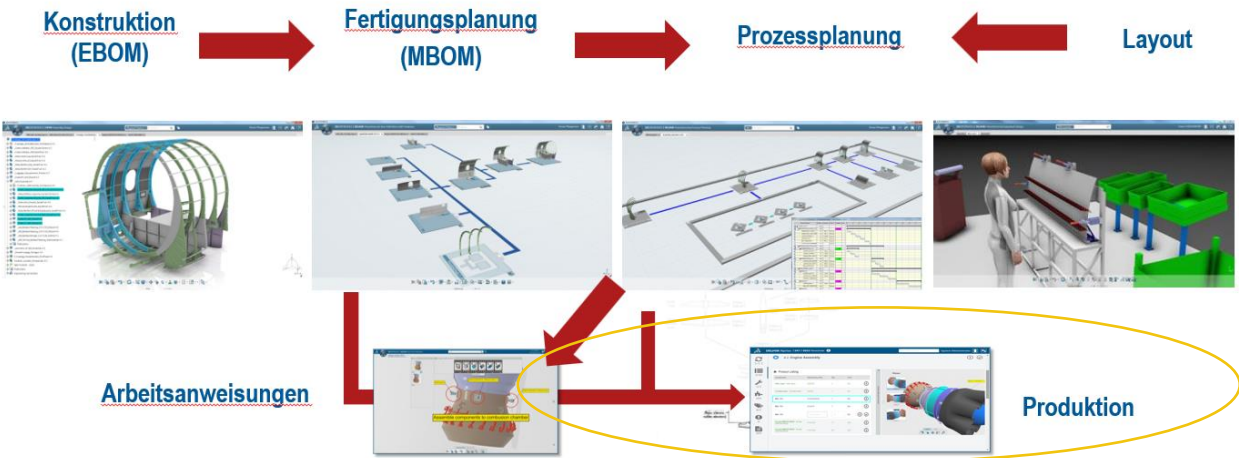
Dependency Type: Finish to Start

Is a Product Flow?: ☒

Optional: ☐

Product Flow Category: Good

OK Cancel Apply



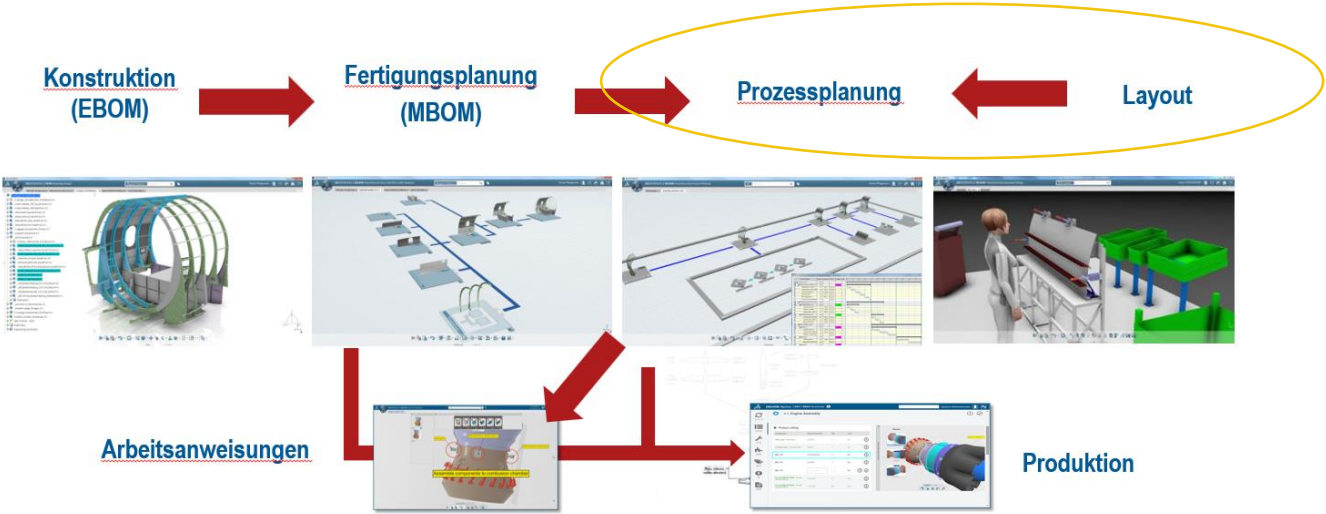
Übergang zur Betriebssteuerung:

Delmia Lean
Delmia Apriso
Delmia Quintiq
Delmia Diota, ...

