



AVEVAWORLD

forzy

a promon company

For An Easier Tomorrow

**Transforming Data into Results:
The Forzy AIM experience**

Rafael Porazza | Head of Sales

Rodrigo Gonçalves | Head of Digital Twin





Who we are

Rafael Porazza

Head of Sales at Forzy

With experience in engineering solutions and industrial automation since 2017, worked at Pollux Automation and Accenture Industry X, leading robotic solutions and autonomous vehicle projects Americas.

MBA in Marketing Management and an MBA in Business Management & Market Intelligence.



We are Forzy, a Promon company specialized
in efficiency and digitalization of operations.

forzy
a promon company

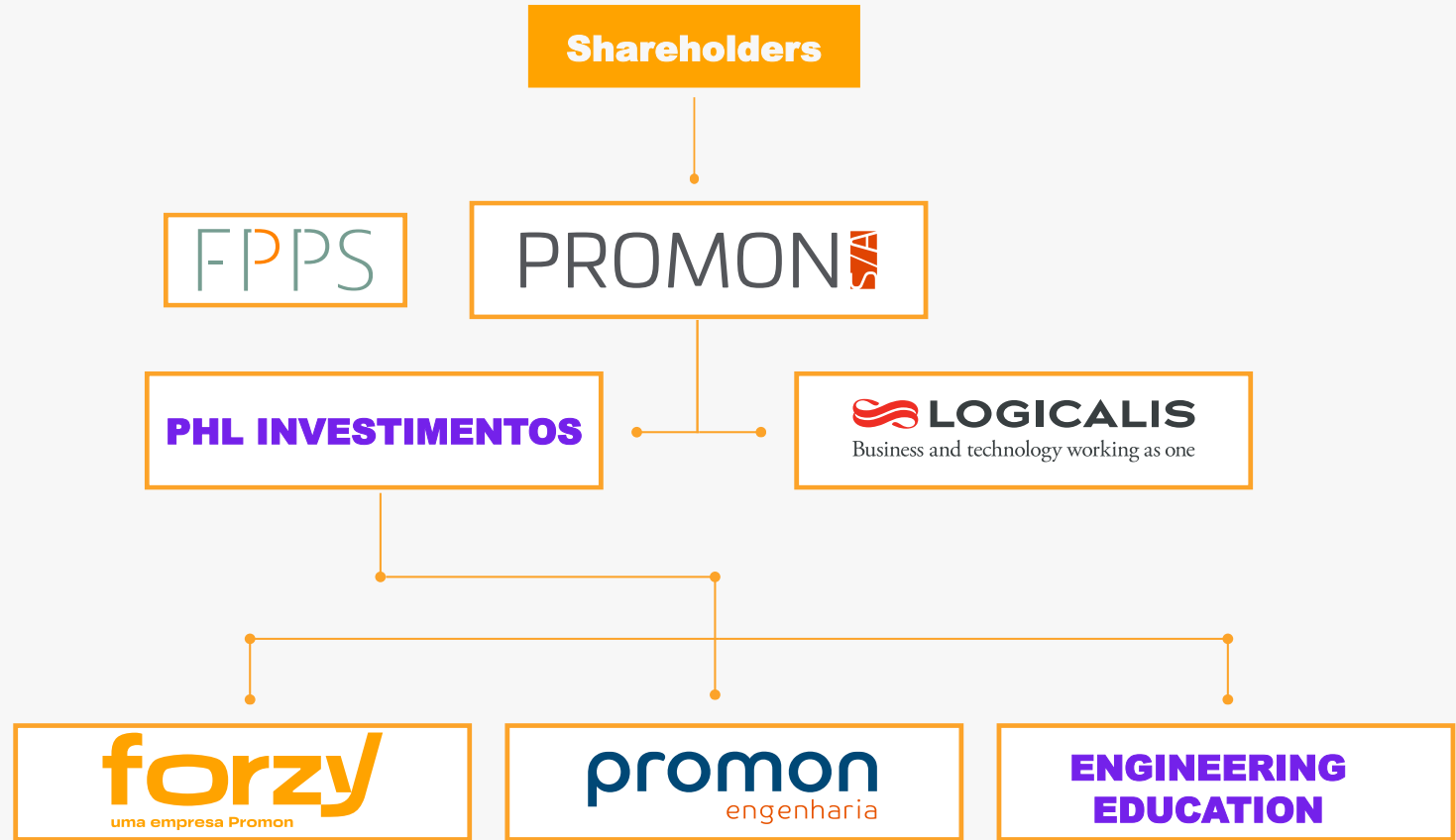
With a modern and agile approach, **our mission is to
facilitate companies' journey toward a more
efficient and streamlined future.**





