

Accelerating your BoM from Design through to Production

Simon Eaves

Associate Director d2m3 Ltd

Join the conversation #AULondon



VER: 12/06/2017 09:51

The background of the slide features a complex, organic wireframe mesh pattern in a light gray color. This pattern is overlaid on a solid blue horizontal bar that spans the width of the slide. The text 'Class Overview' is written in white on the blue bar.

Class Overview

Accelerating your BoM from Design through to Production.

- Attendees of this class will learn how to take an Autodesk Inventor BoM and use Fusion Lifecycle to modify, review and release the BoM into production.
- Identify the importance of accurate BoMs through the design and manufacturing process.
- Identify the challenges in producing accurate BoM information without automation.
- Understand how Fusion Lifecycle can reduce mistakes and improve productivity.
- Learn what tools and APIs are available to help ensure BoM accuracy and improve automation.

The background features a blue gradient bar at the bottom, transitioning from a darker blue on the left to a lighter blue on the right. Overlaid on this is a complex, light gray wireframe mesh pattern that forms a series of interconnected, flowing shapes, resembling a stylized, abstract representation of a network or a series of connected loops.

Introductions

Who am I..?



Simon Eaves

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About d2m3



- d2m3 is a leading data management software integrator specialising in TDM, PDM & PLM systems.
- With over 20 years experience implementing Solutions for customers throughout the UK, Europe and North America.
- And a...Fusion Lifecycle Specialised Partner

AUTODESK® FUSION LIFECYCLE

d2m3 - What do we do..?



Provide the resources to help our clients enhance their businesses to become more;

- + Effective
- + Productive
- + Successful

by creating more quality **time** within your design & management related functions

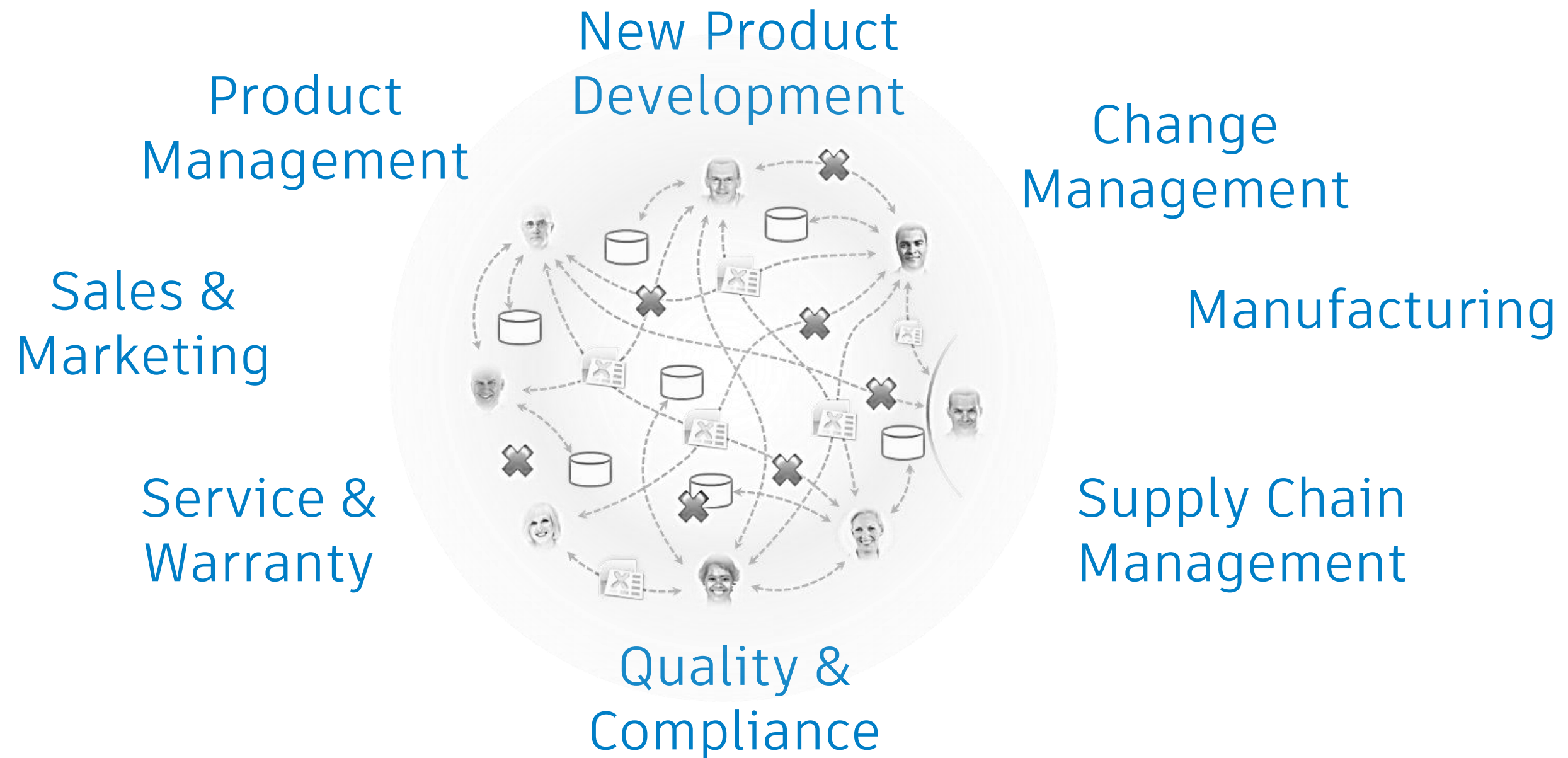


Business Challenges...

✖ *Chaos...*

✖ *Mistakes...*

✖ *Delays...*



The background of the slide is a complex, abstract wireframe mesh. It consists of a dense network of thin, grey lines that form a series of interconnected, flowing, and undulating shapes. These shapes resemble organic, cellular structures or perhaps a stylized representation of a molecular or biological network. The mesh is more densely packed in some areas, creating a sense of depth and volume, while other areas are more sparse. The overall effect is one of dynamic, interconnected complexity.

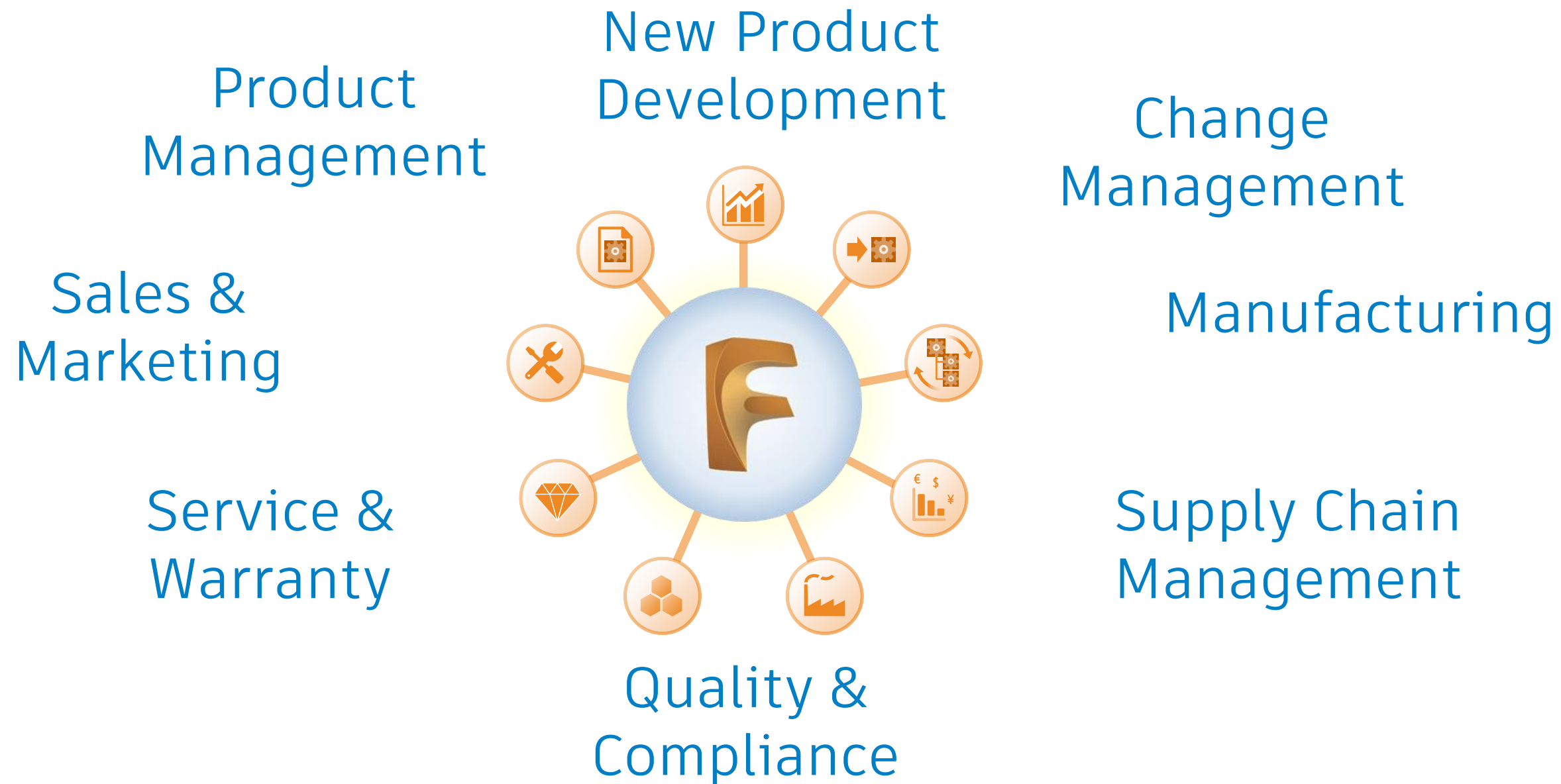
Autodesk Fusion Lifecycle

Meet those Challenges with Autodesk Fusion Lifecycle

✓ *Order...*

✓ *Accuracy...*

✓ *Acceleration...*



What is Autodesk Fusion Lifecycle..?

- A Product Lifecycle Management Solution
 - Product Lifecycle Management (PLM) is the process of managing the entire lifecycle of a product from its conception, through design and manufacture, to service and disposal.
 - PLM integrates people, data, processes and business systems and provides a product information backbone for companies and their extended enterprise.



AUTODESK® FUSION LIFECYCLE

What is Autodesk Fusion Lifecycle..?

- Fusion Lifecycle is a Product Lifecycle Management (PLM) system that connects and organises people, processes, and information improving how companies create, build, support and evolve products and services.



AUTODESK® FUSION LIFECYCLE

Autodesk Fusion Lifecycle



Cloud-based

zero deployment



Accessible

on any device



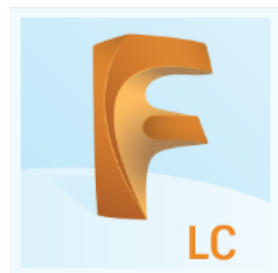
Role Based

Access

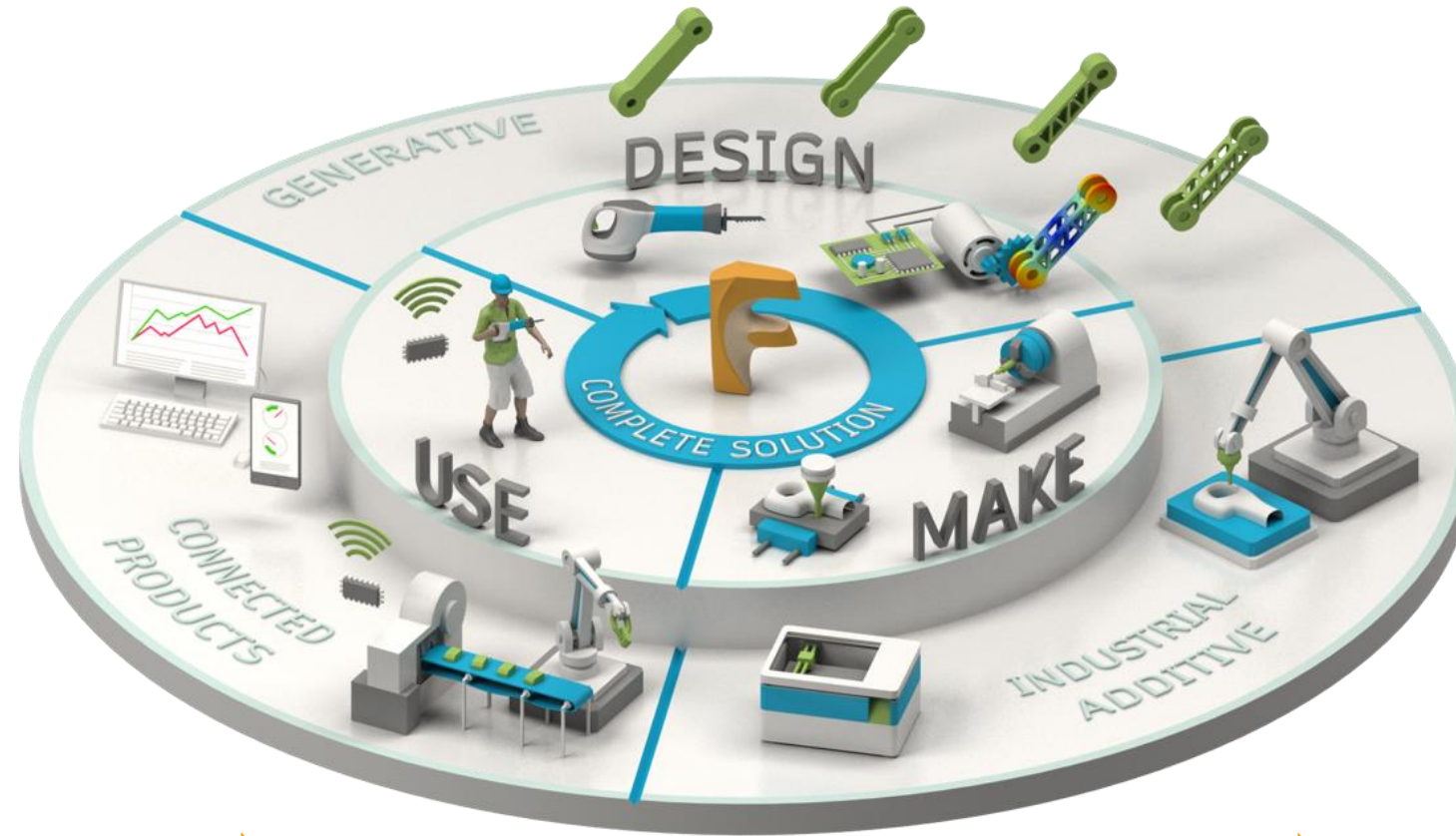


Fast Speed

to Production



Autodesk Fusion Lifecycle is Part of Autodesk's Product Innovation Platform



AUTODESK® FUSION 360™

CAD/CAM/CAE

Product Design &
Mfg Automation

AUTODESK® FUSION LIFECYCLE

PLM

Product Lifecycle Process
Collaboration, Control

AUTODESK® FUSION CONNECT

IoT

Monitor, Operate, Analyze
Connected Products

Fusion Lifecycle Standard Capabilities



But Autodesk Fusion Lifecycle is much more...

- Quality Management
- Project Management
- Task Management
- Requirements
- Lean Six Sigma
- Change Management
- Document Control
- ISO 9001
- Deviation Waiver
- Risk Analysis
- Feasibility Study
- Sales Handover
- Inspections
- Service
- Installation
- Root Cause Analysis
- Calibration
- FMEA
- Asset Management
- Suppliers
- RFQ
- Project Costing
- NPI\NPD
- REACH & RoHS
- Improvement Charter
- Lean 5S
- Tooling
- Prototype Management
- Accident Reports
- Audits
- Lessons Learnt
- QIP
- Technical Requirements
- Products
- Warranty
- Item Management



The background of the slide is a complex, abstract wireframe mesh. The mesh is composed of numerous interconnected lines forming a series of organic, flowing shapes that resemble a stylized, interconnected network or a series of overlapping, curved planes. The lines are thin and grey, set against a white background. A solid blue horizontal bar spans the bottom third of the image, providing a contrasting background for the white text.

