

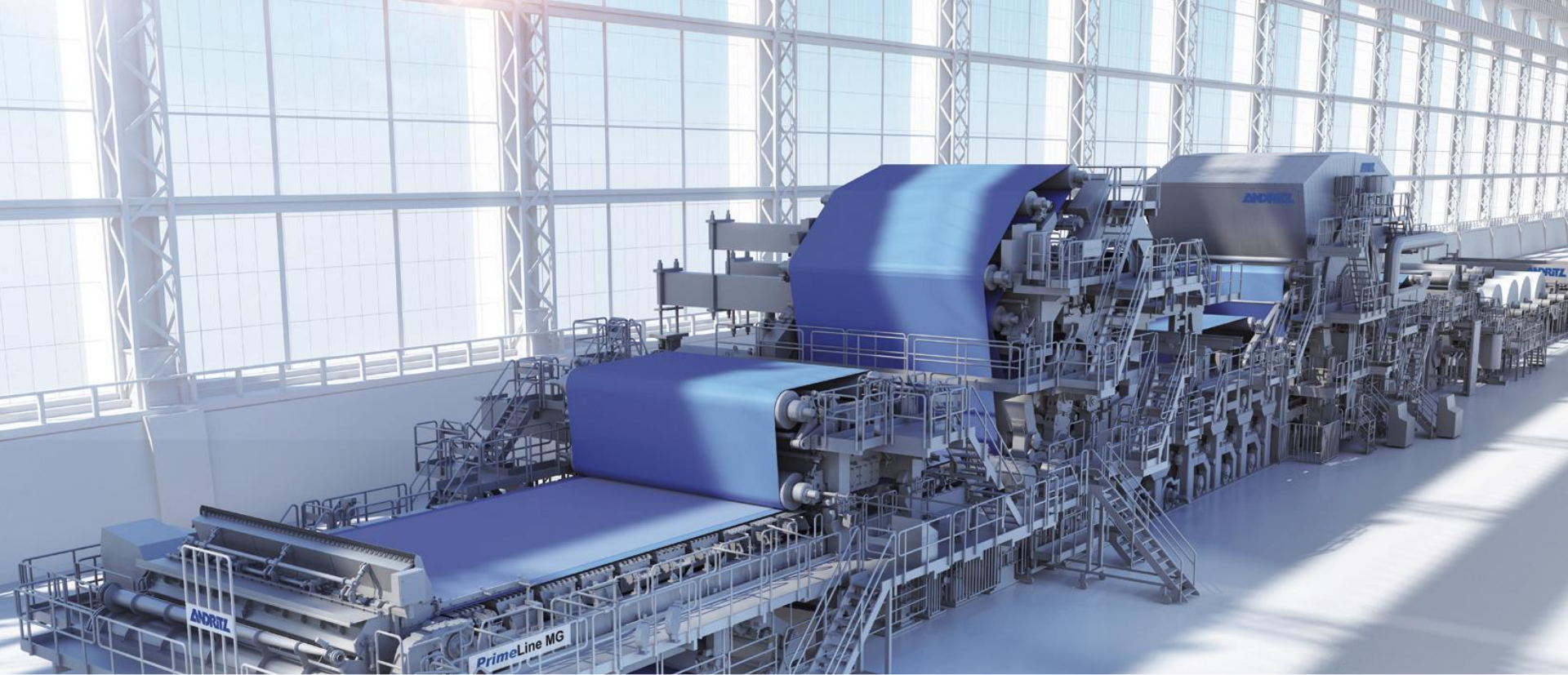
Autodesk Data & Platform

Autodesk Design & Manufacturing

Karl Osti

EMBA (M&A), M.Sc. Business Innovation, M.Sc. Business Informatics

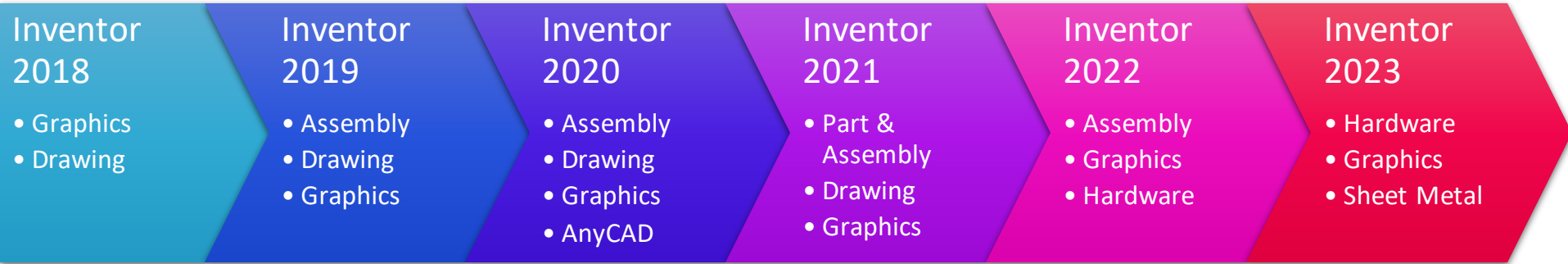
Sr. Manager, D&M Industry Strategy, Enterprise Customers



Autodesk Inventor: “Happy Birthday – 25th anniversary”

CADENAS: “Thank You for your partnership since the first days.”

Performance



64%

**Insufficient
cross-functional
communication**



Manual

- Integration of systems & silos
- Reconstruct to Analyze
- Waste capacity & resources



Complexity

- Spread across Systems
- Integration overhead
- Shadow IT



Context

- Inability to derive business value
- Inability to self-service
- Gap to data driven decision making

PROCUREMENT

MANUFACTURING

QUALITY



SERVICE

DESIGN
ENGINEERING

SUPPLIER

AUTOMATION



COLLABORATION



CONVERGENCE





Fusion

Find

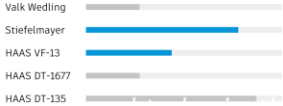


Good morning, Shaun



Project progress

More



Analytics

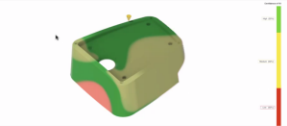
More

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My Insights

More



Generative Design Unlimited Access

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[Learn more](#)

My Tasks

More

Job	Due date	Description	State
C000074	10/19/2022	Document release	Review
C000074	03/31/2022	I think we need to redesign	In process
C000074	10/19/2022	Change manufactring...	Open
C000074	03/31/2022	Change manufactring...	Evaluation
C000074	10/19/2022	Change manufactring...	Open
C000074	03/31/2022	Change manufactring...	Open
C000074	10/19/2022	Initial release	Open

Activity stream

More

- David Gonzales:** Update the angle here, see my mark-up. 23 mins ago
- David Gonzales:** The hold need to update to 3mm. 1 day ago
- David Gonzales** Posted Welcome to project - RCCF Concrete 10 days ago