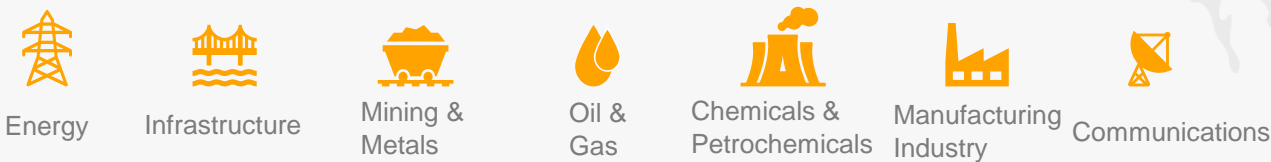
PROMON S.A.

A holding company operating in the fields of **engineering**, **telecommunications**, and **digital transformation**, serving various markets in around the world



Forzy is a company of **PROMON S.A.**

With **over 60 years of experience** in delivering large-scale industrial projects



+ USD 680 MM in revenue

From the Promon S.A. group

+ 3.000 projects

Industrial and infrastructure

+ 40 countries

with projects implemented

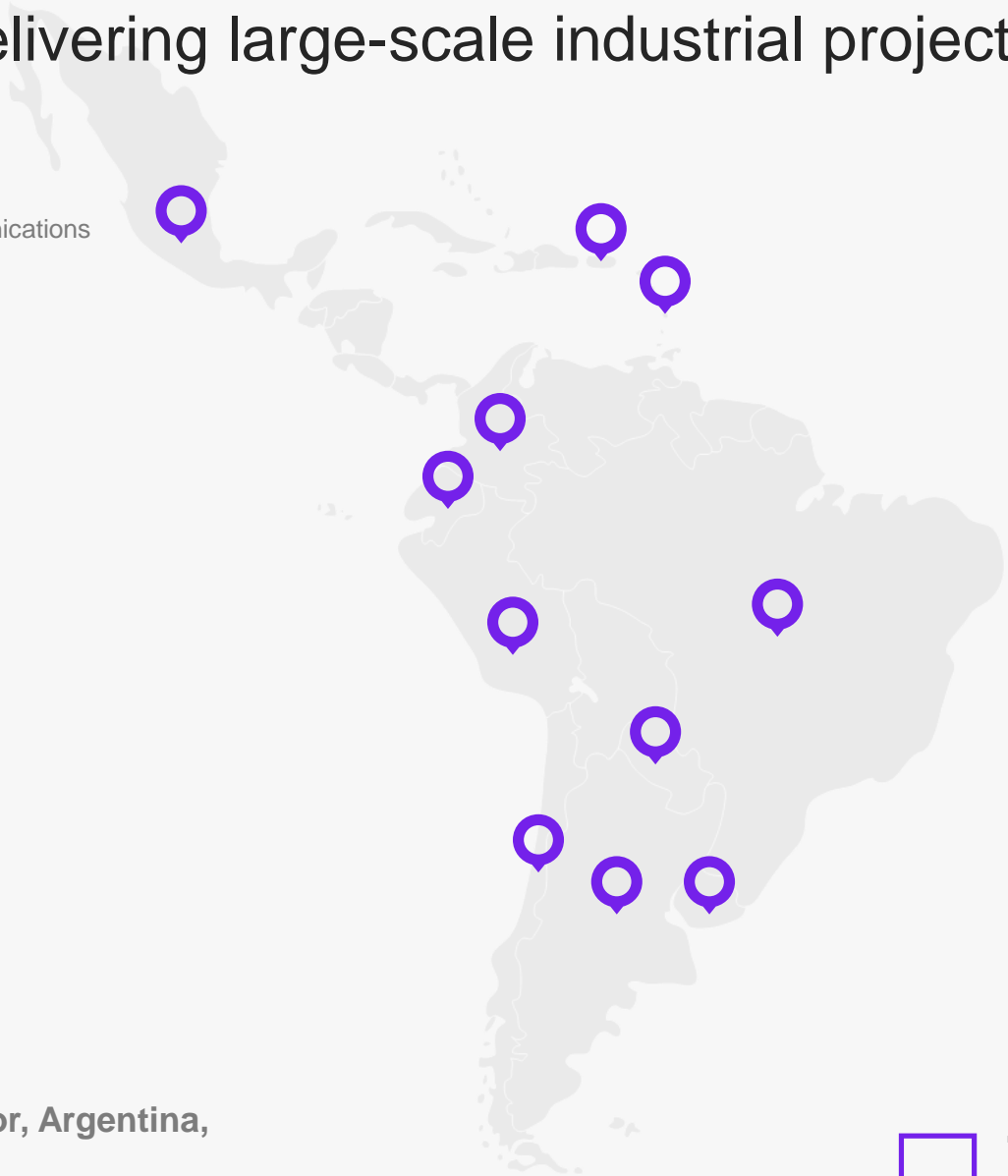
+ 1.600 employees

In Brazil, working across a wide range of projects

+ de 3.600 employees

Across the Americas, with offices in:

Dominican Republic, Brazil, Colombia, Puerto Rico, Mexico, Ecuador, Argentina, Paraguay, Uruguay, Chile, Peru.





Industry



Energy



Infrastructure



Real Estate

DESIGN, EXECUTION & COMMISSIONING

OPERATION & MAINTENANCE

DECOMMISSIONING / DEACTIVATION OR ADAPTATION

CONSULTING

Maturity Analysis

✓ Industry 4.0 Digital Maturity Assessment ✓ Development and implementation of the Digital Journey Roadmap

EFFICIENCY SOLUTIONS

Operational Efficiency

✓ Systems ✓ Processes ✓ Organization

Energy Efficiency

✓ Energy Consumption ✓ Own Energy Generation ✓ Competitive Energy Contracting

DIGITAL SOLUTIONS

1 - Descriptive Digital Twin (Static Data)

✓ Asset and Document Digitization (BIM & GED) ✓ Reality Capture

2 - Operational Digital Twin (Asset Management)

✓ Operation Monitoring (Sensors, Assets, etc.) ✓ Vertical and Horizontal Integration
✓ Operational Control Center (OCC) (Visualization / KPI control)