The BoM from Design to Manufacturing

Terms of Reference - BoM

- A BoM (Bill of Materials) or product structure is a list of the raw materials, sub-assemblies, intermediate assemblies, sub-components, parts and the quantities of each needed to manufacture an end product.

Terms of Reference – dBoM

- An dBoM (Design Bill of Materials) is a type of BoM that reflects the product as designed by engineering, as it leaves the design tool and before it is modified by an engineer within another tool/application.

dBoM

Terms of Reference – eBoM

- An eBoM (Engineering Bill of Materials) is a type of BoM reflecting the product as it leaves engineering after it may have been modified by an application other than the design tool.

eBoM

Terms of Reference – mBoM

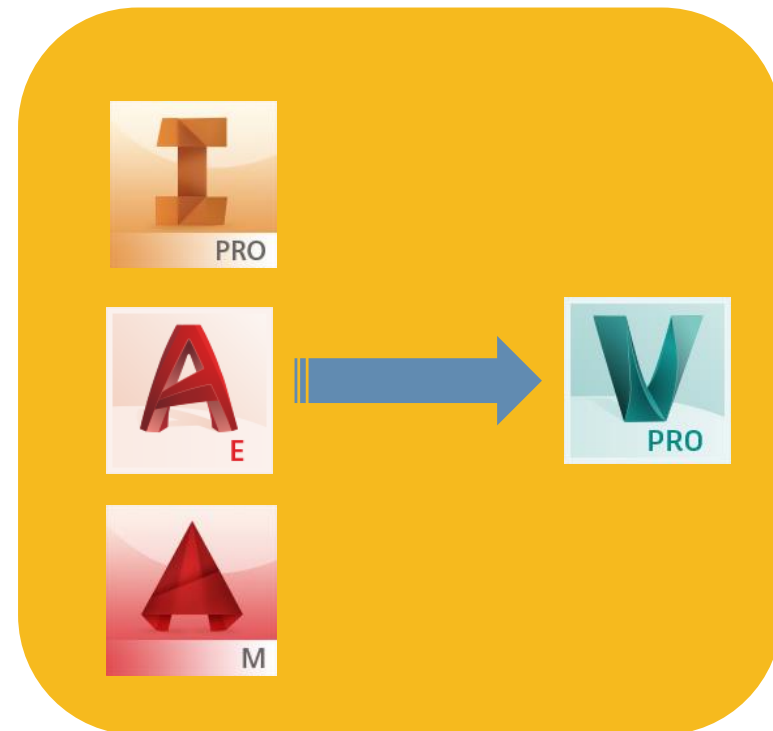
- Unlike the eBoM, which is organized with regards to how the product is engineered, the mBoM is focused on the parts & structure that are needed to manufacture and produce a product.

mBoM

The BoM Lifecycle...



CAD/PDM



PI M

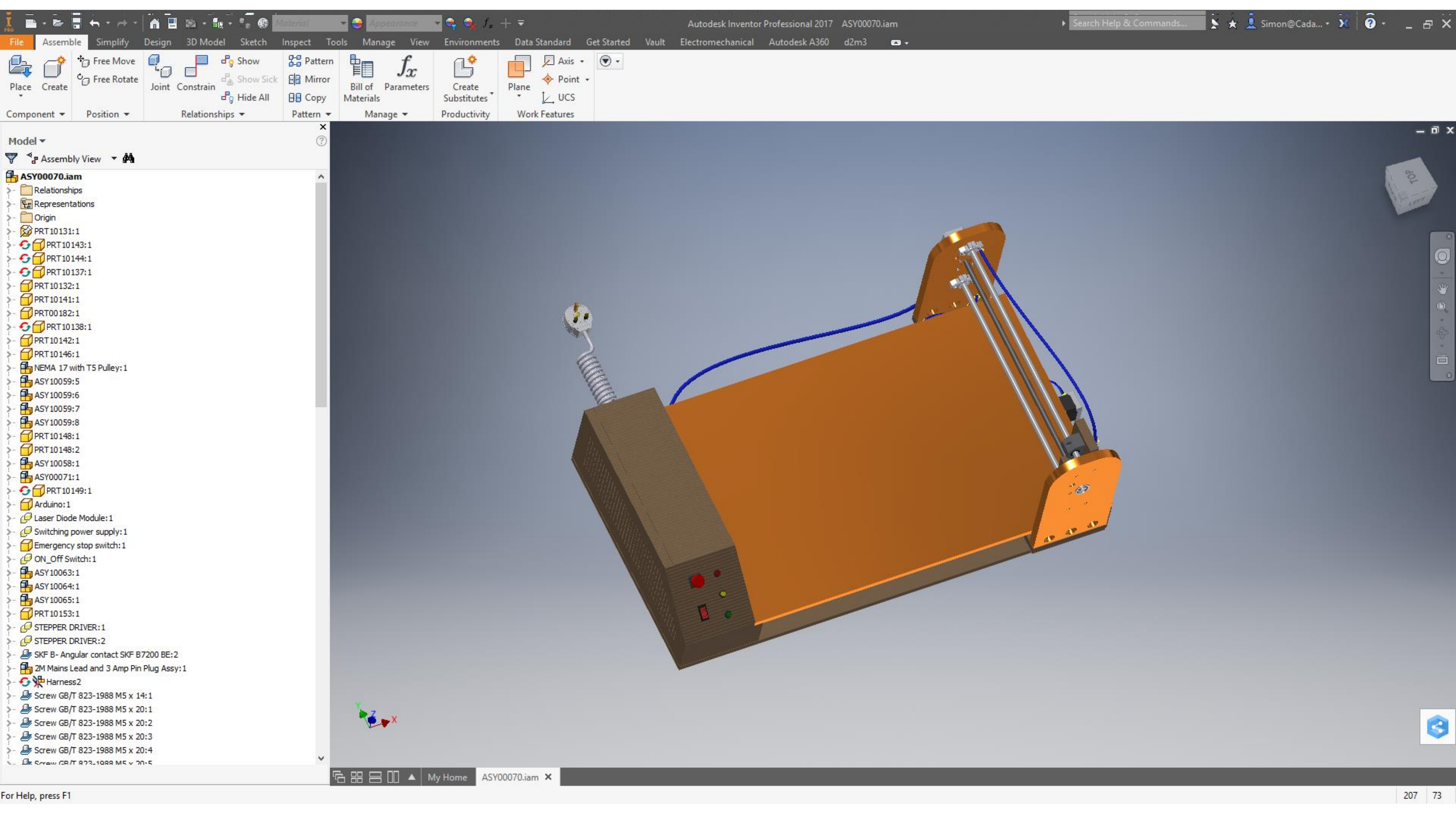


ERP



The background of the slide is a complex, abstract wireframe mesh. The mesh is composed of numerous interconnected lines forming a series of organic, flowing shapes that resemble a stylized, interconnected network or a series of overlapping, curved planes. The lines are thin and grey, set against a white background. A solid blue horizontal bar spans the bottom third of the image, providing a contrasting background for the white text.

The (Inventor) Design Model



File Assemble Simplify Design 3D Model Sketch Inspect Tools Manage View Environments Data Standard Get Started Vault Electromechanical Autodesk A360 d2m3

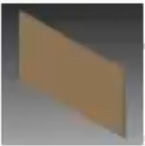
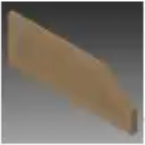


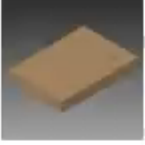



Place Create Free Move Free Rotate Joint Constraint

Component Position Relations

- Model
- Assembly View
- ASY00070.iam
- Relationships
 - Representations
 - Origin
 - PRT10131:1
 - PRT10143:1
 - PRT10144:1
 - PRT10137:1
 - PRT10132:1
 - PRT10141:1
 - PRT00182:1
 - PRT10138:1
 - PRT10142:1
 - PRT10146:1
 - NEMA 17 with T5 Pulley:1
 - ASY10059:5
 - ASY10059:6
 - ASY10059:7
 - ASY10059:8
 - PRT10148:1
 - PRT10148:2
 - ASY10058:1
 - ASY00071:1
 - PRT10149:1
 - Arduino:1
 - Laser Diode Module:1
 - Switching power supply:1
 - Emergency stop switch:1
 - ON_Off Switch:1
 - ASY10063:1
 - ASY10064:1
 - ASY10065:1
 - PRT10153:1
 - STEPPER DRIVER:1
 - STEPPER DRIVER:2
 - SKF B- Angular contact SKF B7200 BE:2
 - 2M Mains Lead and 3 Amp Pin Plug Assy:1
 - Harness2
 - Screw GB/T 823-1988 M5 x 14:1
 - Screw GB/T 823-1988 M5 x 20:1
 - Screw GB/T 823-1988 M5 x 20:2
 - Screw GB/T 823-1988 M5 x 20:3
 - Screw GB/T 823-1988 M5 x 20:4
 - Screw GB/T 823-1988 M5 x 20:5

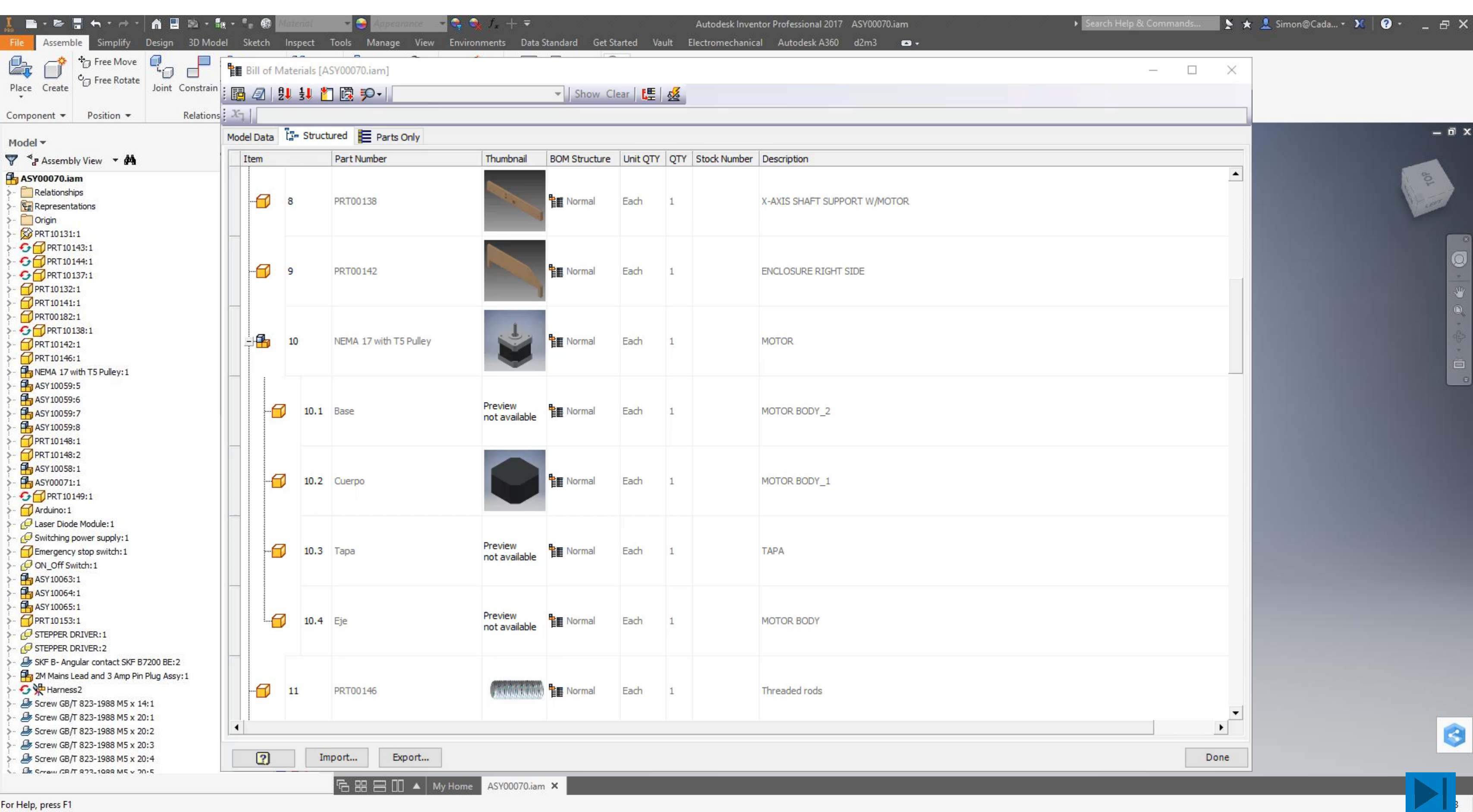
Bill of Materials [ASY00070.iam]

Model Data Structured Parts Only

Item	Part Number	Thumbnail	BOM Structure	Unit QTY	QTY	Stock Number	Description
1	PRT00131		Normal	Each	1	PRT00131	BASE PLATE
2	PRT00143		Normal	Each	1		CASE - LEFT SIDE
3	PRT00144		Normal	Each	1		CASE - LEFT SIDE
4	PRT00137		Normal	Each	1		X-AXIS SHAFT SUPPORT
5	PRT00132		Normal	Each	1		REAR COVER
6	PRT00141		Normal	Each	1		ENCLOSURE LID
7	PRT00182		Normal	Each	1		WORKSHEET
8	PRT00138		Normal	Each	1		X-AXIS SHAFT SUPPORT W/MOTOR



Import... Export... Done






The Exported BoM from Inventor

	A	B	C	D	E	F	G
1	Item	Part Number	BOM Structure	Unit QTY	QTY	Stock Number	Description
2	1	PRT00131	Normal	1	1	PRT00131	BASE PLATE
3	2	PRT00143	Normal	1	1		CASE - LEFT SIDE
4	3	PRT00144	Normal	1	1		CASE - LEFT SIDE
5	4	PRT00137	Normal	1	1		X-AXIS SHAFT SUPPORT
6	5	PRT00132	Normal	1	1		REAR COVER
7	6	PRT00141	Normal	1	1		ENCLOSURE LID
8	7	PRT00182	Normal	1	1		WORKSHEET
9	8	PRT00138	Normal	1	1		X-AXIS SHAFT SUPPORT W/MOTOR
10	9	PRT00142	Normal	1	1		ENCLOSURE RIGHT SIDE
11	10	NEMA 17 with T5 Pulley	Normal	1	1		MOTOR
12	10.1	Base	Normal	1	1		MOTOR BODY_2
13	10.2	Cuerpo		1	1		MOTOR BODY_1
14	10.3	Tapa		1	1		TAPA
15	10.4	Eje					
16	11	PRT00183		1	1		Threaded rods
17	12	ASY00059		1	4		12MM SHAFT SUPPORT
18	12.1	SHF12	Normal	1	1		SHAFT FITTING
19	12.2	ISO 4762 - M3 x 10	Purchased	1	1		Hexagon Socket Head Cap Screw
20	13	PRT00148	Normal	1	2		M10 THREADED BAR
21	14	ASY00071	Normal	1	1		MOTOR
22	14.1	PRT00183	Normal	1	1		Y-AXIS SIDE
23	14.2	PRT00139	Normal	1	1		X-AXIS MOVING PART
24	14.3	PRT00184	Normal	1	1		Y-AXIS SIDE W/MOTOR
25	14.4	Threaded rods GB/T 15389-1994 M10 x 1000	Normal	1	1		Threaded rods
26	14.5	NEMA 17 with T5 Pulley	Normal	1	1		MOTOR
27	14.5.1	Base	Normal	1	1		MOTOR BODY_2
28	14.5.2	Cuerpo	Normal	1	1		MOTOR BODY_1
29	14.5.3	Tapa	Normal	1	1		TAPA
30	14.5.4	Eje	Normal	1	1		MOTOR BODY
31	14.6	ASY00059	Normal	1	4		12MM SHAFT SUPPORT