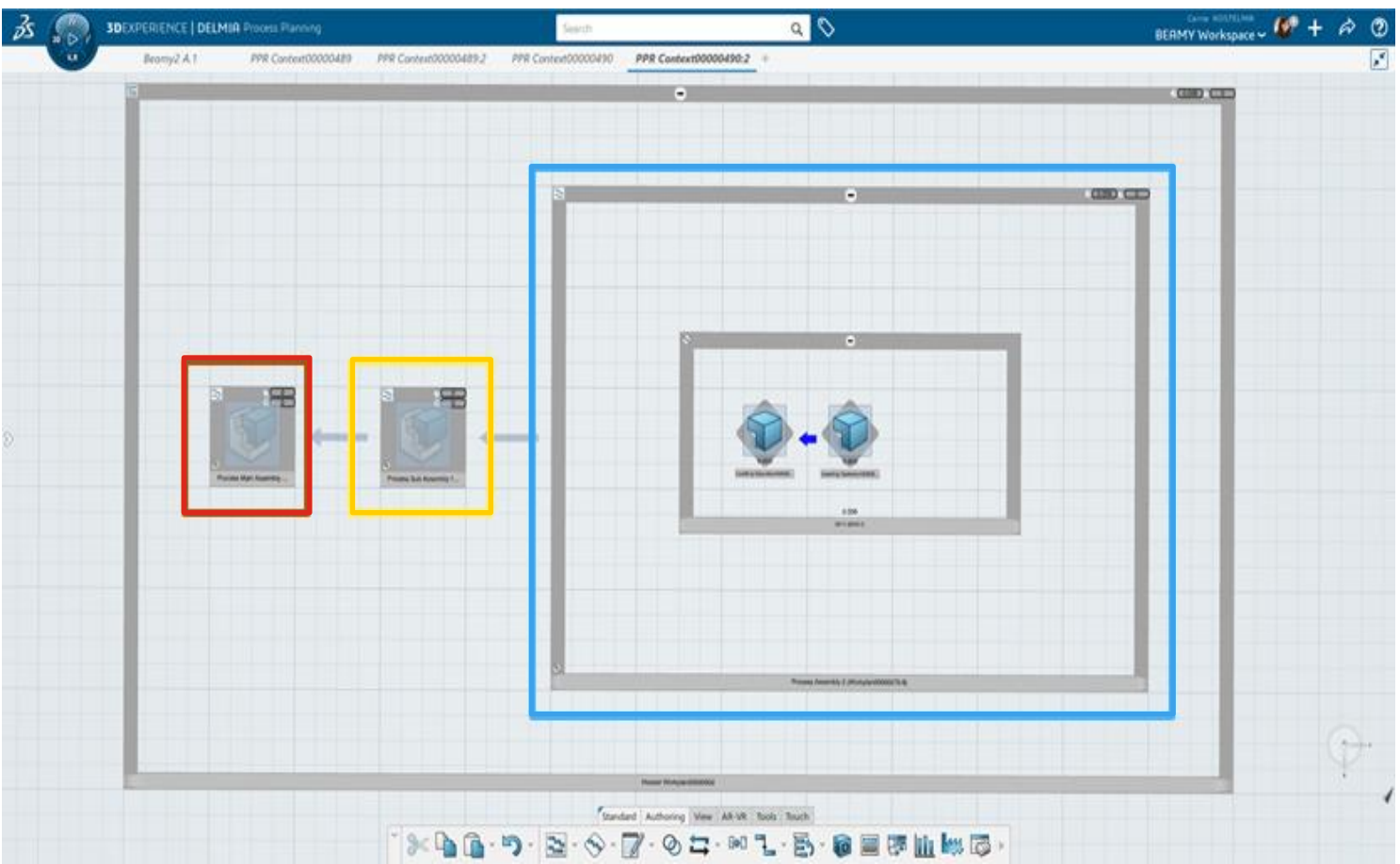
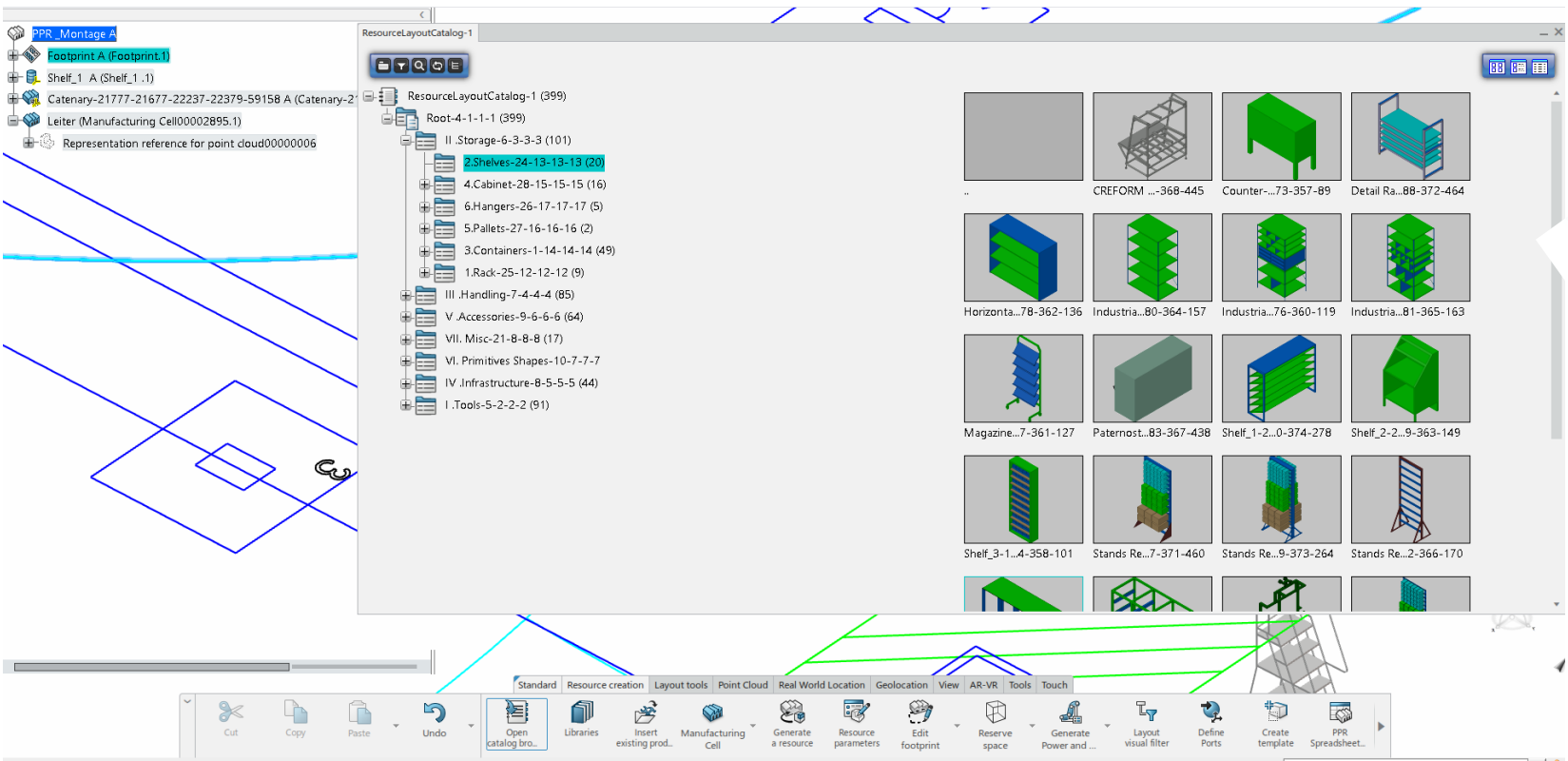
Vorbereitung zur Produktionsplanung:
Nacharbeit, Austaktung, Prozessabhängigkeiten