3 - Predictive Digital Twin

✓ Analytics, anomaly detection, sensors, etc.

4 - Prescriptive Digital Twin

✓ Control and lifecycle planning of the asset

5 - Autonomous Digital Twin

✓ Control and lifecycle planning of the asset

Digital Asset Lifecycle

5 Years

40 Years

Project Digital Twin

(Descriptive)

Data Quality /
Compliance / KPIs

3D Progress
Visualization

4D/5D Progress
Visualization



Contract
Management



Procurement



Engineering



Costs



Material
Management



Planning



Status &
Reports



Project



Work
Packages



AWP

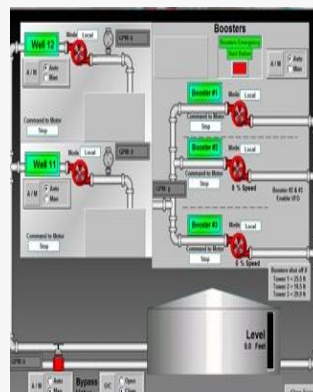
Engineering and C&M

DIGITAL HANDOVER

Operational Digital Twin

(Operational, Predictive, Prescriptive and Autonomous)

Monitoring KPIs



Artificial Intelligence



Safety
Management



Integration



Process
Control



Process
Optimization



Optimization
Strategy



Supply Chain



Production
Accounting



Test
Management



Prediction /
Prescription



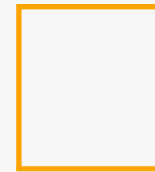
Production
Management

Operations & Maintenance



VALUE PROPOSITION

We are the ideal **One-Stop-Shop** solutions partner for companies looking to optimize processes, reduce costs, and increase the availability and useful life of assets.





Who we are

Rodrigo Gonçalves

Head of Digital Twin at Forzy.

Worked at Promon Engenharia from 2008 to 2024, where, for the last four years, he was Coordinator of the Engineering Systems discipline.

Specialist in AVEVA tools since 2003.

Master's and Ph.D. in Engineering with a focus on technologies related to reality capture.