Excel

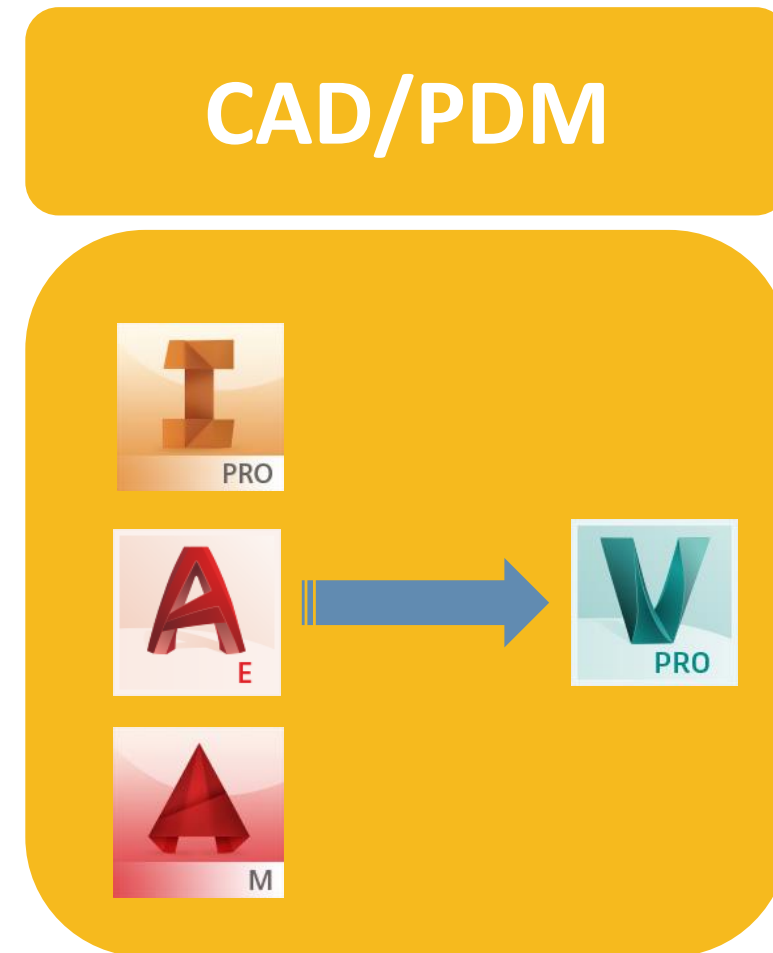
BOM

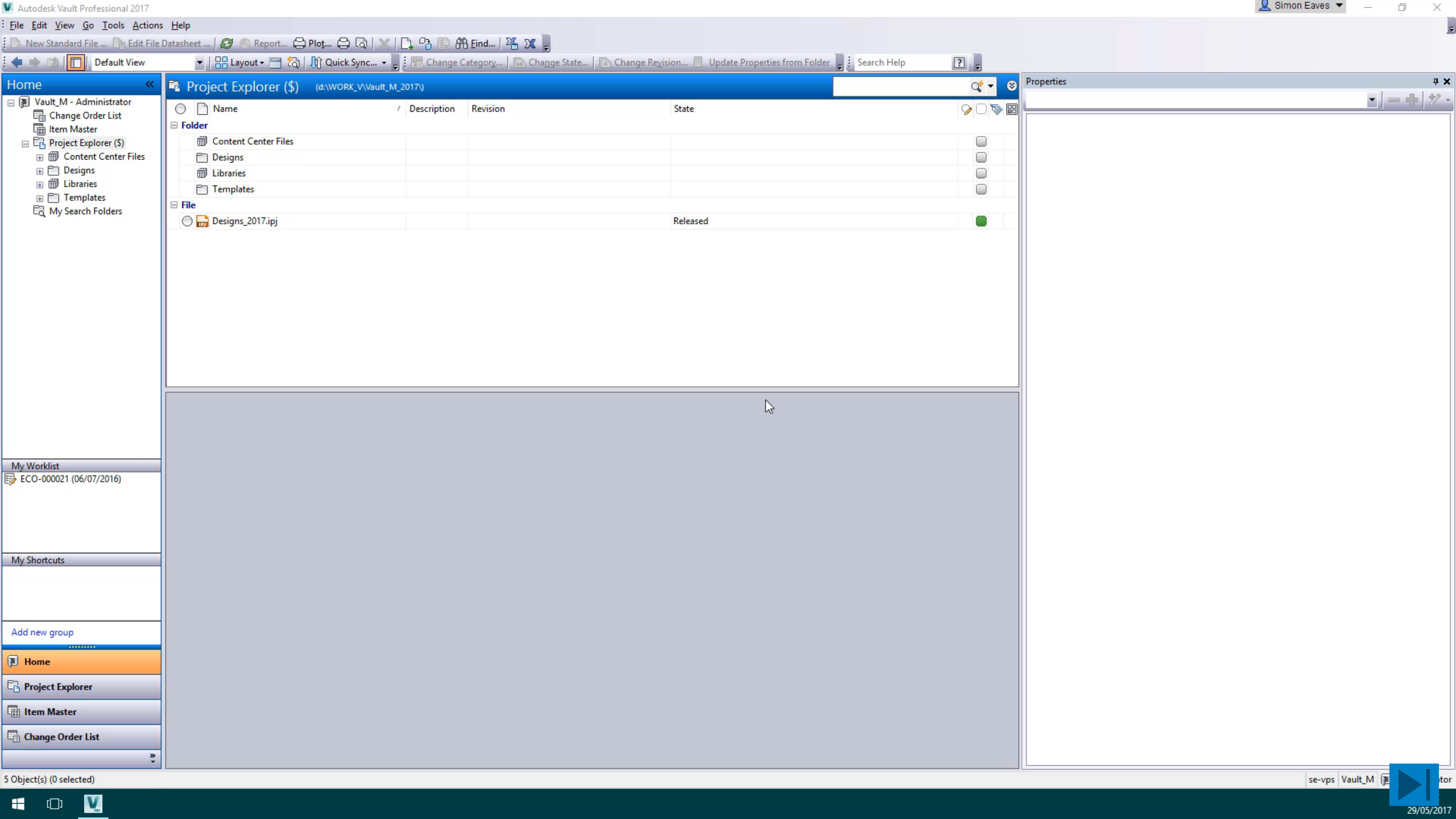
The background of the slide is an abstract, light gray wireframe mesh. The mesh is composed of numerous interconnected lines forming a complex, organic pattern of polygons. It has a 3D, undulating appearance, with some areas being more densely packed than others, creating a sense of depth and movement. The overall effect is reminiscent of a digital or architectural model.

Autodesk Vault's View of the Design Model

Autodesk Vault

- Autodesk Vault is an Excellent BoM Data Aggregator
 - Combine Data...
 - from Inventor,
 - from AutoCAD Electrical &
 - from AutoCAD Mechanical...
- Into a single dBoM.





Project Explorer (\$)			
Name	Description	Revision	State
Folder			
Content Center Files			
Designs			
Libraries			
Templates			
File			
Designs_2017.ipj			Released

Autodesk Vault Professional 2017

File Edit View Go Tools Actions Help

New Standard File ... Edit File Datasheet ... Report... Plot... Check In... Find...

Default View Layout Quick Sync... Change Category... Change State... Change Revision... Update Properties from Folder Search Help

Home<<

Vault_M - Administrator

Change Order List

Item Master

Project Explorer (\$)

Content Center Files

Designs

Libraries

Templates

My Search Folders

Project Explorer (\$) (Search Results) (d:\WORK_V\Vault_M_2017\)

ASY00070

Name	Description	Revision	State
ASY00070.dwg	CNC LASER ...	B	Released
ASY00070.iam	CNC LASER ...	B	Released

Properties

ASY00070.iam

System

User Defined

Approved By	
Approved On	
Author	jg
Comments	
Description	CNC LASER ENGRAVER
IsCC	False
Keywords	
Material	
Part Number	ASY00070
PLM Classification	
PLM Level 2	
Project	
Project Number	
ThinClient URL	http://se-vps/AutodeskTC/se-vps/Vault_M#/Entit...

History Uses Where Used Change Order Preview CAD BOM Datasheet

Latest Released

File Name	Version	Revision	State (Historical)	Checked Out By	Created By	Checked In	Comment	Path
ASY00070.iam	21	B	Released		Administrator	29/05/2017 08:35		S:/Designs/P
2M Mains Lead and 3 Amp Pin Plug Assy.ia...	30	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
Arduino.ipt	25	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ASY00057.Harness2.iam	36	B	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ASY00071.iam	9	A	Released		Administrator	26/09/2016 13:35	Released to manufact...	S:/Designs/P
ASY10058.iam	40	B	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ASY10059.iam	32	B	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ASY10063.iam	30	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ASY10064.iam	30	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ASY10065.iam	30	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
Emergency stop switch.ipt	25	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ISO 7046-1 - M5 x 25H.ipt	8		Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Content C
Laser Diode Module.ipt	23	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
NEMA 17 with T5 Pulley.iam	31	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
ON_Off Switch.ipt	24	A	Released		Administrator	29/05/2017 08:32	Released to manufact...	S:/Libraries/S
DPT00102.ipt	12	A	Released		Administrator	26/09/2016 13:35	Released to manufact...	S:/Designs/P

My Worklist

ECO-000021 (06/07/2016)

My Shortcuts

Add new group

Home

Project Explorer

Item Master

Change Order List

2 Object(s) (1 selected)

se-vps Vault_M

29/05/2017

Image of a mechanical assembly (likely a laser engraver component).

Autodesk Vault Professional 2017

FileEditViewGoToolsActionsHelp

NewNew Standard File ...Edit File Datasheet ...Report...Plot...Go to: Enter an item numberFind...Update Properties from FolderSearch Help

Assembly ItemsLayoutQuick Sync...Change Category...Change State...Change Revision...

Home

Vault_M - Administrator

Change Order ListItem MasterProject Explorer (\$)Content Center FilesDesignsLibrariesTemplatesMy Search Folders

Item Master

Search Item Master

Number	Revision	State	Title (Item,CO)
ASY00071	B	Released	ASY00071
ASY00061	B	Released	ASY10061
SW3dPS-3 Pin PLug	B	Released	2M Mains Lead and 3 Amp Pin Plug Assy
ASY00059	B	Released	ASY10059
ASY00057.Harness2	A	Released	ASY00057.Harness2
ASY00070	A	Released	ASY00070
NEMA 17 with T5 Pulley	B	Released	NEMA 17 with T5 Pulley
ASY00065	A	Released	ASY10065
ASY00064	A	Released	ASY10064
ASY00063	A	Released	ASY10063
ASY00062	A	Released	ASY10062
ASY00058	A	Released	ASY10058
Screw GB 823 M3.5 x 25	A	Released	Screw GB/T 823-1988 M3
PRT00182	A	Released	PRT00182
10AWG-GRY.Wire_7	A	Released	HA_VC_537
10AWG-BLK.Wire_38	A	Released	HA_VC_534

GeneralHistoryBill of MaterialsWhere UsedChange OrderViewAssociated FilesDatasheet

LatestReleasedTodayMulti-LevelAll Rows

Number	Position Number	Item Description	Quantity	Units	State (Historical)
ASY00070	-	CNC LASER ENGRAVER	-	Each	Released
PRT00131	1	BASE PLATE	1 Each	Each	Released
PRT00143	2	CASE - LEFT SIDE	1 Each	Each	Released
PRT00144	3	CASE - LEFT SIDE	1 Each	Each	Released
PRT00137	4	X-AXIS SHAFT SUPPORT	1 Each	Each	Released
PRT00132	5	REAR COVER	1 Each	Each	Released
PRT00141	6	ENCLOSURE LID	1 Each	Each	Released
PRT00182	7	WORKSHEET	1 Each	Each	Released
PRT00138	8	X-AXIS SHAFT SUPPORT W/MOTOR	1 Each	Each	Released
PRT00142	9	ENCLOSURE RIGHT SIDE	1 Each	Each	Released
NEMA 17 with T5 Pulley	10	MOTOR	1 Each	Each	Released
PRT00146	11	Threaded rods	1 Each	Each	Released
ASY00059	12	12MM SHAFT SUPPORT	4 Each	Each	Released
PRT00148	13	M10 THREADED BAR	2 Each	Each	Released
ASY00071	14	MOTOR	1 Each	Each	Released
ASY00058	15	LASER ACTUATOR	1 Each	Each	Released
PRT00149	16	ENCLOSURE, BUTTON FACE	1 Each	Each	Released
Arduino	17	ARDUINO UNO	1 Each	Each	Released
Laser Diode Module	18	50mW LASER MODULE	1 Each	Each	Released
Switching power supply	19	STEP AP214	1 Each	Each	Released
Emergency stop switch	20	EMERGENCY STOP SWITCH	1 Each	Each	Released

Properties

ASY00070

System

User Defined

Associated File Revision	B
Equivalence Value	ASY00070
PLM Classification	
PLM Level 2	
ThinClient URL	http://se-vps/AutodeskTC/se-vps/Vault_M#/Entit...

My Worklist

ECO-000021 (06/07/2016)

My Shortcuts

Add new group

Home

Project Explorer

Item Master

Change Order List

110 Items (1 selected)

se-vpsVault_M

29/05/2017

	A	B	C	D	E	F	G
1	Level	Number	Material	Item Description	Item Qty	Units	
2	1	ASY00070		CNC LASER ENGRAVER		Each	
3	1.1	PRT00131	MDF Medium Density Fiberboard	BASE PLATE	1	Each	
4	1.2	PRT00143	MDF Medium Density Fiberboard	CASE - LEFT SIDE	1	Each	
5	1.3	PRT00144	MDF Medium Density Fiberboard	CASE - LEFT SIDE	1	Each	
6	1.4	PRT00137	MDF Medium Density Fiberboard	X-AXIS SHAFT SUPPORT	1	Each	
7	1.5	PRT00132	MDF Medium Density Fiberboard	REAR COVER	1	Each	
8	1.6	PRT00141	MDF Medium Density Fiberboard	ENCLOSURE LID	1	Each	
9	1.7	PRT00182	Gold	WORKSHEET	1	Each	
10	1.8	PRT00138	MDF Medium Density Fiberboard	X-AXIS SHAFT SUPPORT W/MOTOR	1	Each	
11	1.9	PRT00142	MDF Medium Density Fiberboard	ENCLOSURE RIGHT SIDE	1	Each	
12	1.1	NEMA 17 with T5 Pulley		MOTOR	1	Each	
13	1.10.1	Base	solidworks materials Acero aleado	MOTOR BODY_2	1	Each	
14	1.10.2	Cuerpo	solidworks materials Acero aleado	MOTOR BODY_1	1	Each	
15	1.10.3	Tapa	solidworks materials Acero aleado	TAPA	1	Each	
16	1.10.4	Eje			1	Each	
17	1.11	PRT00146			1	Each	
18	1.12	ASY00059					
19	1.12.1	SHF12			1	Each	
20	1.12.2	ISO 4762 - M3 x 12		Hexagon Thin Nut	1	Each	
21	1.13	PRT00148	Generic	M10 THREADED BAR	2	Each	
22	1.14	ASY00058		LASER ACTUATOR	1	Each	
23	1.14.1	PRT00136	MDF Medium Density Fiberboard	Y-AXIS MOVING PART	1	Each	
24	1.14.2	ASY00061		THREADED ACTUATOR	1	Each	
25	1.14.2.1	PRT00135	MDF Medium Density Fiberboard	Y-AXIS NUT SUPPORT	1	Each	
26	1.14.2.2	ISO 4035 - M10		Hexagon thin nuts (chamfered) - Product gr	2	Each	
27	1.14.3	LUHR12		LUHR/LUJR-Linear Bearing Units - with Close	2	Each	
28	1.15	PRT00149	MDF Medium Density Fiberboard	ENCLOSURE, BUTTON FACE	1	Each	
29	1.16	Arduino	Generic	ARDUINO UNO	1	Each	
30	1.17	Laser Diode Module	Generic	50mW LASER MODULE	1	Each	
31	1.18	Switching power supply	Generic	STEP AP214	1	Each	

ASY00070 BoM Vault Export





Fusion Lifecycle Data Import

Manual Import Data into Fusion Lifecycle

Edit Import

Save

Cancel

Run

ASY00070(unsaved) Workspace: Items and BOMs Filename: ASY00070 - Initial Production Release.xlsx