Prozessdefinition und Layout

3D Punktwolken gemessen mit 3D Laserscanner



Parametrische 3D Bibliotheken

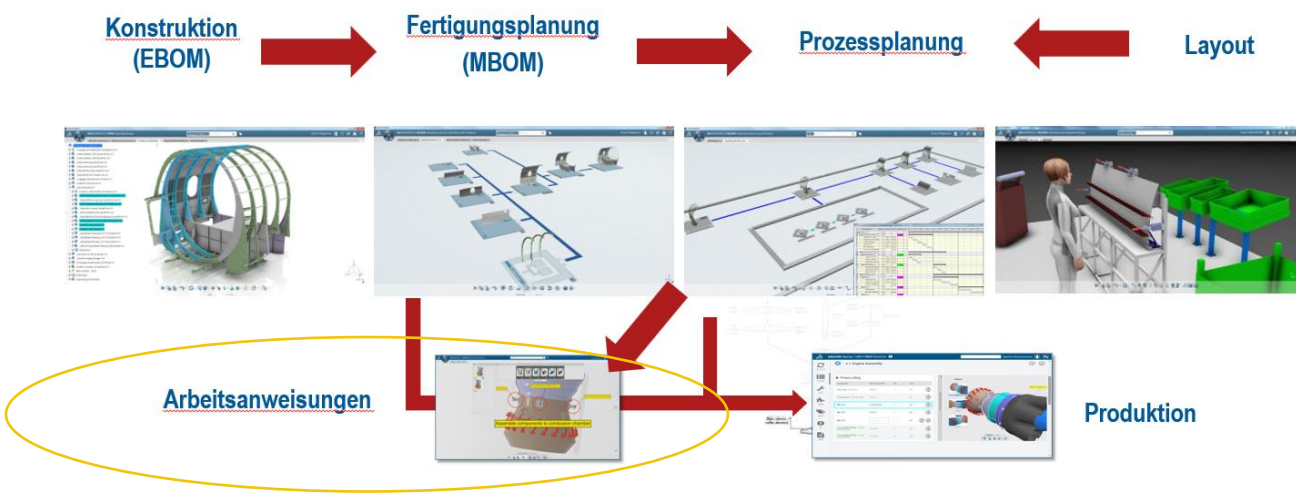
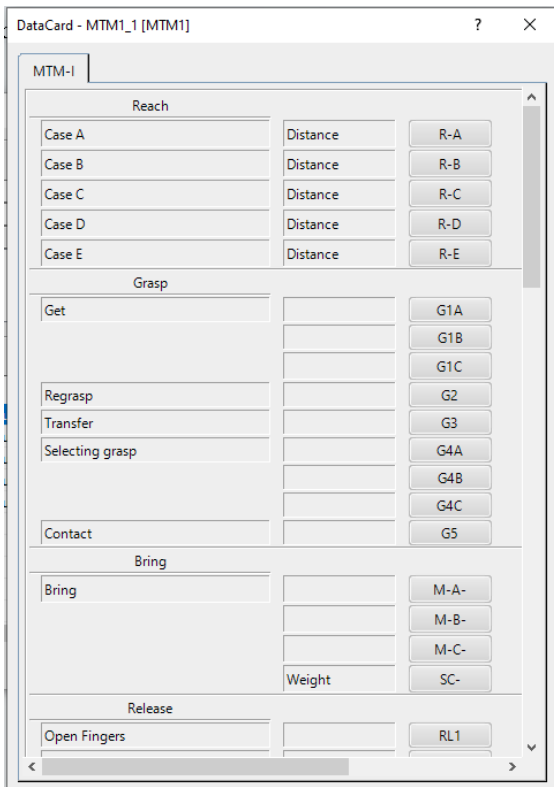
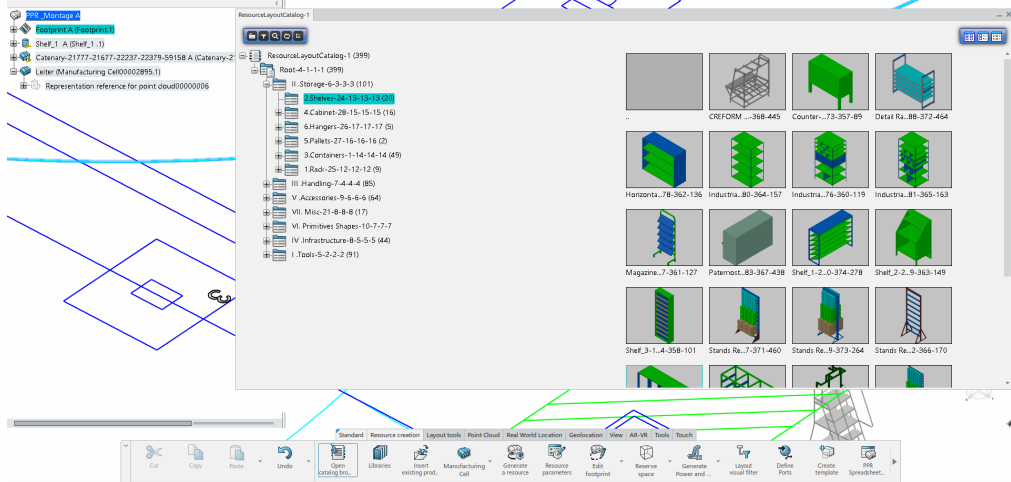