The Business Challenge

Promon's projects faced scattered data and isolated systems

Business Impact

Increased inefficiencies and competitiveness limitations.

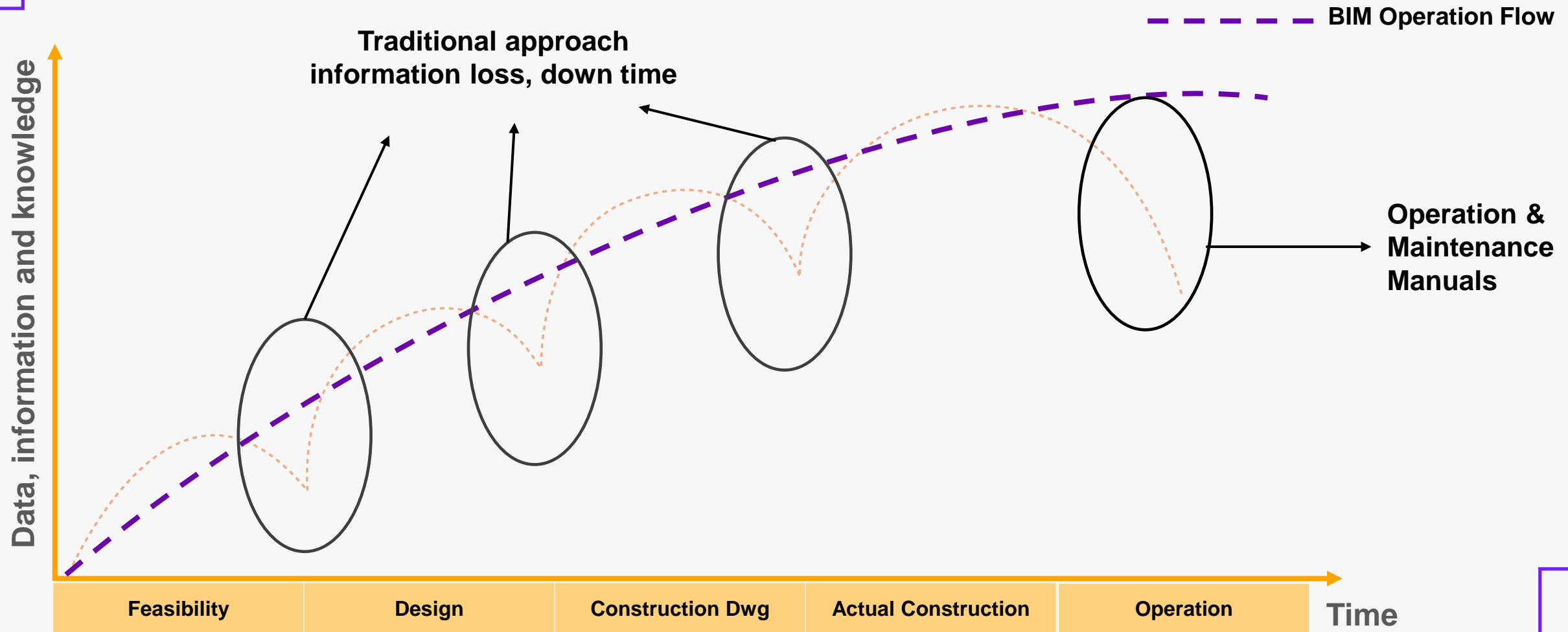
Our Challenge?

Centralizing and ensuring reliable information.

Improving fragmented communication.