			Level	Item Number	Revision	Title	Description	Material	Lifecycle State	ThinClient URL	Release Date	Quantity
1			1	ASY00070	A	ASY00070	CNC LASER ENGRAVER		Production	http://se-vps/AutodeskTC/se-vps/Ve	2016-03-05	
2			1.1	PRT00131	A	PRT10131	BASE PLATE	MDF Medium Density Fiberboard	Production		2016-03-05	1
3			1.2	PRT00143	A	PRT10143	CASE - LEFT SIDE	MDF Medium Density Fiberboard	Production		2016-03-05	1
4			1.3	PRT00144	A	PRT10144	CASE - LEFT SIDE	MDF Medium Density Fiberboard	Production		2016-03-05	1
5			1.4	PRT00137	A	PRT10137	X-AXIS SHAFT SUPPORT	MDF Medium Density Fiberboard	Production		2016-03-05	1
6			1.5	PRT00132	A	PRT10132	REAR COVER	MDF Medium Density Fiberboard	Production		2016-03-05	1
7			1.6	PRT00141	A	PRT10141	ENCLOSURE LID	MDF Medium Density Fiberboard	Production	http://se-vps/AutodeskTC/se-vps/Ve	2016-03-05	1
8			1.7	PRT00182	A	PRT00182	WORKSHEET	Gold	Production	http://se-vps/AutodeskTC/se-vps/Ve	2016-03-05	1
9			1.8	PRT00138	A	PRT10138	X-AXIS SHAFT SUPPORT W/MOTC	MDF Medium Density Fiberboard	Production	http://se-vps/AutodeskTC/se-vps/Ve	2016-03-05	1
10			1.9	PRT00142	A	PRT10142	ENCLOSURE RIGHT SIDE	MDF Medium Density Fiberboard	Production		2016-03-05	1
11			1.10	NEMA 17 with T5 Pulley	A	NEMA 17 with T5 Pulley	MOTOR		Production		2016-03-05	1
12			1.10.1	Base	A	Base	MOTOR BODY_2	solidworks materials Acero aleado	Production		2016-03-05	1
13			1.10.2	Cuerpo	A	Cuerpo	MOTOR BODY_1	solidworks materials Acero aleado	Production		2016-03-05	1
14			1.10.3	Tapa	A	Tapa	TAPA	solidworks materials Acero aleado	Production		2016-03-05	1
15			1.10.4	Eje	A	Eje	MOTOR BODY	solidworks materials Acero aleado	Production		2016-03-05	1
16			1.11	PRT00146	A	PRT10146	Threaded rods	Steel, Mild	Production		2016-03-05	1
17			1.12	ASY00059	A	ASY10059	12MM SHAFT SUPPORT		Production		2016-03-05	4
18			1.12.1	SHF12	A	SHF12	SHAFT FITTING	Aluminum	Production		2016-03-05	1
19			1.12.2	ISO 4762 - M3 x 10	A	ISO 4762 M3 x 10	Hexagon Socket Head Cap Screw		Production		2016-03-05	1
20			1.13	PRT00148	A	PRT10148	M10 THREADED BAR	Generic	Production		2016-03-05	2

Page 1 of 5

Displaying 1 - 25 of 124

Import Settings Problems (50)

Project Name
ASY00070

Project Description
First production Release of ASY00070 from Vault

For new records
Select...

For matching records
Select...

For new picklist values
Use blank instead

Strictly enforce all validations and constraints

Ignore validations and constraints whenever possible

For new BOM relationships
Select...

For existing BOM relationships
Select...



The PLM View - Fusion Lifecycle UI Overview

What does the Fusion Lifecycle UI Give You?

Control of Product &
Project Data



Streamlined Processes



Accountability &
Traceability



Information Access



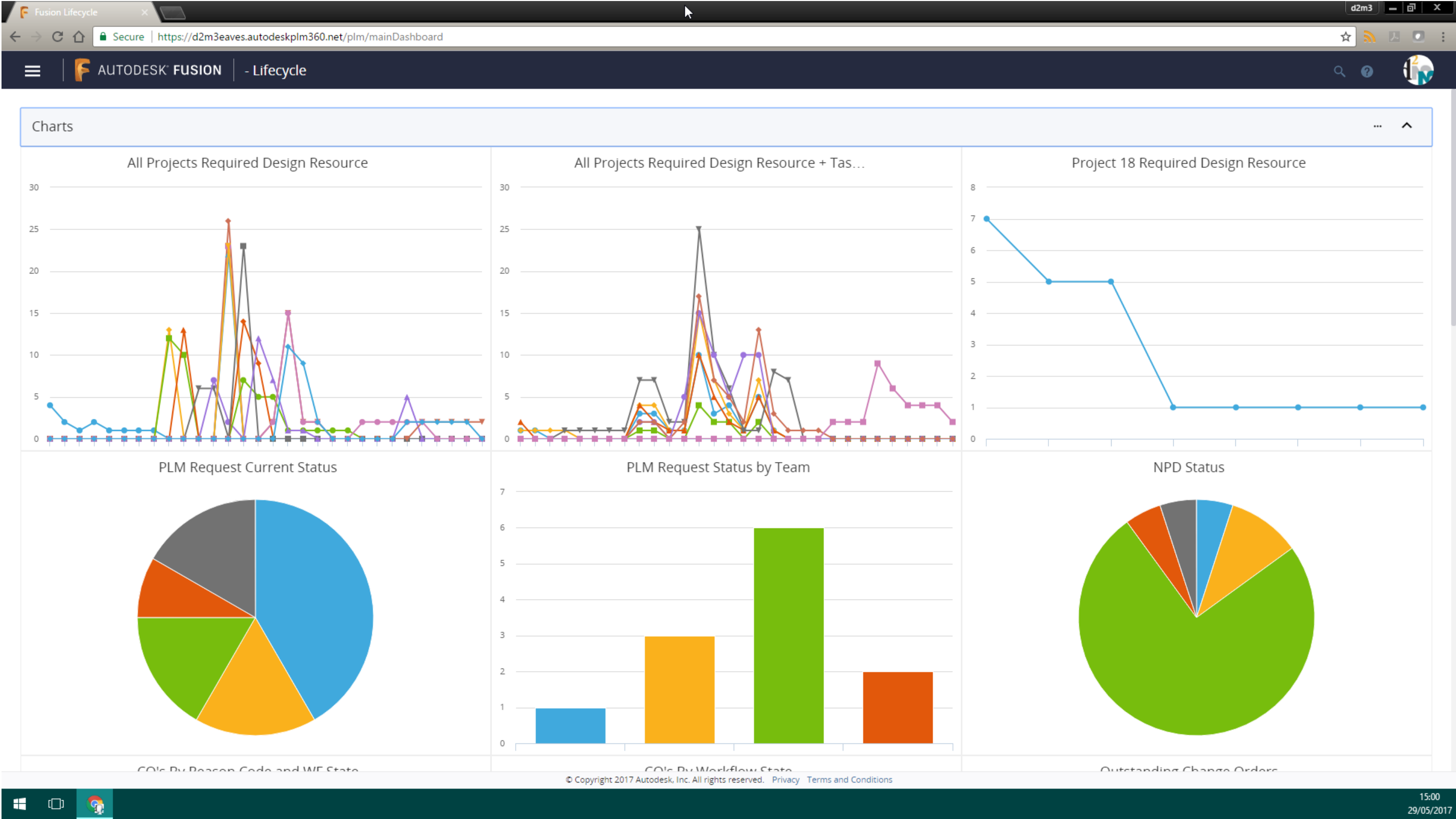
Real-time Visibility



Collaboration

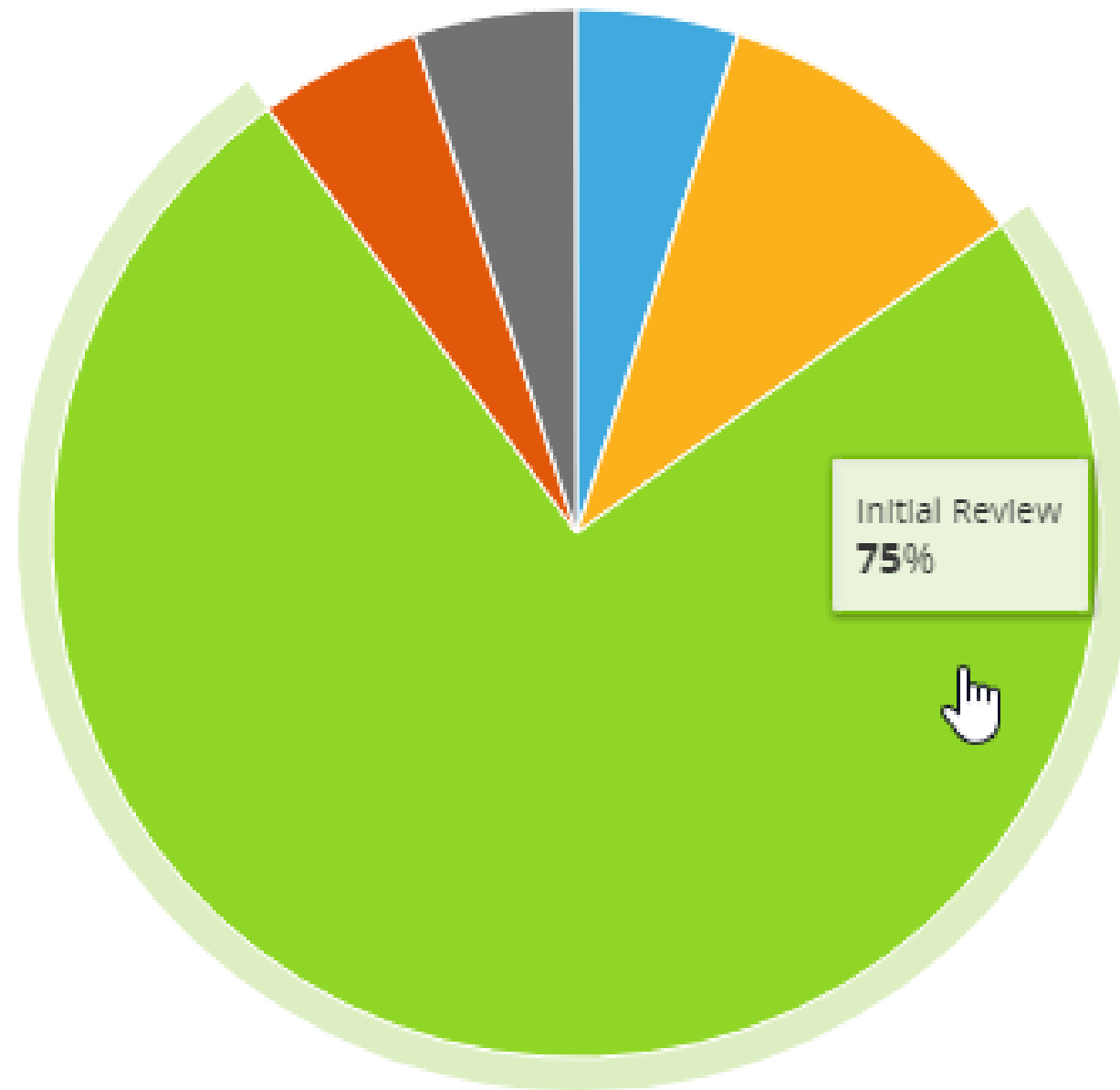


Home Page – View Your Data, Your Way



Home Page – View Your Data, Your Way

NPD Status



Home Page – What have I been asked to do?

Fusion Lifecycle

Secure | https://d2m3eaves.autodeskplm360.net/plm/mainDashboard

d2m3

AUTODESK FUSION

- Lifecycle

Charts

...

My Outstanding Work

	Due Date	Item Name	Workspace	State	State Set On	State Set By
	23/05/2017	NPI000006 - Larger Domestic Model of Henry	2. DEMO - NPD/NPI	Milestone Approvals	22/05/2017	Simon Eaves
		PREQ000013 - New Product Concept	1. DEMO - PLM Request	Awaiting Project Team ...	15/05/2017	Simon Eaves
		AU000015 - Numatic International Ltd -	Audits	Create	10/05/2017	Simon Eaves
		PREQ000009 - Address Motor Overheating Issues	1. DEMO - PLM Request	Awaiting Project Team ...	08/05/2017	Ian Kellsall
	14/05/2017	NPI000008 - New Hand Held Henry	2. DEMO - NPD/NPI	Feasibility WIP	08/05/2017	Simon Eaves
		NPI000003 - New Product Introduction	2. DEMO - NPD/NPI	Feasibility WIP	04/05/2017	Simon Eaves
	23/04/2017	NI000002 - New Home Flatbed Laser Engraver	New Product Introduction	[01b] Gate 1 Review (In...	31/03/2017	Simon Eaves
		CO000008 - Move to Design	6. DEMO - Change Orders	Create	28/03/2017	Simon Eaves
	17/10/2016	CA000002 - To resolve issue with an over heating power supply	Corrective / Preventative Actions	Create	29/09/2016	Simon Eaves

My Bookmarks

My Recently Viewed Items

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15:01
29/05/2017

Home Page – Where can I go?

Fusion Lifecycle

Secure | https://d2m3eaves.autodesklpm360.net/plm/mainDashboard

d2m3 Apps d2m3 EPDM FLC FLC Demo FLC Projects Scripting Social/Profiles Travel # Autodesk Main Slack

AUTODESK FUSION - Lifecycle

< Back Charts

Non Conformances

My Outstanding Work Corrective / Preventative Actions

Return Merchandise Authorization

Due Date	Item Name	Workspace	State	State Set On	State Set By
23/05/2017	NPI000006 - Larger Domestic Model of Henry	2. DEMO - NPD/NPI	Milestone Approvals	22/05/2017	Simon Eaves
	PREQ000013 - New Product Concept	1. DEMO - PLM Request	Awaiting Project Team ...	15/05/2017	Simon Eaves
	AU000015 - Numatic International Ltd -	Audits	Create	10/05/2017	Simon Eaves
	PREQ000009 - Address Motor Overheating Issues	1. DEMO - PLM Request	Awaiting Project Team ...	08/05/2017	Ian Kelsall
14/05/2017	NPI000008 - New Hand Held Henry	2. DEMO - NPD/NPI	Feasibility WIP	08/05/2017	Simon Eaves
	NPI000003 - New Product Introduction	2. DEMO - NPD/NPI	Feasibility WIP	04/05/2017	Simon Eaves
23/04/2017	NI000002 - New Home Flatbed Laser Engraver	New Product Introduction	[01b] Gate 1 Review (In...	31/03/2017	Simon Eaves
	CO000008 - Move to Design	6. DEMO - Change Orders	Create	28/03/2017	Simon Eaves
17/10/2016	CA000002 - To resolve issue with an over heating power supply	Corrective / Preventative Actions	Create	29/09/2016	Simon Eaves

My Bookmarks

My Recently Viewed Items

https://d2m3eaves.autodesklpm360.net/plm/workspaces/19

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Home Page – Where can I go?



Engineering Product Management

The Engineering Product Management powered by Autodesk PLM 360 provides a central view into all of the processes related to your product.

[More information](#)



Supplier Management

Supply and Procurement applications in Autodesk PLM 360 help everyone in the organization involved with the negotiation, purchase, and receipt of goods and services work from Supplier

[More information](#)



Quality Management

Quality Management Powered by Autodesk™ PLM 360 delivers the tools manufacturers need to collect and analyze quality data, define inspection standards, track and communicate non-

[More information](#)



Engineering Change Management

The Engineering Change Management App powered by Autodesk PLM 360 provides a repeatable request, review, analysis, and change implementation process that is flexible for a number

[More information](#)



Lean 5S Auditing

The Lean 5S Audit app, helps you to check that all the 5S processes have been carried out correctly. This app helps you to audit the processes for Sort, Straighten, Shine, Standardisation and Sustain.

[More information](#)



Manufacturing Asset Management

Get the tools you need to collect and analyze data related to assets so you can keep them available and in good shape.