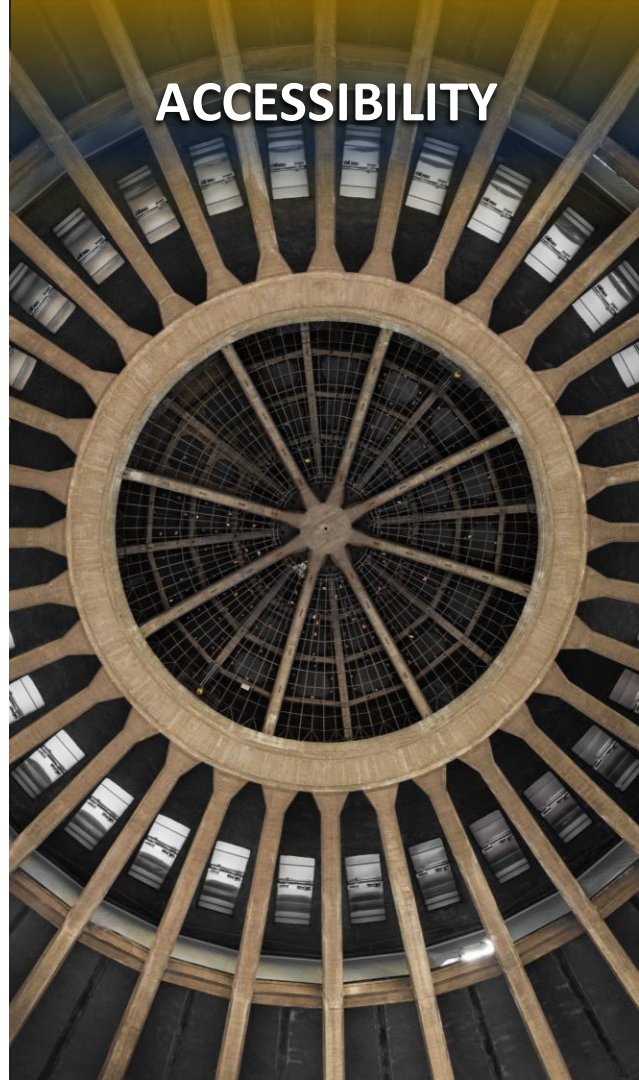
GRANULARITY



INTEROPERABILITY



ACCESSIBILITY



Product

- Line
- Unit
- Machine
- Function
- Module
- Assembly
- Subassembly
- Component
- Rawmaterial

IT

- IT System
- IT tool
- IT-db

Process

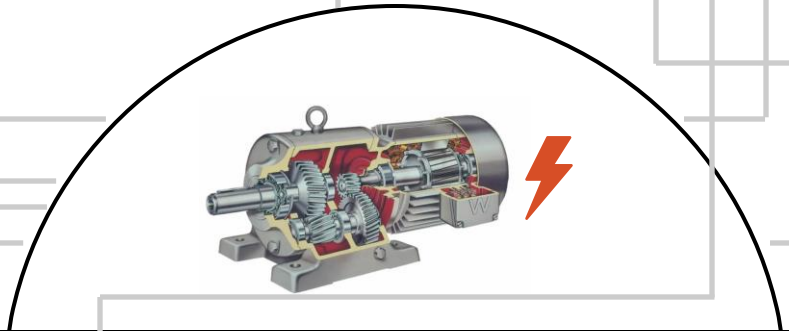
- Business process
- Engineering process
- Sales process
- Production process
- Service process
- Installation process
- Ramp up process
- Maintenance process

- Technical process
- Mechanical process
- Electrical process
- Fluidical process
- Control process

- Operation process
- Plant management level
- MES level
- Control level
- Actor level

Documentation system

- Technical documentation
- Data sheet
- Assembly documentation
- Service documentation



Use case : Motor defect

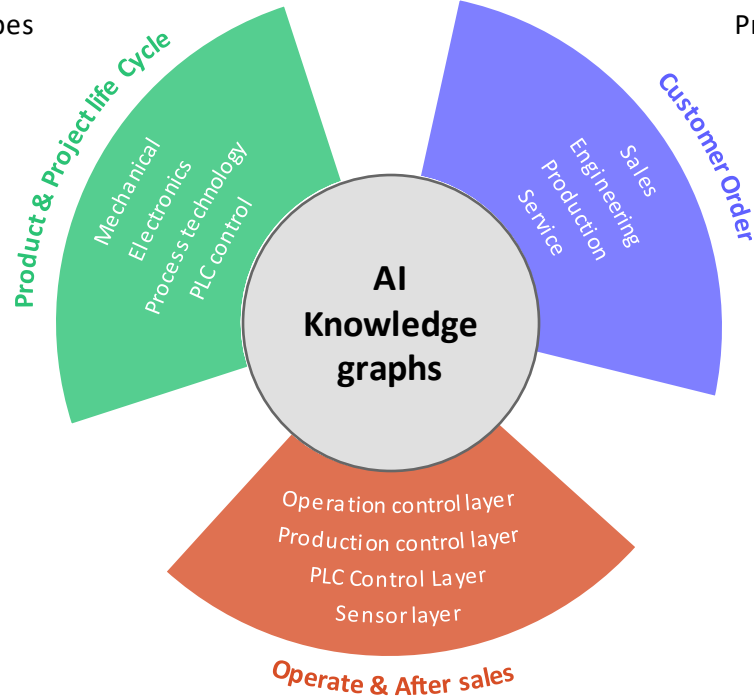
Workflow: QM notification, request for change

Domains Structures Methods

Phase I:

Engineering of prototypes

- ✓ Engineering data
- ✓ Simulation
- ✓ Function management



Phase II:

Production of instances

- ✓ Production data
- ✓ Variant management
- ✓ Master data management

Phase III:

Operation of application

- ✓ Operations data
- ✓ Data management Machine (DMM)