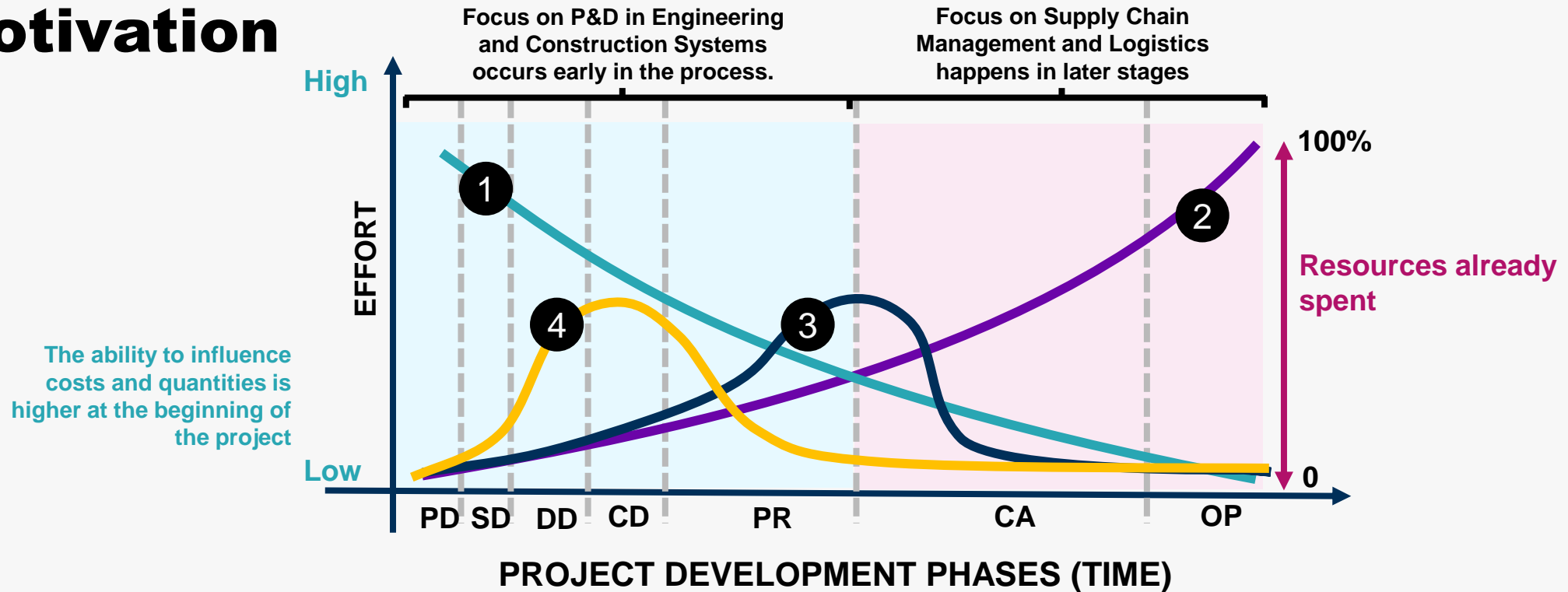
Integrating engineering systems in a unified platform.

Motivation



Source: Reduction of data loss in transfer stages using standardized workflows (adapted from Aziz (2016))

Motivation



- 1** — Ability to impact construction costs and functional characteristics of the project
- 2** — Cost of project changes
- 3** — Traditional Project Process (CAD)
- 4** — BIM Process

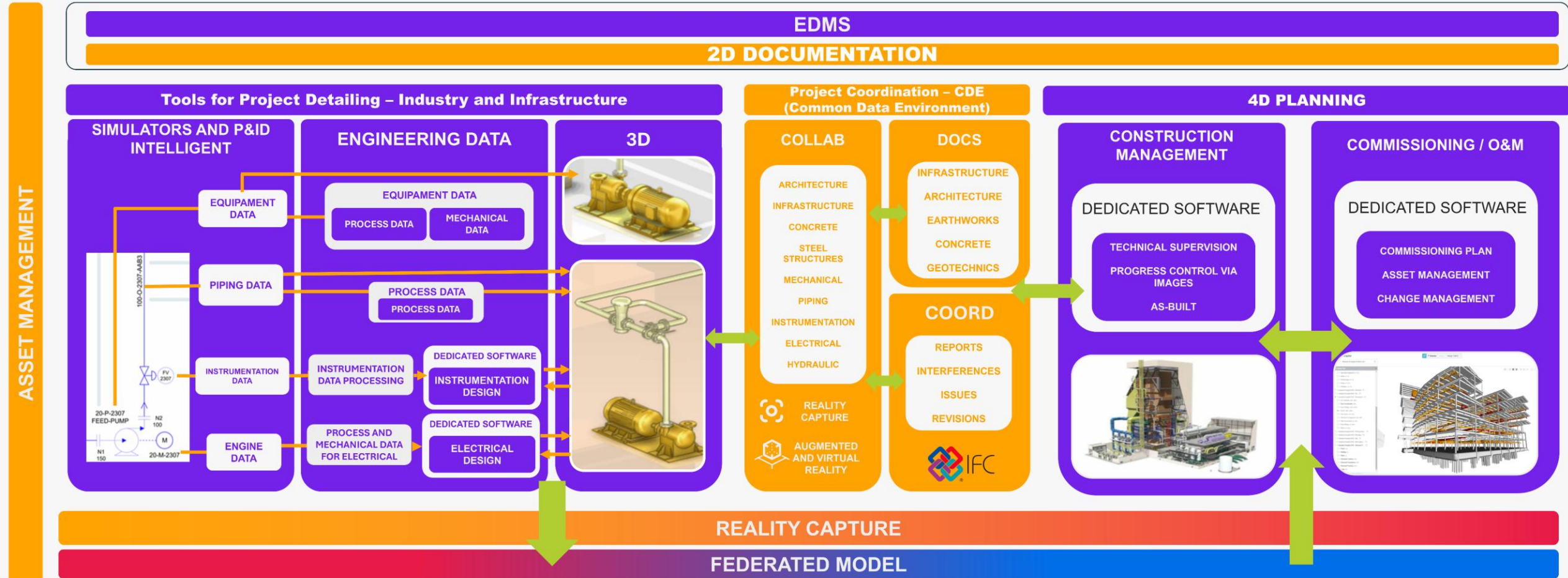
PD (Pre-Design) | Conceptual Phase
SD (Schematic Design) | Preliminary Study
DD (Construction Design) | Basic Project
CD (Detailed Design) | Executive Project
PR (Procurement) | Bidding and Contracting
CA (Construction) | Execution/Construction
OP (Operation) | Operation