[More information](#)



Equipment calibration

Equipment calibration is a necessary part of any production line, calibration can be painless with proper planning and tracking. With Equipment calibration app you can add all of your calibration

[More information](#)



FMEA Analysis

Use the Failure mode and effect analysis (FMEA) app to review as your components, assemblies, and subsystems and record the results for each type for Functional, Design or Process FMEA analysis.

[More information](#)



Deviation / Waiver Request

The Deviation / Waiver Request provide an exception to the normal standard process allowing the use of a part or design during a short period of time, certain quantity build, or design phase.

[More information](#)



Accident Reports

Avoid penalties and keep a complete record of work-related injuries with the Accident Report App powered by Autodesk PLM 360.

[More information](#)



Design Review

Manage your design review requirements, issues, concerns, and discuss alternatives with the Design Review App powered by Autodesk PLM 360.

[More information](#)



Field Failure Request

The Field Failure Request App powered by Autodesk PLM 360 enables your field technicians to communicate quality issues onsite on any device, and at any time.

[More information](#)



Return Merchandise Authorization

The Return Merchandise Authorization App powered by Autodesk PLM 360 provides a standardized and repeatable means to manage the RMA process.

[More information](#)



New Product Introduction (NPI)

The NPI App powered by Autodesk PLM 360 provides utilizes an industry standard stage gate process keeping your new product's introduction to the market on schedule and on budget.

[More information](#)



Document Control

The Document Control App powered by Autodesk PLM 360 provides an effective and secure means to distribute, enforce standards, and manage change of your documents.

[More information](#)



Customer Management

The Customer Management App powered by Autodesk PLM 360 can connect your customer data to all of your processes currently or soon to be managed by Autodesk PLM 360.

[More information](#)



Marketing Asset Management

Marketing Asset Management app can be used for the management, control, tracking, and distribution of brand assets, marketing materials, sales tools and creative materials.

[More information](#)



CE Marking

Use the CE Marking PLM 360 App to manage your approval stages needed for the affixing of the CE marking on your product. Track when the EC Declaration Of Conformity is completed and get a

[More information](#)



Autodesk Services Implementation Tracker

Manage your Autodesk implementation with the Autodesk Services Implementation Tracker, powered by PLM 360. Build your implementation plan in Phases and Sprints, use the project

[More information](#)



Supplier Quarterly Business Review (SQBR)

Supplier Quarterly Business Review (SQBR) helps everyone in the organization to visualize the Supplier Performance.

[More information](#)

The background of the slide features a complex, organic wireframe mesh pattern in a light gray color. This pattern is overlaid on a solid blue horizontal bar that spans the width of the slide. The blue bar has a slight gradient, being darker on the left and lighter on the right. The text 'The Imported BoM Item' is written in a white, sans-serif font on the left side of the blue bar.

The Imported BoM Item

Fusion Lifecycle BoM Management

In this section we will see...

- Item & BOM Management with Lifecycle Control
- Configurable, context-specific BoM views
- Revision Effectivity
- BoM Comparison



Charts

⋮ ▼

My Outstanding Work

🔄 ^

			Due Date	Item Name	Workspace	State	State Set On	State Set By
			23/05/2017	NPI000006 - Larger Domestic Model of Henry	2. DEMO - NPD/NPI	Milestone Approvals	22/05/2017	Simon Eaves
				PREQ000013 - New Product Concept	1. DEMO - PLM Request	Awaiting Project Team ...	15/05/2017	Simon Eaves
				AU000015 - Numatic International Ltd -	Audits	Create	10/05/2017	Simon Eaves
			14/05/2017	PREQ000009 - Address Motor Overheating Issues	1. DEMO - PLM Request	Awaiting Project Team ...	08/05/2017	Ian Kelsall
				NPI000008 - New Hand Held Henry	2. DEMO - NPD/NPI	Feasibility WIP	08/05/2017	Simon Eaves
				NPI000003 - New Product Introduction	2. DEMO - NPD/NPI	Feasibility WIP	04/05/2017	Simon Eaves
			23/04/2017	NI000002 - New Home Flatbed Laser Engraver	New Product Introduction	[01b] Gate 1 Review (In...	31/03/2017	Simon Eaves
				CO000008 - Move to Design	6. DEMO - Change Orders	Create	28/03/2017	Simon Eaves
			17/10/2016	CA000002 - To resolve issue with an over heating power supply	Corrective / Preventative Actions	Create	29/09/2016	Simon Eaves

My Bookmarks

▼

My Recently Viewed Items

▼

Home > Items and BOMs

Item Descriptor

Item Number

ASY00070 - MDF CNC LASER ENGRAVER

ASY00070

ASY00069 - Large BED CNC LASER ENGRAVER

ASY00069

ASY00068 (A) - CNC Aluminium Base LASER ENGR...

ASY00068 (A)

ASY00057 - Medium Sized CNC LASER ENGRAVER

ASY00057

ASY00070 - MDF CNC LASER ENGRAVER

Pending

Unreleased

[REV:w] v

Details

Attachments

Bill of Materials

Where Used

Related Changes

Associated Design Reviews

Milestones

Change Log

Edit

Summary (1 of 7)

Item Number

ASY00070

Description

MDF CNC LASER ENGRAVER

Unit of Measure

Each

ERP Part Number

Vault BOM Details (2 of 7)

Material

Title

ASY00070

Classification (3 of 7)

Classification

BOM

Level 2

PRODUCT

Level 3

Class Description

900 - BOM - PRODUCT -

Class Number

900

Environmental Compliance (4 of 7)

Secure

https://d2m3eaves.autodeskplm360.net/plm/workspaces/57/items/itemDetails?view=split&tab=details&mode=view&itemId=urn%60adsk.plm%60tenant.workspace.item%60D2M3EAVES,57,17126

Apps

d2m3

EPDM

FLC

FLC Demo

FLC Projects

Scripting

Social/Profiles

Travel

Autodesk Main Slack

AUTODESK FUSION

- Lifecycle

2

14:44

31/05/2017



The Bill Of Material Tab

Fusion Lifecycle

Secure | https://d2m3eaves.autodesklm360.net/plm/workspaces/57/items/itemDetails?view=split&tab=details&mode=view&itemId=urn%60adsk,plm%60tenant,workspace,item%60D2M3EAVES,57,17126

Apps d2m3 EPDM FLC FLC Demo FLC Projects Scripting Social/Profiles Travel # Autodesk Main Slack

≡

AUTODESK FUSION

- Lifecycle

Home > Items and BOMs

Item Descriptor

Item Number

ASY00070 - MDF CNC LASER ENGRAVER

ASY00070

ASY00069 - Large BED CNC LASER ENGRAVER

ASY00069

ASY00068 (A) - CNC Aluminium Base LASER ENGR...

ASY00068 (A)

ASY00057 - Medium Sized CNC LASER ENGRAVER

ASY00057

ASY00070 - MDF CNC LASER ENGRAVER

[REV:w] ▾

^

▾

★

Actions ▾

⌵

✕

🕒 Pending

📦 Unreleased

Details

Attachments

Bill of Materials

Where Used

Related Changes

Associated Design Reviews

Milestones

Change Log

Edit

Summary (1 of 7)

^

Item Number

ASY00070

Description

MDF CNC LASER ENGRAVER

Unit of Measure

Each

ERP Part Number

Vault BOM Details (2 of 7)

^

Material

Title

ASY00070

Classification (3 of 7)

^

Classification

BOM

Level 2

PRODUCT

Level 3

Class Description

900 - BOM - PRODUCT -

Class Number

900

Environmental Compliance (4 of 7)

^

01/06/2017

The background of the slide features a complex, organic wireframe mesh pattern in a light gray color. This pattern is overlaid on a solid blue horizontal bar that spans the width of the slide. The text 'Related BoM Items' is written in white on the blue bar.

Related BoM Items

Home > Items and BOMs

Item Descriptor

Item Number

ASY00070 - MDF CNC LASER ENGRAVER

ASY00070

ASY00069 - Large BED CNC LASER ENGRAVER

ASY00069

ASY00068 (A) - CNC Aluminium Base LASER ENGR...

ASY00068 (A)

ASY00057 - Medium Sized CNC LASER ENGRAVER

ASY00057

ASY00070 - MDF CNC LASER ENGRAVER

[REV:w]

Pending

Unreleased

Details

Attachments

Bill of Materials

Where Used

Related Changes

Associated Design Reviews

Milestones

Change Log

Edit

Add

Remove

...

Views:

Default View Full

Default View Full as of Today using the Released Revisions configuration

#	Descriptor	Material	Quantity	Units			Lifecycle
0.0	ASY00070 - MDF CNC LASER ENGRAVER [...]		0.00				Working
1.1	PRT00131 - BASE PLATE [REV:A]	MDF Medium Den...	1.00	EA			mBOM
1.2	PRT00143 - CASE - LEFT SIDE [REV:A]	MDF Medium Den...	1.00	EA			mBOM
1.3	PRT00144 - CASE - LEFT SIDE [REV:A]	MDF Medium Den...	1.00	EA			mBOM
1.4	PRT00137 - X-AXIS SHAFT SUPPORT [REV:...	MDF Medium Den...	1.00	EA			mBOM
1.5	PRT00132 - REAR COVER [REV:A]	MDF Medium Den...	1.00	EA			mBOM
1.6	PRT00141 - ENCLOSURE LID [REV:A]	MDF Medium Den...	1.00	EA			mBOM
1.7	PRT00138 - X-AXIS SHAFT SUPPORT W/M...	MDF Medium Den...	1.00	EA			mBOM
1.8	PRT00142 - ENCLOSURE RIGHT SIDE [REV...	MDF Medium Den...	1.00	EA			mBOM
> 1.9	NEMA 17 with T5 Pulley - MOTOR [REV:A]		1.00	EA			mBOM
1.10	PRT00146 - Threaded rods [REV:A]	Steel, Mild	1.00	EA			mBOM
> 1.11	ASY00059 - 12MM SHAFT SUPPORT [REV:...		4.00	EA			mBOM
1.12	PRT00148 - M10 THREADED BAR [REV:A]	Generic	2.00	EA			mBOM
> 1.13	ASY00062 - MOTOR [REV:A]		1.00	EA			mBOM
1.14	SKF B7200 BE - Single row angular conta...		1.00	EA			mBOM

05/06/2017



Released Revisions

Home > Items and BOMs

ASY00057.Harness2 - HARNESS ASSEMBLY [REV:B] ▾

Locked

05/06/2017

mBOM

Details

Attachments

Bill of Materials

Where Used

Related Changes

Associated Design Reviews

Milestones

Change Log

Edit

Add

Remove

⋮

Views:

Default View Full ▾

Default View Full as of Today using the Released Revisions configuration

#	Descriptor	Material	Quantity	Units			Lifecycle
▾ 0.0	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:B]		0.00				mBOM
1.1	10AWG-RED.Wire4 - 10AWG-RED [REV:A]	Generic	450.00	mm			mBOM
1.2	10AWG-RED.Wire8 - 10AWG-RED [REV:A]	Generic	100.00	mm			mBOM
1.3	10AWG-RED.Wire11 - 10AWG-RED [REV:A]	Generic	390.33	mm			mBOM
1.4	10AWG-RED.Wire12 - 10AWG-RED [REV:A]	Generic	400.00	mm			mBOM
1.5	10AWG-GRY.Wire17 - 10AWG-GRY [REV:A]	Generic	350.00	mm			mBOM
1.6	10AWG-GRY.Wire20 - 10AWG-GRY [REV:A]	Generic	200.00	mm			mBOM
1.7	10AWG-BLU.Wire23 - 10AWG-BLU [REV:A]	Generic	147.30	mm			mBOM
1.8	10AWG-GRN.Wire25 - 10AWG-GRN [REV:A]	Generic	158.32	mm			mBOM
1.9	10AWG-ORG.Wire22 - 10AWG-ORG [REV:A]	Generic	174.19	mm			mBOM
1.10	10AWG-BLU.Wire28 - 10AWG-BLU [REV:A]	Generic	66.11	mm			mBOM
1.11	10AWG-BRN.Wire29 - 10AWG-BRN [REV:A]	Generic	42.14	mm			mBOM
1.12	10AWG-GRN.Wire30 - 10AWG-GRN [REV:A]	Generic	65.80	mm			mBOM
1.13	10AWG-BLU.Wire32 - 10AWG-BLU [REV:A]	Generic	1457.49	mm			mBOM
1.14	10AWG-BRN.Wire33 - 10AWG-BRN [REV:A]	Generic	1457.26	mm			mBOM

09:39

05/06/2017

ASY00057.Harness2 - HARNESS ASSEMBLY [REV:B] v

Locked | 05/06/2017 | mBOM

Details Attachments Bill of Materials Where Used Related Changes Associated Design Reviews Milestones Change Log

Edit Add Remove ... Views: Default View Full

Default View Full as of Today using the Released Revisions configuration

#	Descriptor	Material	Quantity	Units			Lifecycle
0.0	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:B]		0.00				mBOM
1.1	10AWG-RED.Wire4 - 10AWG-RED [REV:A]	Generic	450.00	mm			mBOM
1.2	10AWG-RED.Wire8 - 10AWG-RED [REV:A]	Generic	100.00	mm			mBOM
1.3	10AWG-RED.Wire11 - 10AWG-RED [REV:A]	Generic	390.33	mm			mBOM
1.4	10AWG-RED.Wire12 - 10AWG-RED [REV:A]	Generic	400.00	mm			mBOM
1.5	10AWG-GRY.Wire17 - 10AWG-GRY [REV:A]	Generic	350.00	mm			mBOM
1.6	10AWG-GRY.Wire20 - 10AWG-GRY [REV:A]	Generic	200.00	mm			mBOM
1.7	10AWG-BLU.Wire23 - 10AWG-BLU [REV:A]	Generic	147.30	mm			mBOM
1.8	10AWG-GRN.Wire25 - 10AWG-GRN [REV:A]	Generic	158.32	mm			mBOM
1.9	10AWG-ORG.Wire22 - 10AWG-ORG [REV:A]	Generic	174.19	mm			mBOM
1.10	10AWG-BLU.Wire28 - 10AWG-BLU [REV:A]	Generic	66.11	mm			mBOM
1.11	10AWG-BRN.Wire29 - 10AWG-BRN [REV:A]	Generic	42.14	mm			mBOM
1.12	10AWG-GRN.Wire30 - 10AWG-GRN [REV:A]	Generic	65.80	mm			mBOM
1.13	10AWG-BLU.Wire32 - 10AWG-BLU [REV:A]	Generic	1457.49	mm			mBOM
1.14	10AWG-BRN.Wire33 - 10AWG-BRN [REV:A]	Generic	1457.26	mm			mBOM

The background features a blue gradient bar at the bottom, transitioning from a darker blue on the left to a lighter blue on the right. Overlaid on this is a complex, light gray wireframe mesh pattern that resembles a distorted grid or a series of interconnected, flowing shapes.