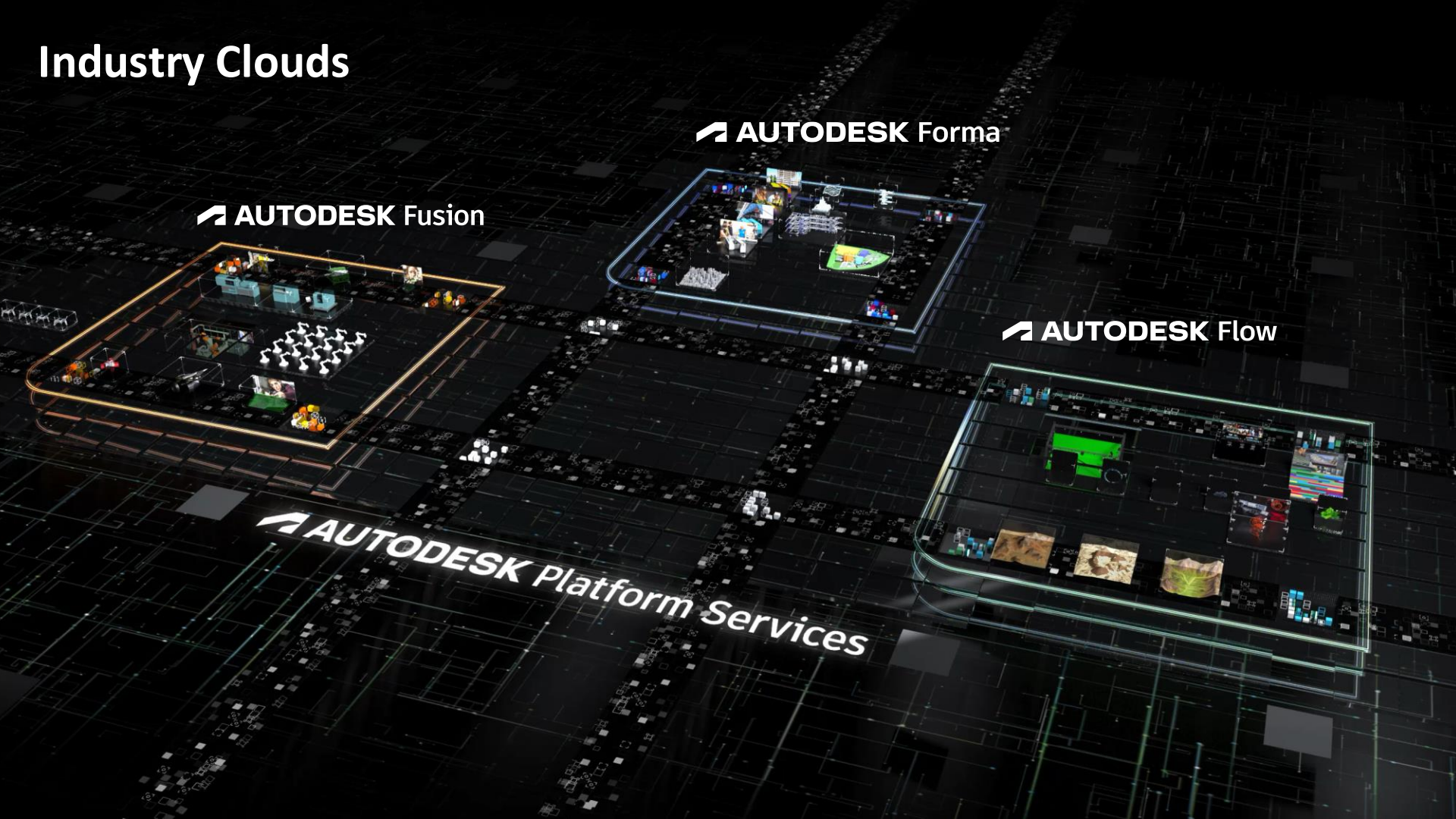
Industry Clouds

 **AUTODESK Fusion**

 **AUTODESK Forma**

 **AUTODESK Flow**

 **AUTODESK Platform Services**



DATA



AUTOMATION



End-to-end capabilities for
connected product
development.