Critical Issue

Integrating various engineering systems and the need to consolidate all information in a single accessible environment.

Business Impact

Lengthier processes and rework due to data inconsistencies.
Limitations in competitiveness and strategic responsiveness.



Choosing the Best Solution

The Need for an Information Hub:

Recognizing the opportunity to turn these challenges into a competitive advantage, Forzy identified that consolidating all information into a unified platform was essential to boost the efficiency and competitiveness of Promon's projects.

Choosing the Best Solution

Essential Requirements:

Integration with existing systems

Scalability

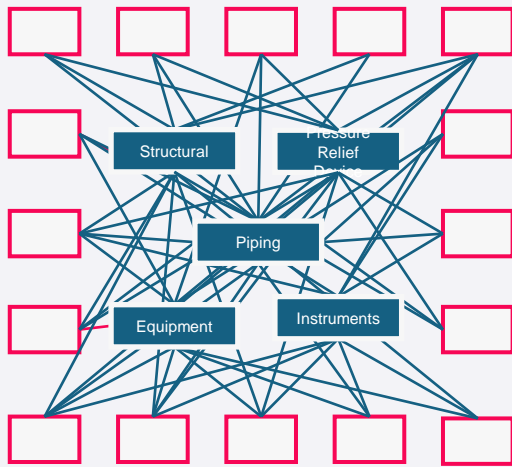
real-time collaboration.



Choosing the Best Solution to Achieve the Business Goal

FROM DISCONNECTED
INFORMATION...

Disconnected information in multiple formats and systems, leading to inconsistencies and manual efforts.



...TO DIGITAL INFORMATION
CONNECTED TO EACH
OTHER AND TO THE
ASSET...

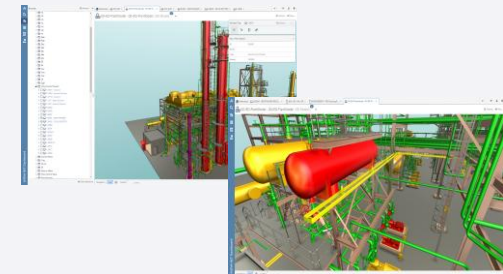
The Asset is at the center of the strategy, with everything interconnected around it in an organized and contextualized manner.