BoM Comparison

ASY00057.Harness2 - HARNESS ASSEMBLY [REV:sA] v

05/03/2016 - 04/06/2017 | mBOM

Details Attachments Bill of Materials Where Used Related Changes Associated Design Reviews Milestones Change Log

Edit Add Remove ... Views: Default View Full

Default View Full as of 04/06/2017 using the Released Revisions configuration

#	Descriptor	Material	Quantity	Units			Lifecycle
0.0	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:sA]		0.00				mBOM
1.1	10AWG-RED.Wire4 - 10AWG-RED [REV:A]	Generic	383.48	mm			mBOM
1.2	10AWG-RED.Wire8 - 10AWG-RED [REV:A]	Generic	97.37	mm			mBOM
1.3	10AWG-RED.Wire11 - 10AWG-RED [REV:A]	Generic	390.33	mm			mBOM
1.4	10AWG-RED.Wire12 - 10AWG-RED [REV:A]	Generic	467.28	mm			mBOM
1.5	10AWG-GRY.Wire17 - 10AWG-GRY [REV:A]	Generic	349.57	mm			mBOM
1.6	10AWG-GRY.Wire20 - 10AWG-GRY [REV:A]	Generic	180.97	mm			mBOM
1.7	10AWG-BLU.Wire23 - 10AWG-BLU [REV:A]	Generic	147.30	mm			mBOM
1.8	10AWG-GRN.Wire25 - 10AWG-GRN [REV:A]	Generic	158.32	mm			mBOM
1.9	10AWG-ORG.Wire22 - 10AWG-ORG [REV:A]	Generic	174.19	mm			mBOM
1.10	10AWG-BLK.Wire27 - 10AWG-BLK [REV:B]	Generic	48.02	mm			mBOM
1.11	10AWG-BLU.Wire28 - 10AWG-BLU [REV:A]	Generic	66.11	mm			mBOM
1.12	10AWG-BRN.Wire29 - 10AWG-BRN [REV:A]	Generic	42.14	mm			mBOM
1.13	10AWG-GRN.Wire30 - 10AWG-GRN [REV:A]	Generic	65.80	mm			mBOM
1.14	10AWG-BLK.Wire31 - 10AWG-BLK [REV:B]	Generic	1462.23	mm			mBOM



The Working Version – Making a Change

ASY00057.Harness2 - HARNESS ASSEMBLY [REV:B] v

Locked | 05/06/2017 | mBOM

Details Attachments Bill of Materials Where Used Related Changes Associated Design Reviews Milestones Change Log

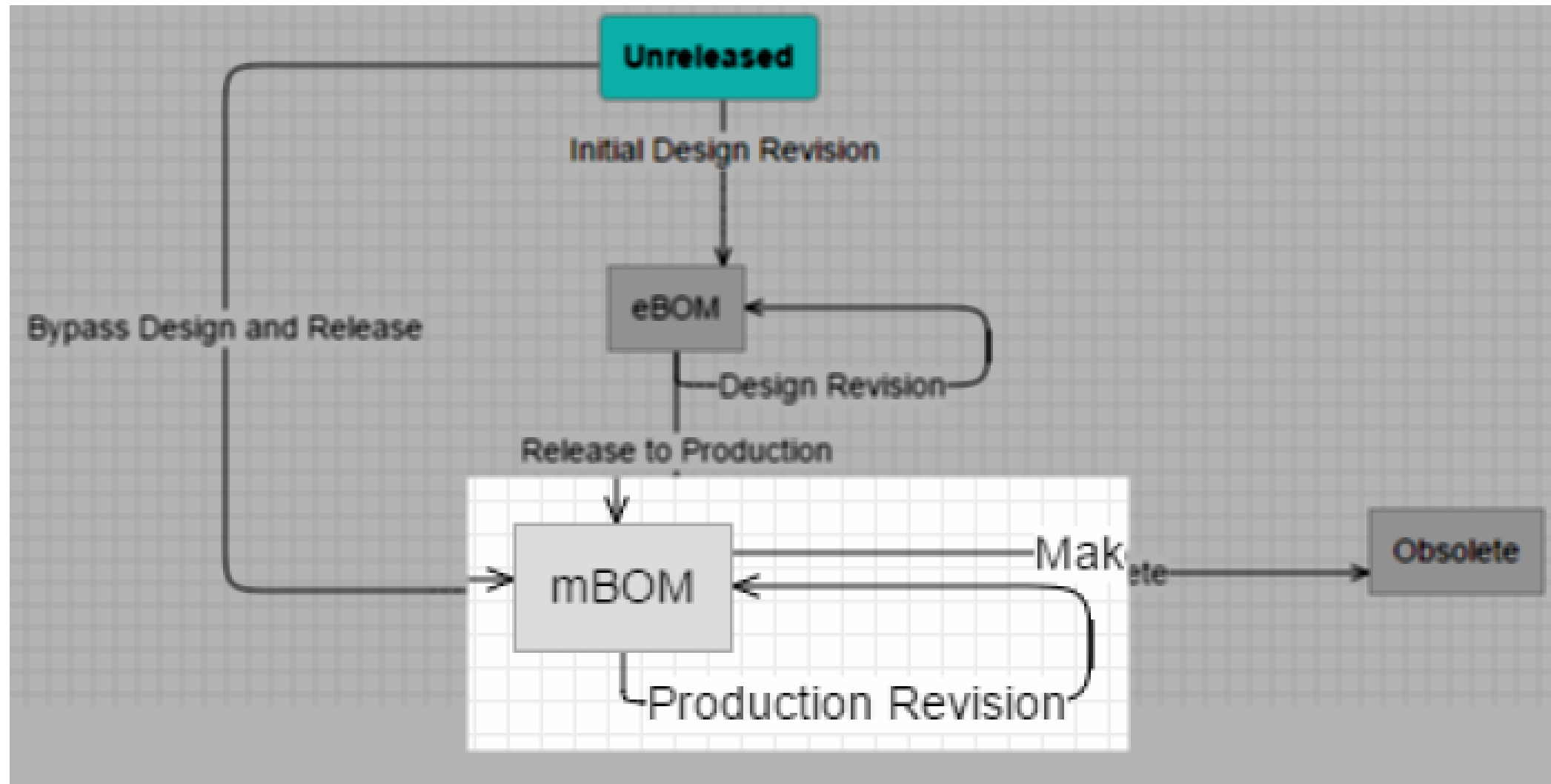
Edit Add Remove ... Views: Default View Full

Default View Full as of Today using the Released Revisions configuration						
#	Descriptor	Material	Quantity	Units		Lifecycle
0.0	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:B]		0.00			mBOM
1.1	10AWG-RED.Wire4 - 10AWG-RED [REV:A]	Generic	450.00	mm		mBOM
1.2	10AWG-RED.Wire8 - 10AWG-RED [REV:A]	Generic	100.00	mm		mBOM
1.3	10AWG-RED.Wire11 - 10AWG-RED [REV:A]	Generic	390.33	mm		mBOM
1.4	10AWG-RED.Wire12 - 10AWG-RED [REV:A]	Generic	400.00	mm		mBOM
1.5	10AWG-GRY.Wire17 - 10AWG-GRY [REV:A]	Generic	350.00	mm		mBOM
1.6	10AWG-GRY.Wire20 - 10AWG-GRY [REV:A]	Generic	200.00	mm		mBOM
1.7	10AWG-BLU.Wire23 - 10AWG-BLU [REV:A]	Generic	147.30	mm		mBOM
1.8	10AWG-GRN.Wire25 - 10AWG-GRN [REV:A]	Generic	158.32	mm		mBOM
1.9	10AWG-ORG.Wire22 - 10AWG-ORG [REV:A]	Generic	174.19	mm		mBOM
1.10	10AWG-BLU.Wire28 - 10AWG-BLU [REV:A]	Generic	66.11	mm		mBOM
1.11	10AWG-BRN.Wire29 - 10AWG-BRN [REV:A]	Generic	42.14	mm		mBOM
1.12	10AWG-GRN.Wire30 - 10AWG-GRN [REV:A]	Generic	65.80	mm		mBOM
1.13	10AWG-BLU.Wire32 - 10AWG-BLU [REV:A]	Generic	1457.49	mm		mBOM
1.14	10AWG-BRN.Wire33 - 10AWG-BRN [REV:A]	Generic	1457.26	mm		mBOM

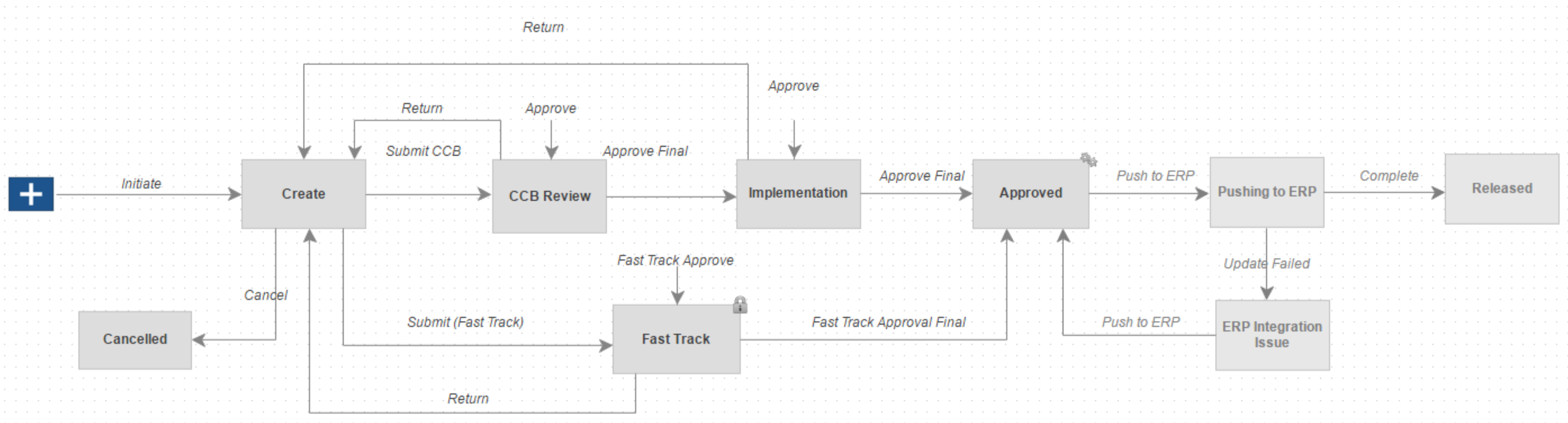
The background of the slide features a complex, abstract pattern of thin, grey lines forming a mesh or wireframe structure. This pattern is overlaid on a solid blue background that occupies the lower half of the image. The mesh lines create a series of interconnected, irregular shapes, giving the impression of a digital or architectural structure.

Controlling the Release Process – Change Orders

The Fusion Lifecycle, Lifecycle



An Engineering Change Process



ASY00057.Harness2 - HARNESS ASSEMBLY [REV:w]

Pending Working

Details Attachments Bill of Materials Where Used Related Changes Associated Design Reviews Milestones Change Log

Edit Add Remove Views: Default View Full

Default View Full as of Today using the Released Revisions configuration						
#	Descriptor	Material	Quantity	Units		Lifecycle
0.0	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:w]		0.00			Working
1.1	10AWG-RED.Wire4 - 10AWG-RED [REV:A]	Generic	400.00	mm		mBOM
1.2	10AWG-RED.Wire8 - 10AWG-RED [REV:A]	Generic	150.00	mm		mBOM
1.3	10AWG-RED.Wire11 - 10AWG-RED [REV:A]	Generic	425.00	mm		mBOM
1.4	10AWG-RED.Wire12 - 10AWG-RED [REV:A]	Generic	400.00	mm		mBOM
1.5	10AWG-GRY.Wire17 - 10AWG-GRY [REV:A]	Generic	350.00	mm		mBOM
1.6	10AWG-GRY.Wire20 - 10AWG-GRY [REV:A]	Generic	200.00	mm		mBOM
1.7	10AWG-BLU.Wire23 - 10AWG-BLU [REV:A]	Generic	147.30	mm		mBOM
1.8	10AWG-GRN.Wire25 - 10AWG-GRN [REV:A]	Generic	158.32	mm		mBOM
1.9	10AWG-ORG.Wire22 - 10AWG-ORG [REV:A]	Generic	174.19	mm		mBOM
1.10	10AWG-BLU.Wire28 - 10AWG-BLU [REV:A]	Generic	66.11	mm		mBOM
1.11	10AWG-BRN.Wire29 - 10AWG-BRN [REV:A]	Generic	42.14	mm		mBOM
1.12	10AWG-GRN.Wire30 - 10AWG-GRN [REV:A]	Generic	65.80	mm		mBOM
1.13	10AWG-BLU.Wire32 - 10AWG-BLU [REV:A]	Generic	1457.49	mm		mBOM
1.14	10AWG-BRN.Wire33 - 10AWG-BRN [REV:A]	Generic	1457.26	mm		mBOM

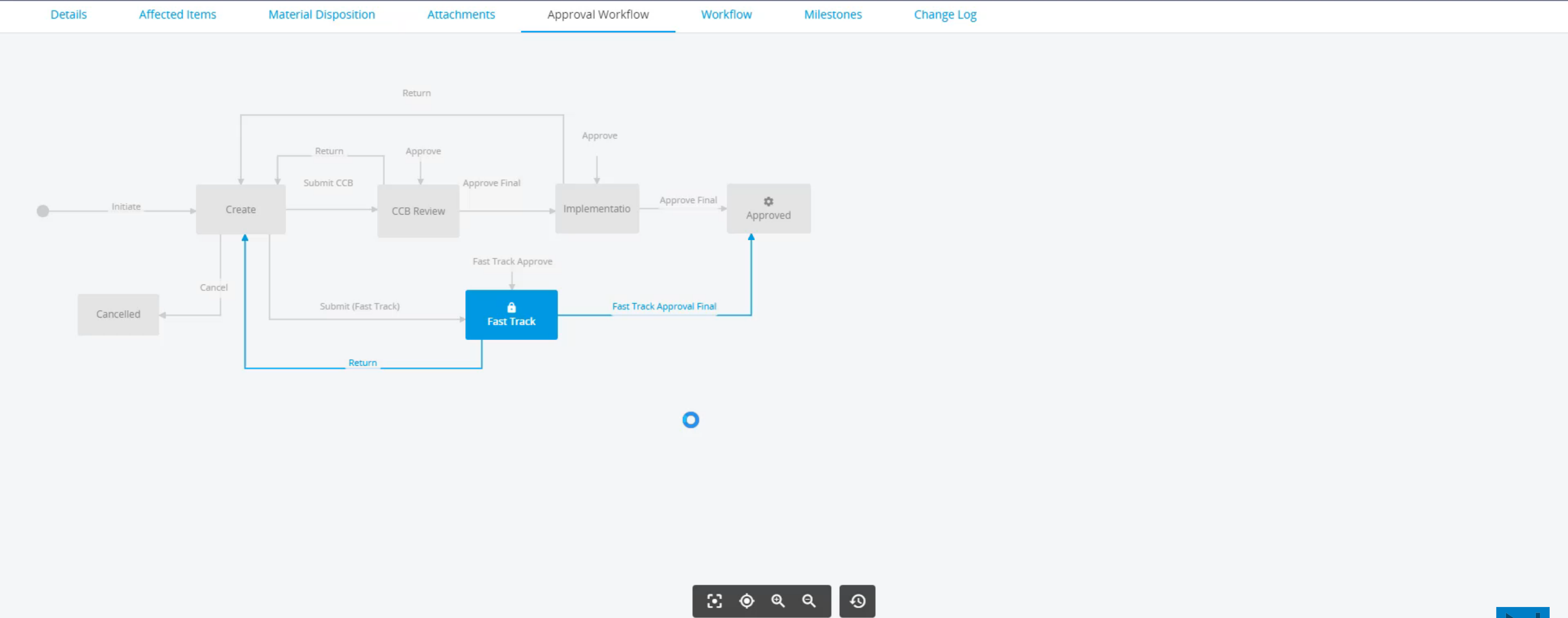
CO000023 - Amended harness with additional crimps and altered wire lengths.

Create

Details Affected Items Material Disposition Attachments Approval Workflow Workflow Milestones Change Log

Edit Add Remove ...