INSIGHTS

PRODUCT LIFECYCLE PHASES & CAPABILITIES

CONCEPT

1. DATA IMPORT
2. GENERATIVE DESIGN
3. SURFACE MODELING
4. FREEFORM MODELING
5. RENDERING

ENGINEERING

1. CAD
2. CAM
3. CAE
4. PCB

PRODUCTION

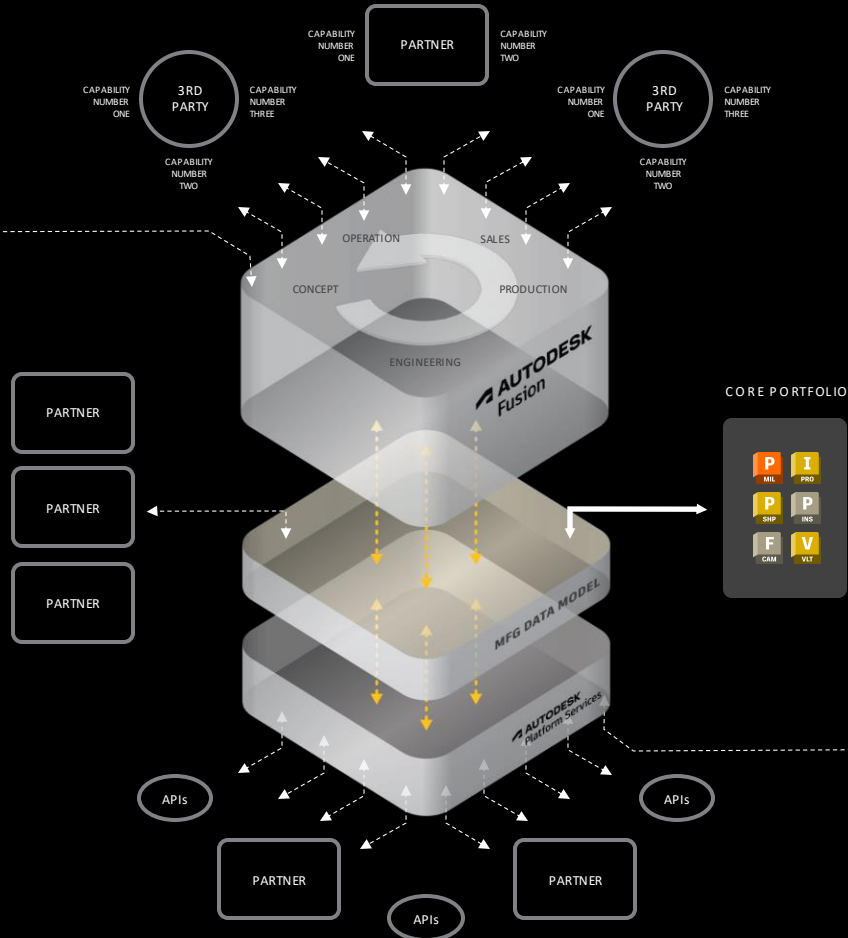
1. QUALITY MANAGEMENT
2. REAL-TIME DATA TRACKING
3. CONNECTED MANUFACTURING
4. PRODUCTION WORKFLOW VISUALIZATION

SALES

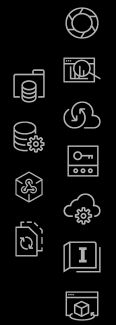
1. ORDERING
2. QUOTING
3. CONFIGURATIONS

OPERATION

1. PREVENTATIVE MAINTENANCE
2. OPERATIONAL PERFORMANCE



APIs





FORM FACTOR

CLEAN

FUNCTION

LIGHTWEIGHT

GRIP

MACHINE

XD

PUSH BUTTON

VS

TOUCH SCREEN

CERAMIC

VS

METAL

???