...PROMOTING FAST AND
EASY ACCESS TO
INFORMATION

Easy and quick access to contextualized information:

- Navigation
- Search
- Visualization
- Verification/Validation



Strategic Criteria for the Choice

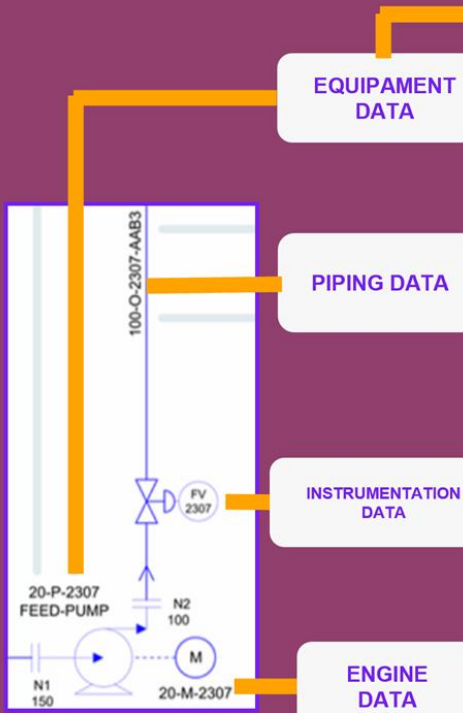


COLABORATIVO (GED)

2D DOCUMENTATION

AVEVA INTEGRATED ENGINEERING AND DESIGN

AVEVA™ Diagrams



EQUIPAMENT DATA

PIPING DATA

INSTRUMENTATION DATA

ENGINE DATA

AVEVA™ Engineering

EQUIPAMENT DATA

PROCESS DATA

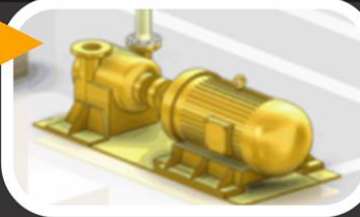
MECHANICAL DATA

PROCESS DATA
PROCESS DATA

INSTRUMENTATION DATA PROCESSING

PROCESS AND MECHANICAL DATA FOR ELECTRICAL

AVEVA™ E3D Design



AVEVA™ Instrumentation
INSTRUMENTATION DESIGN

AVEVA™ Eletrical
ELECTRICAL DESIGN

AUTODESK CONSTRUCTION CLOUD

COLLABORATION/ COORDINATION

ARCHITECTURE
INFRASTRUCTURE
CONCRETE
STEEL STRUCTURES
MECHANICAL
PIPING
INSTRUMENTATION
ELECTRICAL
HYDRAULIC
IFC



REALITY CAPTURE



AUGMENTED AND VIRTUAL REALITY

DOCS

AUTODESK CIVIL 3D - REVIT

INFRASTRUCTURE
ARCHITECTURAL
CONCRETE
STRUCTURES

MEMETSCHEK ALLPLAN

CONCRETE
STRUCTURE

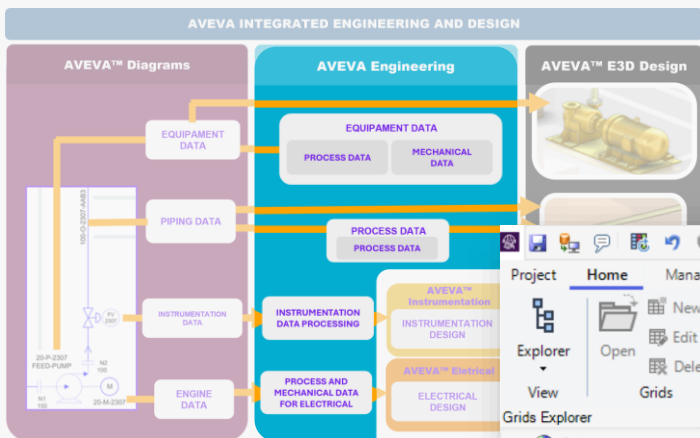
TRIMBLE TEKLA

STEEL
STRUCTURES

AUTODESK NAVISWORKS / CINTOO

FEDERATED MODEL





AVEVA™ Engineering

Engineer - AVEVA Engineering (Project - GPE, MDB - DIST_PRO_TRA)

Project Home Manage View Simulation PROMON AVEVA NET Drawings

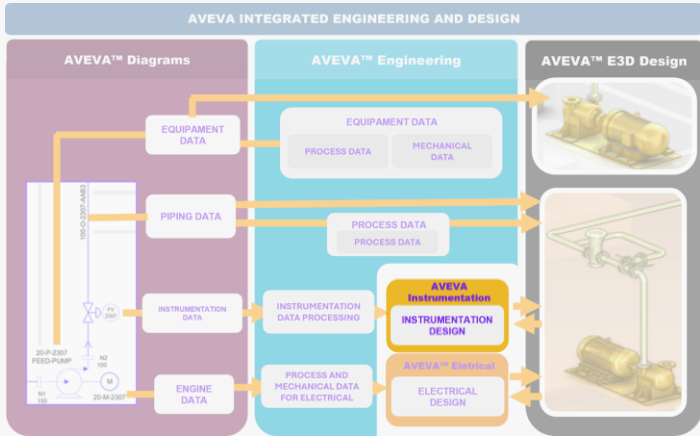
Explorer Open Edit Delete View Grids Clipboard