#	Item	Lifecycle	Effectivity	From	To
1	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:w]	Production Revision	05/06/2017	B	C



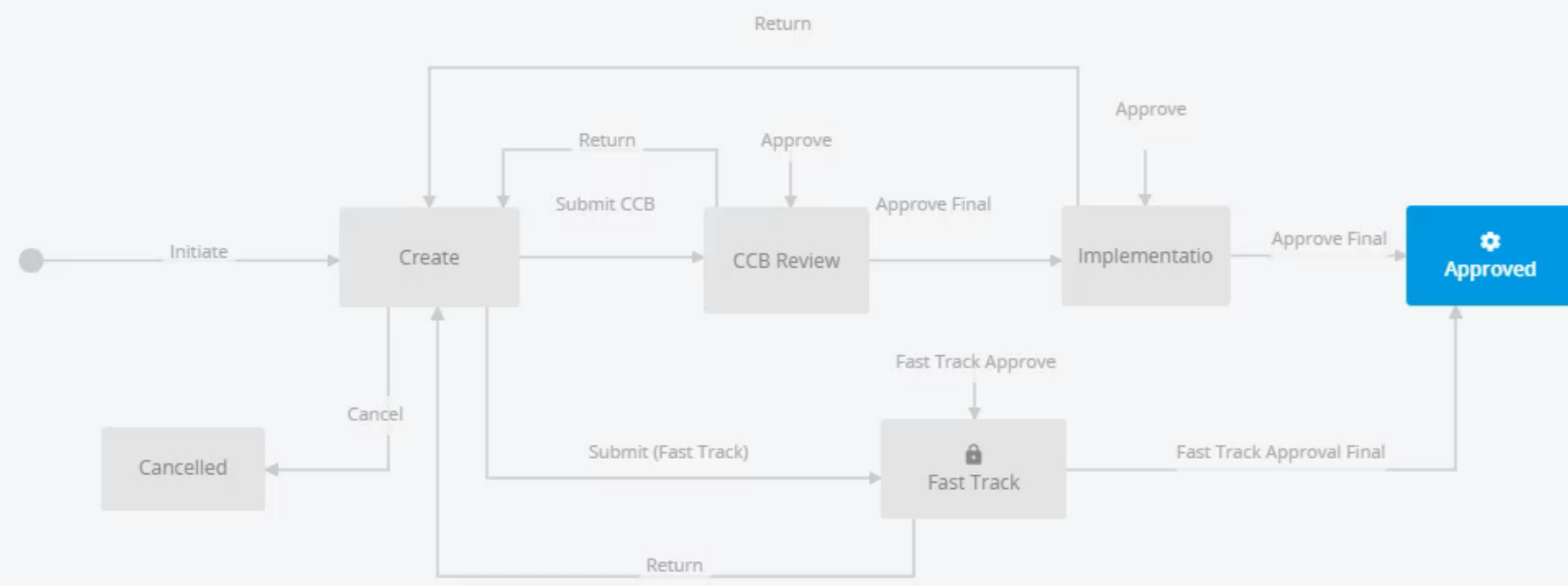


The Product BoM

CO000023 - Amended harness with additional crimps and altered wire lengths.

Locked Approved

Details Affected Items Material Disposition Attachments Approval Workflow Workflow Milestones Change Log



Home > Items and BOMs

Item Descriptor

Item Number

ASY00070 - MDF CNC LASER ENGRAVERASY00070

ASY00069 - Large BED CNC LASER ENGRAVERASY00069

ASY00068 (A) - CNC Aluminium Base LASER ENGR...ASY00068 (A)

ASY00057 - Medium Sized CNC LASER ENGRAVERASY00057

ASY00070 - MDF CNC LASER ENGRAVER

[REV:w]

Pending

Unreleased

Details

Attachments

Bill of Materials

Where Used

Related Changes

Associated Design Reviews

Milestones

Change Log

Edit

Add

Remove

...

Views: Default View Full

Default View Full as of Today using the Released Revisions configuration

#	Descriptor	Material	Quantity	Units	Lifecycle
> 1.15	ASY00058 - LASER ACTUATOR [REV:A]		1.00	EA	mBOM
1.16	PRT00149 - ENCLOSURE, BUTTON FACE [REV:A]	MDF Medium Den...	1.00	EA	mBOM
1.17	Arduino - ARDUINO UNO [REV:A]	Generic	1.00	EA	mBOM
1.18	Laser Diode Module - 50mW LASER MODULE [REV:A]	Generic	1.00	EA	mBOM
1.19	Switching power supply - STEP AP214 [REV:A]	Generic	1.00	EA	mBOM
1.20	Emergency stop switch - E-STOP SWITCH [REV:A]	Generic	1.00	EA	mBOM
1.21	ON_Off Switch - STEP AP203 [REV:A]	Generic	1.00	EA	mBOM
> 1.22	ASY00063 - RED PUSH BUTTON [REV:A]		1.00	EA	mBOM
> 1.23	ASY00064 - GREEN PUSH BUTTON [REV:A]		1.00	EA	mBOM
> 1.24	ASY00065 - YELLOW PUSH BUTTON [REV:A]		1.00	EA	mBOM
1.25	PRT00153 - TOP HAT [REV:A]	MDF Medium Den...	1.00	EA	mBOM
1.26	STEPPER DRIVER - ULN2003 DRIVER BOARD [REV:A]	Generic	2.00	EA	mBOM
> 1.27	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:C]		1.00	EA	mBOM
1.28	Screw GB 823 M5 x 14 - Cross recessed small pan head screws ...		1.00	EA	mBOM
1.29	Screw GB 823 M5 x 20 - Cross recessed small pan head screws ...		15.00	EA	mBOM

05/06/2017

Home > Items and BOMs

Item Descriptor

Item Number

ASY00070 - MDF CNC LASER ENGRAVER

ASY00070

ASY00069 - Large BED CNC LASER ENGRAVER

ASY00069

ASY00068 (A) - CNC Aluminium Base LASER ENGR...

ASY00068 (A)

ASY00057 - Medium Sized CNC LASER ENGRAVER

ASY00057

ASY00070 - MDF CNC LASER ENGRAVER

[REV:w]

Pending

Unreleased

Details

Attachments

Bill of Materials

Where Used

Related Changes

Associated Design Reviews

Milestones

Change Log

Edit

Add

Remove

...

Views:

Default View Full

Default View Full as of Today using the Released Revisions configuration

#	Descriptor	Material	Quantity	Units	Lifecycle
0.0	ASY00070 - MDF CNC LASER ENGRAVER [REV:w]		0.00		Working
1.1	PRT00131 - BASE PLATE [REV:A]	MDF Medium Den...	1.00	EA	mBOM
1.2	PRT00143 - CASE - LEFT SIDE [REV:A]	MDF Medium Den...	1.00		mBOM
	LEFT SIDE [REV:A]	MDF Medium Den...	1.00		mBOM
	HAF...		1.00		mBOM
	OVER [REV:A]	MDF Medium Den...	1.00		mBOM
1.6	PRT00141 - ENCLOSURE LID [REV:A]	MDF Medium Den...	1.00		mBOM
1.7	PRT00138 - X-AXIS SHAFT SUPPORT W/MOTOR [REV:A]	MDF Medium Den...	1.00	EA	mBOM
1.8	PRT00142 - ENCLOSURE RIGHT SIDE [REV:A]	MDF Medium Den...	1.00	EA	mBOM
> 1.9	NEMA 17 with T5 Pulley - MOTOR [REV:A]		1.00	EA	mBOM
1.10	PRT00146 - Threaded rods [REV:A]	Steel, Mild	1.00	EA	mBOM
> 1.11	ASY00059 - 12MM SHAFT SUPPORT [REV:A]		4.00	EA	mBOM
1.12	PRT00148 - M10 THREADED BAR [REV:A]	Generic	2.00	EA	mBOM
> 1.13	ASY00062 - MOTOR [REV:A]		1.00	EA	mBOM
1.14	SKF B7200 BE - Single row angular contact ball bearings SK...		1.00	EA	mBOM

LC





Excel

06/06/2017

Item & BoM Management with Lifecycle Control

Comprehensive information about component parts and assemblies is managed in a single, secure environment.

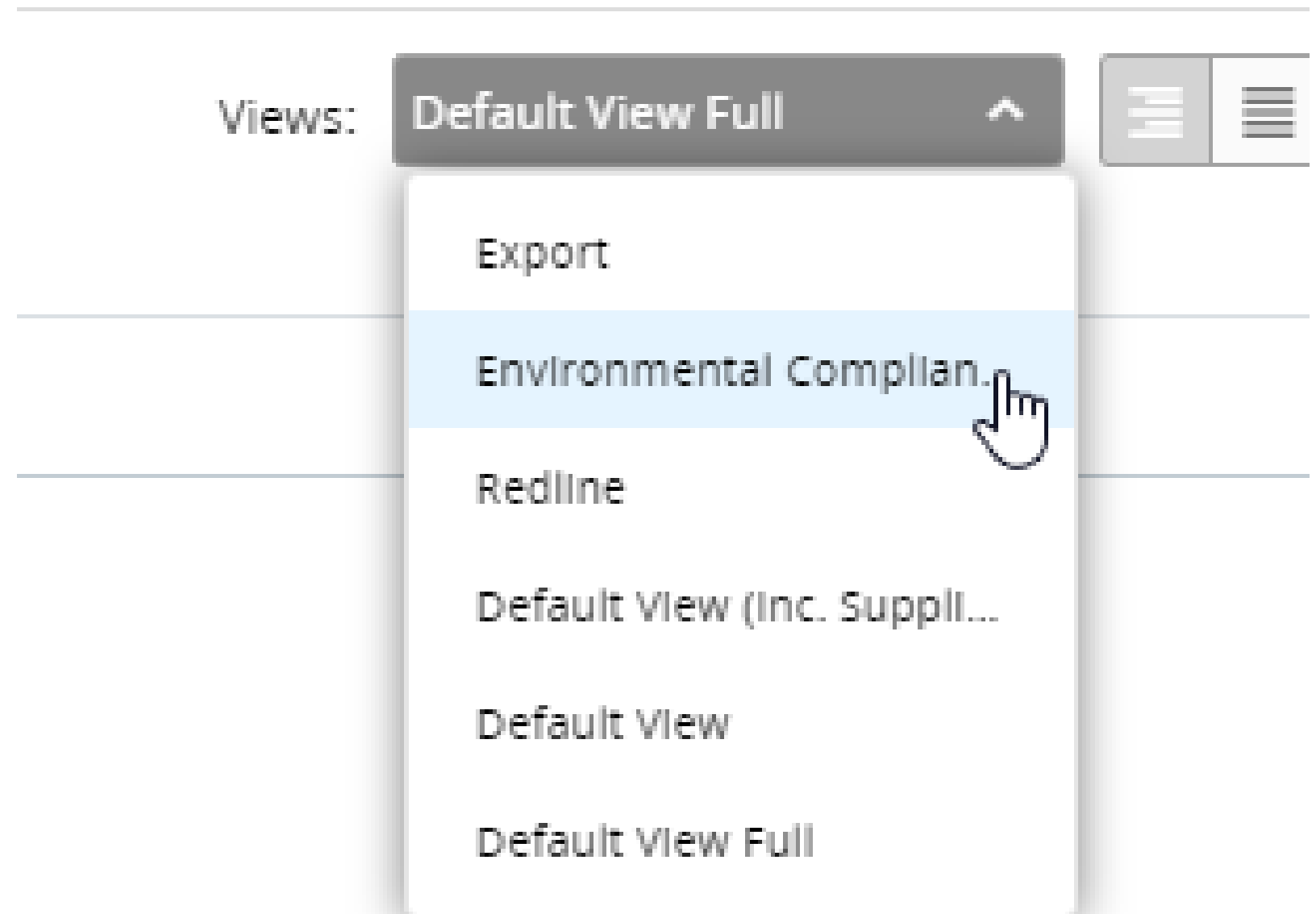
- Enable stakeholders to quickly and easily find and understand items
- Revision control ensures everyone is referencing the correct version
- Reduce the risk of downstream errors and re-work.

#	Descriptor	Material
 0.0	ASY00070 - MDF CNC LASER ENGRAVER [REV:w]	
 1.1	PRT00131 - BASE PLATE [REV:A]	MDF Medium Density Fiberboard
 1.2	PRT00143 - CASE - LEFT SIDE [REV:A]	MDF Medium Density Fiberboard
 1.3	PRT00144 - CASE - LEFT SIDE [REV:A]	MDF Medium Density Fiberboard
 1.4	PRT00137 - X-AXIS SHAFT SUPPORT [REV:A]	MDF Medium Density Fiberboard
 1.5	PRT00132 - REAR COVER [REV:A]	MDF Medium Density Fiberboard
 1.6	PRT00141 - ENCLOSURE LID [REV:A]	MDF Medium Density Fiberboard
 1.7	PRT00138 - X-AXIS SHAFT SUPPORT W/MOTOR [REV:A]	MDF Medium Density Fiberboard
 1.8	PRT00142 - ENCLOSURE RIGHT SIDE [REV:A]	MDF Medium Density Fiberboard
 1.9	NEMA 17 with T5 Pulley - MOTOR [REV:A]	
 2.1	Base - MOTOR BODY_2 [REV:A]	solidworks materials Acero aleado
 2.2	Cuerpo - MOTOR BODY_1 [REV:A]	solidworks materials Acero aleado
 2.3	Tapa - TAPA [REV:A]	solidworks materials Acero aleado
 2.4	Eje - MOTOR BODY [REV:A]	solidworks materials Acero aleado
 1.10	PRT00146 - Threaded rods [REV:A]	Steel, Mild
 1.11	ASY00059 - 12MM SHAFT SUPPORT [REV:A]	
 2.1	SHF12 - SHAFT FITTING [REV:A]	Aluminum
 2.2	ISO 4762 - M3 x 10 - Hexagon Socket Head Cap Screw [REV:A]	
 1.12	PRT00148 - M10 THREADED BAR [REV:A]	Generic

Configurable, context-specific BoM views

Multiple, configurable views of BoM structures can easily be defined.




- Enables users to view BoMs in the right context, viewing only relevant information to them
- Provides stakeholders across the organization with the real-time product information needed to make accurate decisions




Revision Effectivity


Components and sub-assemblies added to a BoM can be made effective from a specific date.

- New versions of an existing part can be phased in on a future date for easier production planning
- View a BoM configuration as active on a historic date offering an aspect of traceability
- Determine exactly what was manufactured or delivered on a particular day

Views: Default View Full   

Compare ☐

As of 05/06/2017 

C 

June 2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	01	02	03
04	05	06	07	08	09	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	01
02	03	04	05	06	07	08

BoM Comparison

Easily perform BoM comparisons on different revisions and configurations

- Quickly identify what's changed when releasing a new version of your product
- The BoM compare features offers an easy-to-understand, graphical indication of differences
- Meet compliance requirements by analysing previous iterations and history of a product

Comparing: [ASY00057.Harness2 - HARNESS ASSEM...](#) revision: C
Against: [ASY00057.Harness2 - HARNESS ASSEM...](#) revision: A

as of Today
as of 04/06/2017

with Released Revisions
with Released Revisions

	#	Descriptor	Material	Quantity	Units		Lifecycle
<input type="checkbox"/>	0.0	ASY00057.Harness2 - HARNESS ASSEMBLY [REV:C]		0.00			mBOM
		ASY00057.Harness2 - HARNESS ASSEMBLY [REV:A]					
<input type="checkbox"/>	1.1	10AWG-RED.Wire4 - 10AWG-RED [REV:A]	Generic	400.00	mm		mBOM
				383.48			
<input type="checkbox"/>	1.2	10AWG-RED.Wire8 - 10AWG-RED [REV:A]	Generic	150.00	mm		mBOM
				97.37			
<input type="checkbox"/>	1.3	10AWG-RED.Wire11 - 10AWG-RED [REV:A]	Generic	425.00	mm		mBOM
				390.33			
<input type="checkbox"/>	1.4	10AWG-RED.Wire12 - 10AWG-RED [REV:A]	Generic	400.00	mm		mBOM
				467.28			
<input type="checkbox"/>	1.5	10AWG-GRY.Wire17 - 10AWG-GRY [REV:A]	Generic	350.00	mm		mBOM
				349.57			
<input type="checkbox"/>	1.6	10AWG-GRY.Wire20 - 10AWG-GRY [REV:A]	Generic	200.00	mm		mBOM

Which means...

Fewer Mistakes...

- And when they happen the impact is reduced...

Increase Competitiveness...