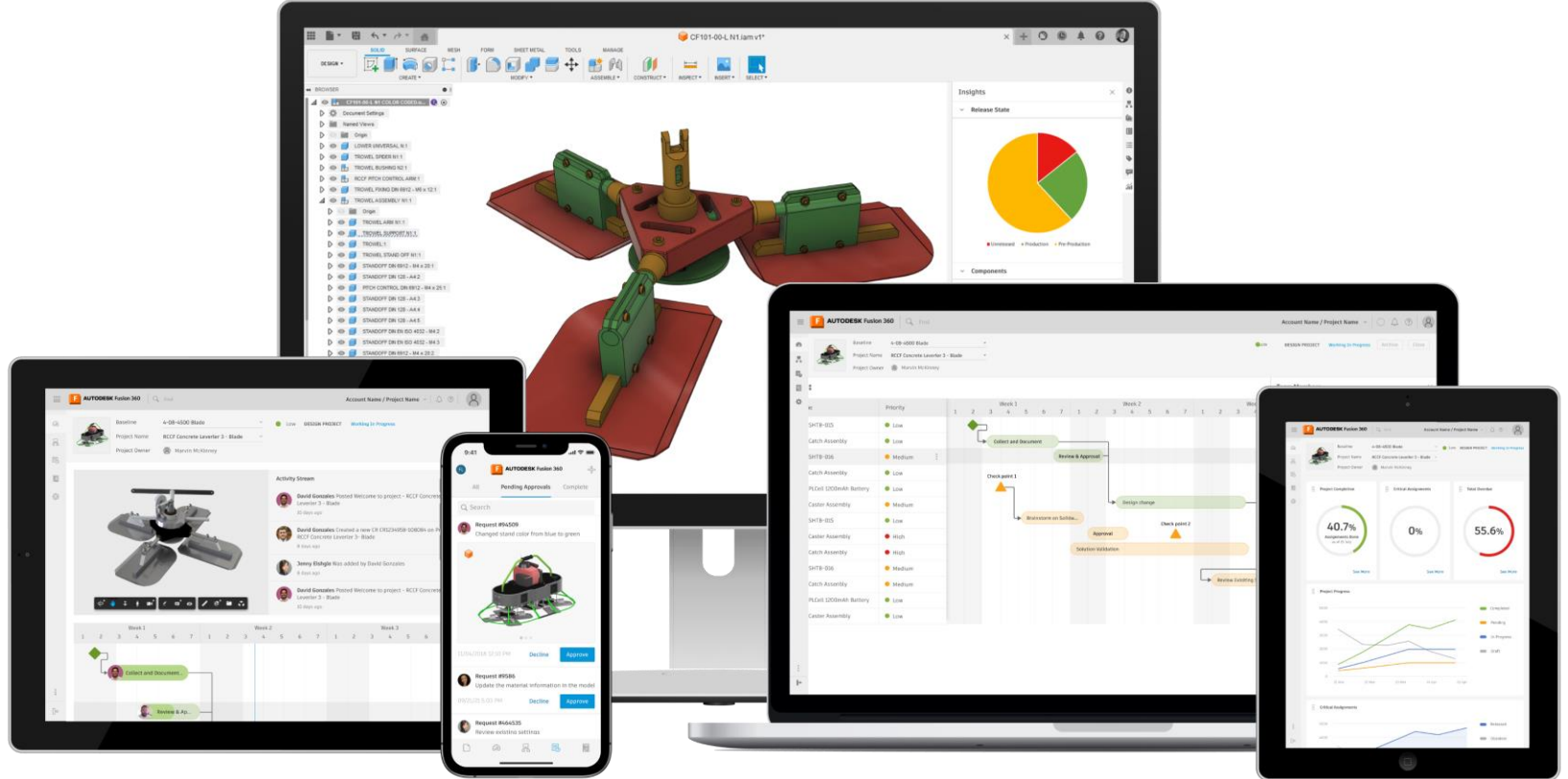
AUTOMATED TIMER

TEMP REGULATOR

GROUND CONTROL

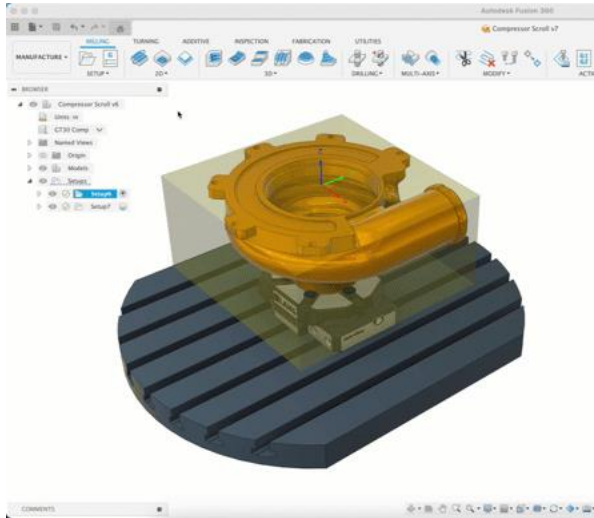
CHAMLET WARMER

POUR RATE

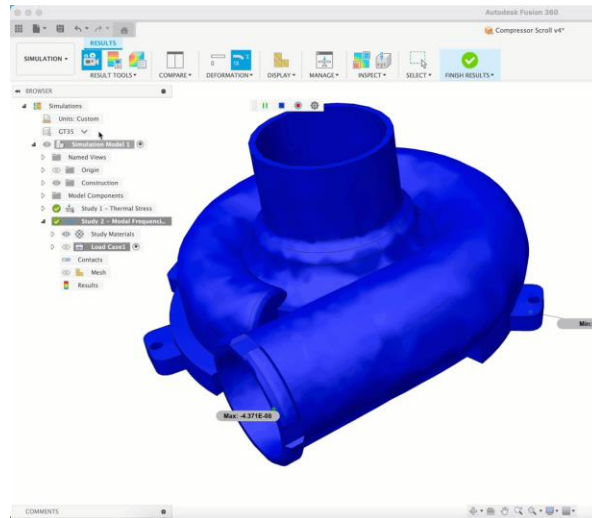


Manufacturing Data Modell: Configurations in Fusion Industry Cloud

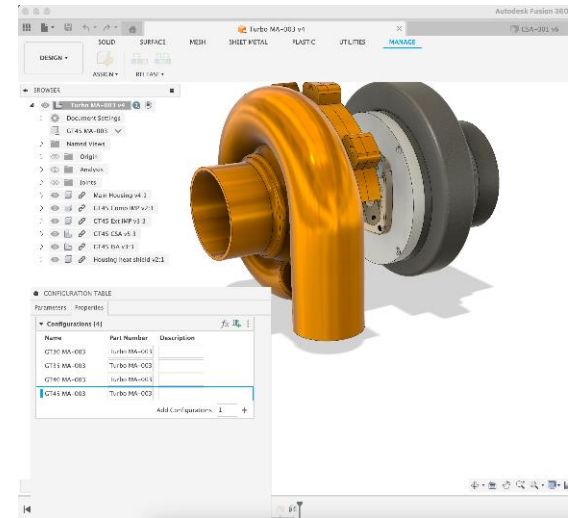
Manufacturing



Simulation



Manage



Clipboard: Paste, Cut, Copy, Format painter

Data: Get data, Excel workbook, Data hub, SQL Server, Enter data, Datasource, Recent sources, Transform data, Refresh


Insert: New visual, Text box, More visuals

Calculations: New measure, Quick measure

Sensitivity: Sensitivity, Publish

Add data to your report


Once loaded, your data will appear in the Data pane.




Import data from Excel



Import data from SQL Server



Paste data into a blank table



Try a sample semantic model

[Get data from another source →](#)

Visualizations

Build visual

Filters

Values

Add data fields here

Drill through

Cross-report Off

Keep all filters On

Add drill-through fields here

Drawing is ready
[Open drawing](#)