Arbeitsanweisungen

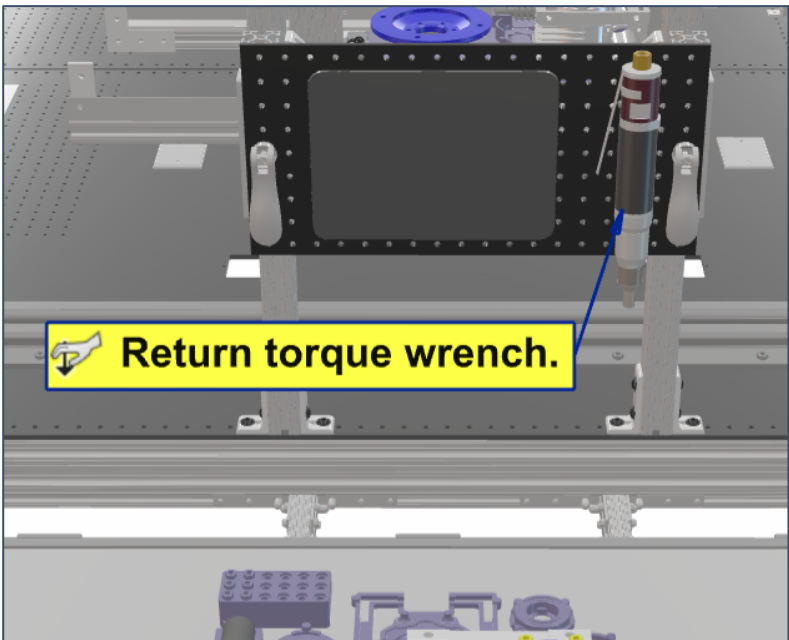
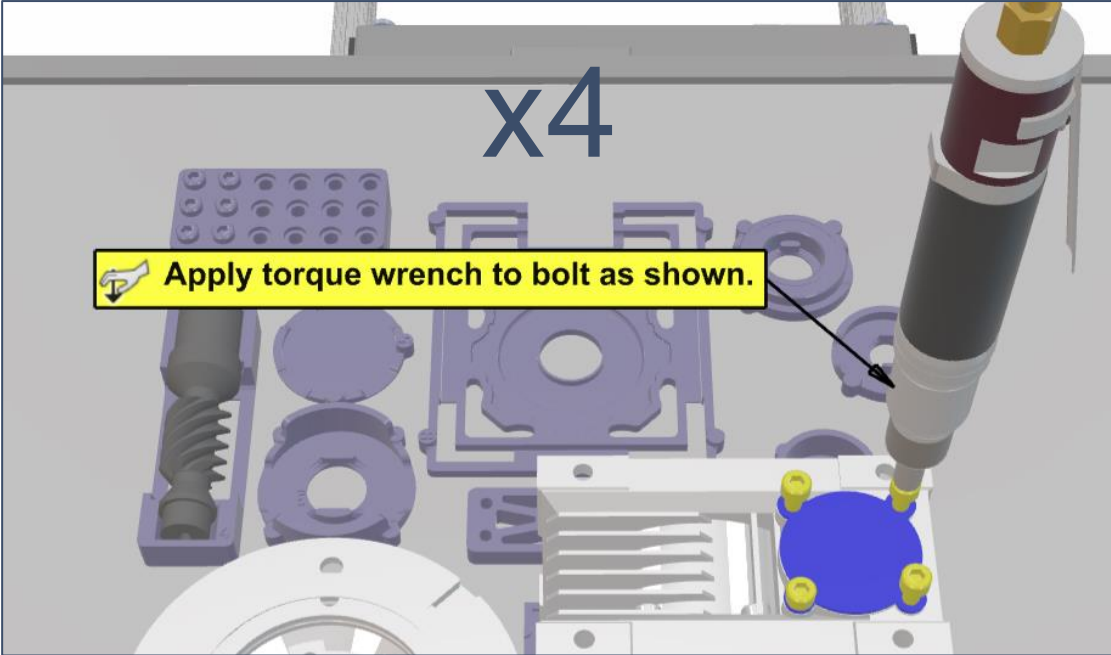
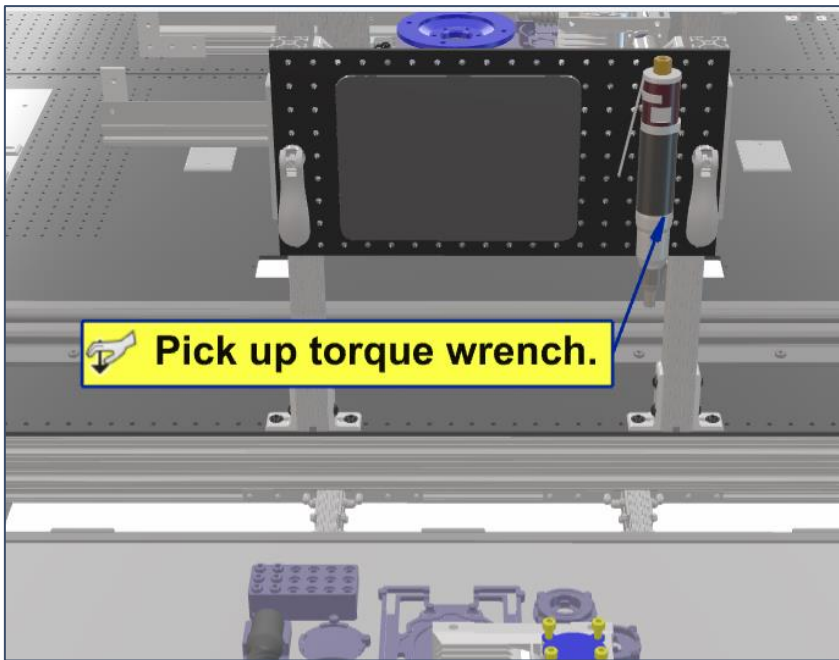
3D Punktwolken gemessen mit 3D Laserscanner



Parametrische 3D Bibliotheken



	Description	P	D	Code	Basic Time(tmu)	Time Type(tmu)	Frequency	Analyze...ime(tmu)	Setu
1	Place 25mm Bearing			AK2	75	TTB	1	75	
2	Place Bottom Bearing Cover			AC2	55	TTB	1	55	
3	Bolts - Get & Place			AF3	80	TTB	4	320	
4	Get torque wrench			HC3	85	TTB	1	85	
5	Apply torque			ZC1	30	TTB	4	120	
6	Return torque wrench			HC3	85	TTB	1	85	
7									





Danke für Ihre Aufmerksamkeit

Bei Fragen bin ich gerne persönlich
für Sie da!



Dr. Martin Feike

Bereichsleiter PLM

+49 176 2068 6007

martin.feike@systemworkx.de