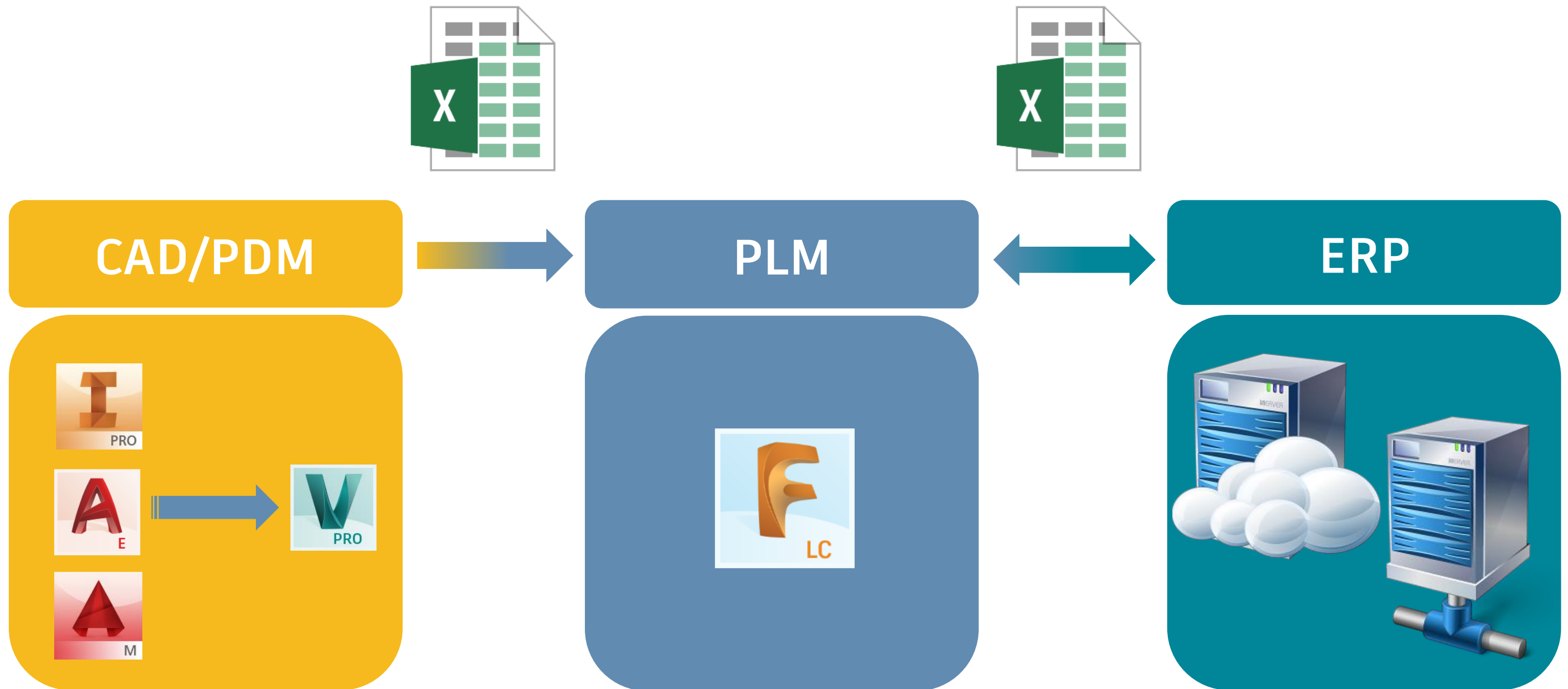
- Be Faster to Market
- And More Profitable
- Offering Better Quality Products



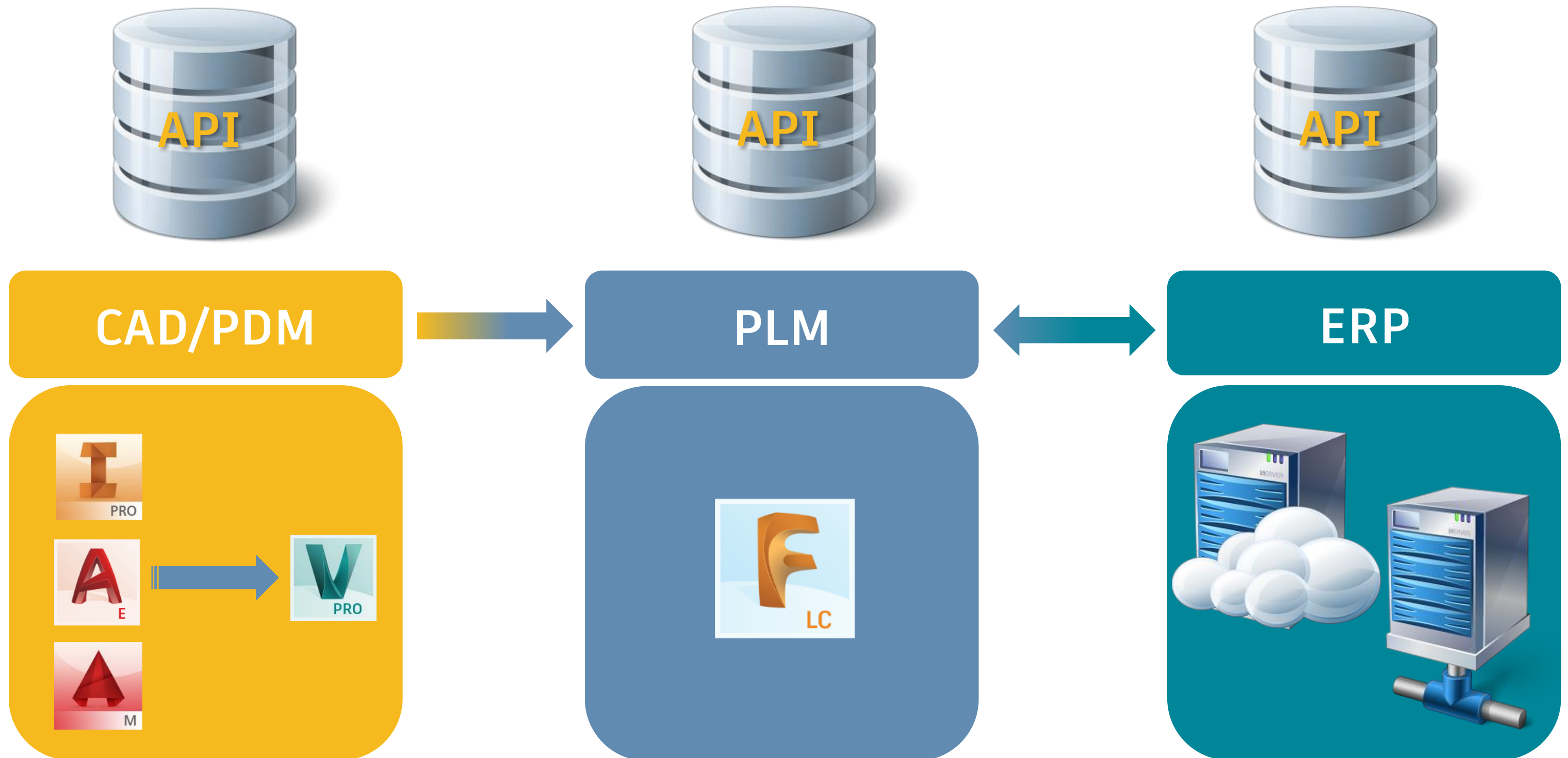
The background features a complex, organic wireframe mesh pattern in a light gray color, set against a white background. A solid blue horizontal bar spans the width of the image, positioned in the lower half. The text "Accelerate the Process" is written in white, sans-serif font, centered within this blue bar.

Accelerate the Process

Data Integration - Manual Process



Data Integration – Accelerate the Process



Autodesk Vault interface showing a 3D model of a suspension fork assembly. The left sidebar displays a tree view of the Vault structure, including designs and components. The main area shows the 3D model of the suspension fork assembly. The top menu bar includes options like File, Assemble, Simplify, Design, 3D Model, Sketch, Inspect, Tools, Manage, View, Environments, Data Standard, Get Started, and Vault. The bottom status bar shows the current file is 'Suspension-Fork...iam' and the user is 'My Home'.

Vault Structure:

- Designs_2017.ipj (Released) (Simple Release Process)
- Suspension-Fork_Complete.iam (Work in Progress) (Flexible Release Process)
 - Dial-Elastomer.iam (Work in Progress) (Flexible Release Process)
 - Dial-Base.ipt (Work in Progress) (Flexible Release Process)
 - Dial-cap.ipt (Work in Progress) (Flexible Release Process)
 - Dial-Cover.ipt (Work in Progress) (Flexible Release Process)
 - Dial.ipt (Work in Progress) (Flexible Release Process)
 - Elastomer.ipt (Work in Progress) (Flexible Release Process)
 - Spacer.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Brace.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Crown.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Damper.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Damper_MIR.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Piston.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Piston_MIR.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Slider.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Slider_MIR.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Tube.ipt (Work in Progress) (Flexible Release Process)
 - Fork-Tube_MIR.ipt (Work in Progress) (Flexible Release Process)
 - Head Tube.ipt (Work in Progress) (Flexible Release Process)
 - NF E 25-125 - M3 x 10.ipt (Released) (Simple Release Process)
 - UNI 5933 - M4 x 12.ipt (Released) (Simple Release Process)

Autodesk Fusion Lifecycle web interface showing a list of items and BOMs. The top navigation bar includes links for Apps, d2m3, EPDM, FLC, FLC Demo, FLC Projects, Scripting, Social/Profiles, Travel, and Autodesk Main Slack. The main content area displays a table of items with columns for Item Descriptor, Item Number, Release Letter, Description, and Lifecycle.

Item List:

Item Descriptor	Item Number	Release Letter	Description	Lifecycle
065-000335 - Panel ...	065-000335		Panel Mount Barrier Ter...	Unreleased
094-000001 - TEST I...	094-000001	A	TEST Item	mBOM
10AWG-BLK.Wire27...	10AWG-BLK.Wire27	B	10AWG-BLK	mBOM
10AWG-BLK.Wire31...	10AWG-BLK.Wire31	B	10AWG-BLK	mBOM
10AWG-BLK.Wire_3...	10AWG-BLK.Wire_38	B	10AWG-BLK	mBOM
10AWG-BLK.Wire_5 ...	10AWG-BLK.Wire_5	A	10AWG-BLK	mBOM
10AWG-BLU.Wire23...	10AWG-BLU.Wire23	A	10AWG-BLU	mBOM
10AWG-BLU.Wire28...	10AWG-BLU.Wire28	A	10AWG-BLU	mBOM
10AWG-BLU.Wire32...	10AWG-BLU.Wire32	A	10AWG-BLU	mBOM
10AWG-BLU.Wire_2...	10AWG-BLU.Wire_24	A	10AWG-BLU	mBOM
10AWG-BLU.Wire_3 ...	10AWG-BLU.Wire_3	A	10AWG-BLU	mBOM
10AWG-BLU.Wire_3...	10AWG-BLU.Wire_36	A	10AWG-BLU	mBOM
10AWG-BRN.Wire29...	10AWG-BRN.Wire29	A	10AWG-BRN	mBOM
10AWG-BRN.Wire33...	10AWG-BRN.Wire33	A	10AWG-BRN	mBOM
10AWG-BRN.Wire_2...	10AWG-BRN.Wire_2	A	10AWG-BRN	mBOM
10AWG-BRN.Wire_3...	10AWG-BRN.Wire_35	A	10AWG-BRN	mBOM
10AWG-GRN.Wire13...	10AWG-GRN.Wire13	A	10AWG-GRN	mBOM
10AWG-GRN.Wire14...	10AWG-GRN.Wire14	A	10AWG-GRN	mBOM

Data Integration – Accelerate with Jitterbit

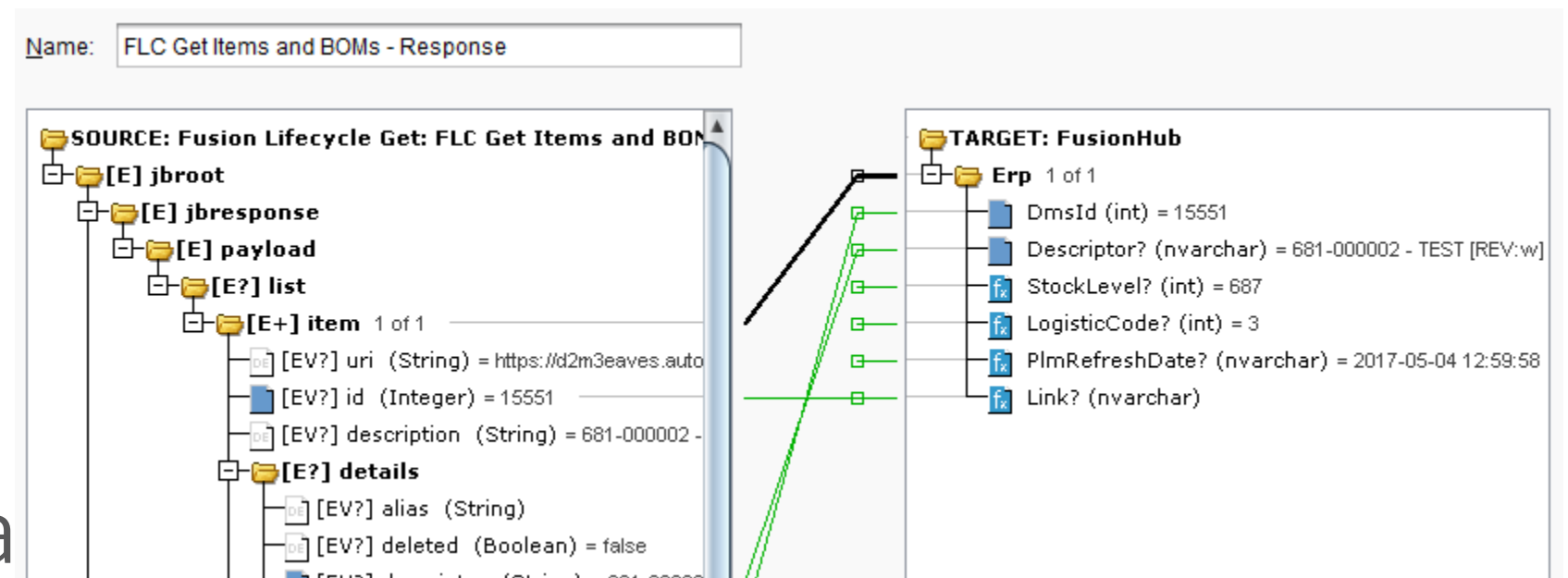
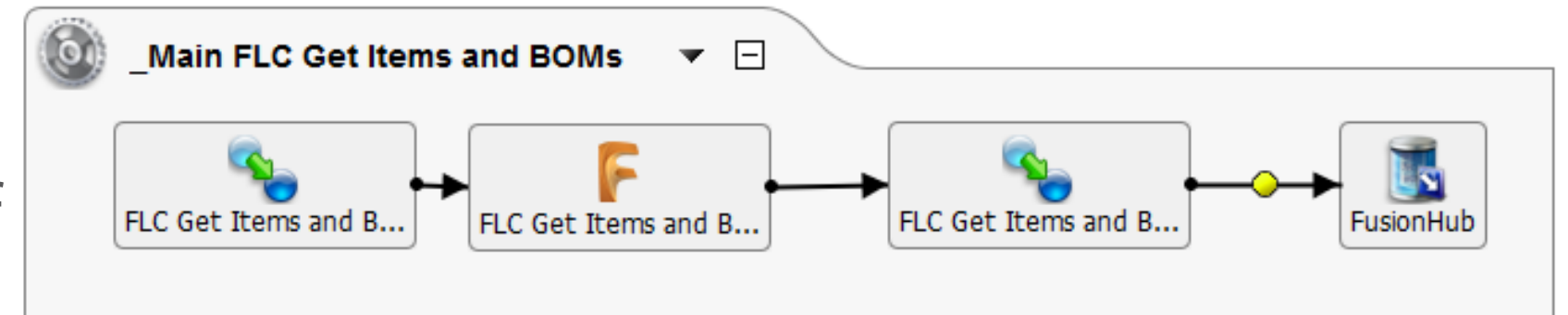


Jitterbit Integrations



Jitterbit Integrations

- Cloud based – always on
- Connectors for a wide variety of major applications and both traditional and SaaS
- Used by major organisation to securely move large volumes of data.
- Visual interface to 'wire up' data transformations





Summary

Accelerating your BoM from Design through to Production.

- Attendees of this class have learnt how to take an Autodesk Inventor BoM and use Fusion Lifecycle to modify, review and release the BoM into production.
 - You can identify the importance of accurate BoMs through the design and manufacturing process.
 - You can identify the challenges in producing accurate BoM information without automation.
 - You now understand how Fusion Lifecycle can reduce mistakes and improve productivity.
 - You have learnt what tools and APIs are available to help ensure BoM accuracy and improve automation.

Thank You....



www.d2m3.com