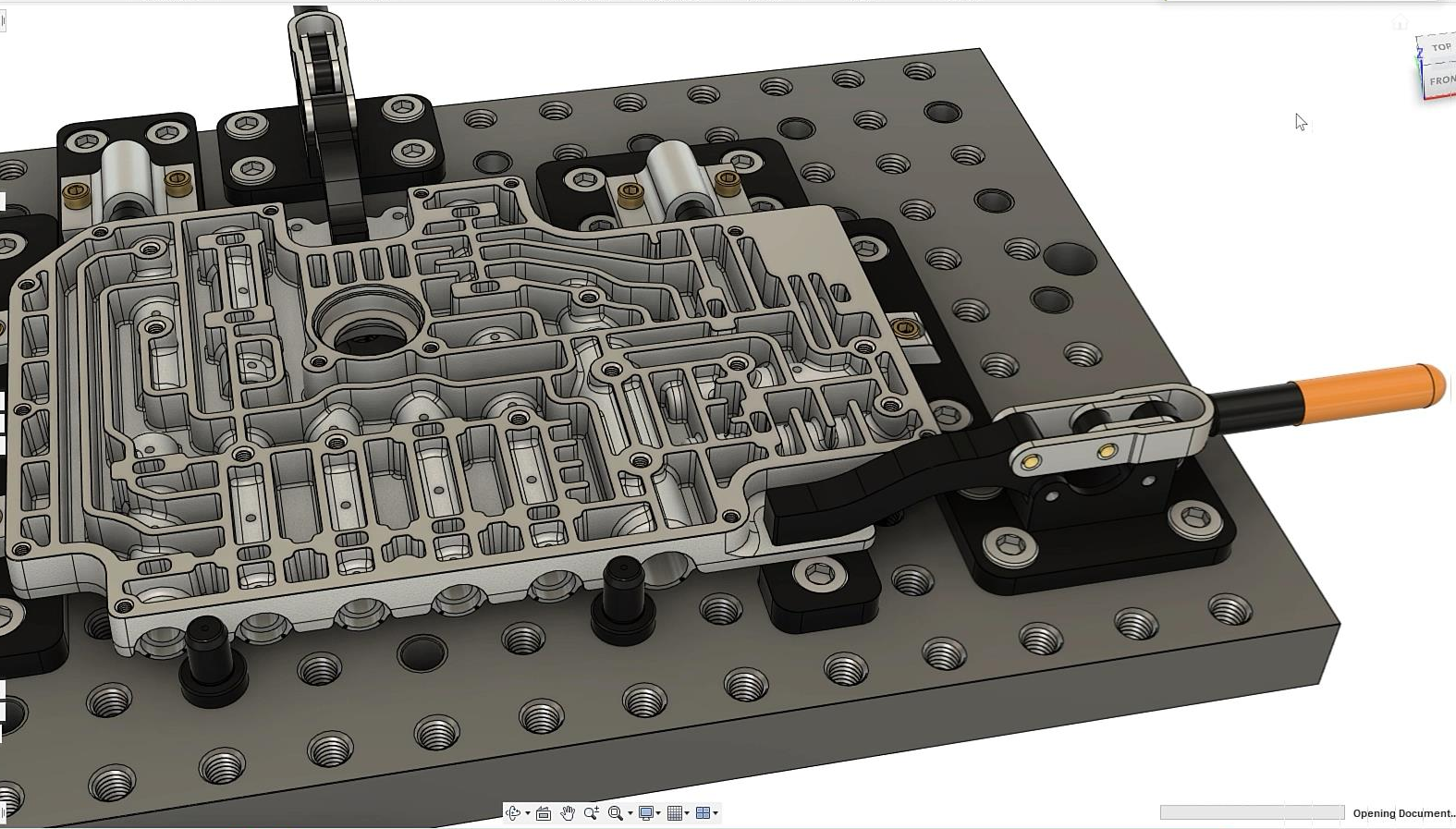
DESIGN ▾

SOLID SURFACE MESH SHEET METAL PLASTIC UTILITIES MANAGE

CREATE ▾ AUTOMATE ▾ MODIFY ▾ ASSEMBLE ▾ CONSTRUCT ▾ INSPECT ▾ INSERT ▾ SELECT ▾

BROWSER

- Valve Body & Fixture v4
- Document Settings
- Named Views
- Origin
- Joints
- 1339N11 v1:1
- Valve Body v1:1
- 5111N1_Heavy Duty Low-Pr...
- 90327A196 v1:1
- 90327A196 v1:81
- 90327A196 v1:82
- 90327A196 v1:83
- 31375A22 - Dowell Pin v1:1
- 225mm Riser Plate v1:1
- 90327A196 v1:5
- 90327A196 v1:6
- 2172A65_Low-Profile Fixture Cla...
- 2172A65_Low-Profile Fixture Cla...
- 5111N1_Heavy Duty Low-Pr...
- 90327A196 v1:9
- 90327A196 v1:132
- 90327A196 v1:133
- 90327A196 v1:134
- 31375A22 - Dowell Pin v1:2
- 35mm Riser Plate v1:1
- 90327A196 v1:13
- 130mm Riser Plate v1:1
- 90327A196 v1:14
- 90327A196 v1:15
- 2172A65_Low-Profile Fixtur...
- 100mm Spring Plunger Riser...
- 3351A17_Spring Plunger v1:1
- 90327A196 v1:16
- 90327A196 v1:141



COMMENTS

Navigation icons: Home, Undo, Redo, Rotate, Zoom, Pan, etc.

Opening Document...

Timeline and status bar with various icons and a progress indicator.