Grids Explorer

- Grids
 - DOCUMENTOS
 - ELETRICA
 - INSTRUMENTAÇÃO
 - MECANICA
 - BOMBAS
 - 01 - Bomba Centrífuga
 - 02 - Lista Bomba Helicoidal
 - COMPRESSOR
 - FILTROS
 - GERAL
 - TALHAS E PONTES ROLANTES
 - TANQUES E VASOS
 - TORRE DE RESFRIAMENTO
 - TRANSPORTADORES
 - TROCADORES DE CALOR
 - PROCESSOS
 - RELATORIOS
 - SISTEMAS
 - TUBULACAO

Gerenciamento

Status	Liberação									
Status TAG	Status Dados Pro	Status Dados Mec	Status Dados Ele	Maturidade - ELE	Maturidade - MEC	Maturidade - PRO	TAG	Quantidade	Descrição	
Approved	Approved					Para Detalhamento	00GAF40AP001	1	RAW WATER PUMP	
Working	Working					Para Detalhamento	00GAF50AP001	1	RAW WATER PUMP	
Approved	Approved					Para Detalhamento	00GHB10AP001	1	SERVICE WATER PUMP	
Working	Working					Para Detalhamento	00GHB20AP001	1	SERVICE WATER PUMP	
Approved	Approved					Para Detalhamento	00GHC10AP001	1	DEMINERALIZED WATER PUMP	
Working	Working					Para Detalhamento	00GHC20AP001	1	DEMINERALIZED WATER PUMP	
Working	Working					Para Detalhamento	00GKB10AP001	1	POTABLE WATER PUMP	
Working	Working					Para Detalhamento	00GKB20AP001	1	POTABLE WATER PUMP	
Approved	Approved					Para Detalhamento	00PGA10AP001	1	AUXILIARY COOLING WATER PUMP	
Working	Working					Para Detalhamento	00PGA20AP001	1	AUXILIARY COOLING WATER PUMP	
Approved	Approved					Para Detalhamento	00PGB10AP001	1	CLOSED COOLING WATER PUMP	
Approved	Approved					Para Detalhamento	00PGB20AP001	1	CLOSED COOLING WATER PUMP	
Working	Working					Para Detalhamento	00PGB30AP001	1	CLOSED COOLING WATER PUMP	
Approved	Approved					Para Detalhamento	11LAC10AP001	1	BOILER FEED WATER PUMP HRSG11	



AVEVA™ Instrumentation

AVEVA Instrumentation Engineer

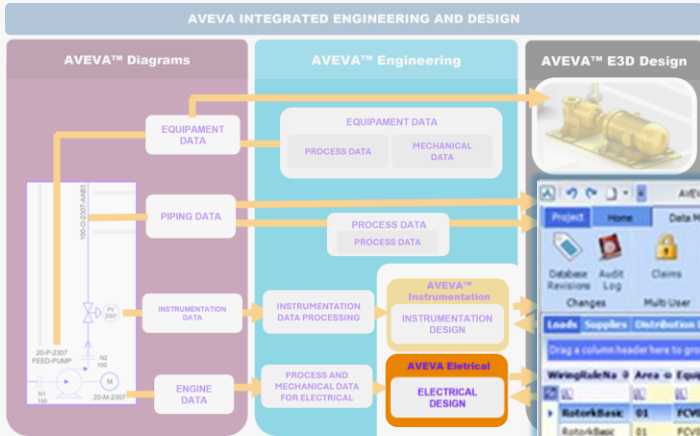
Products: AVEVA Engineering | Groups: Instrumentos | Config: Instrumentos_Pressao

Compare/Update | Accept All | Update Database | Side-by-Side View | Close | Previous | Next | Page 1 of 1

Wired	Accept	Name	Matched Status	Number Of Differences	Attributes to be Modified	Attributes Matched
<input type="checkbox"/>	<input type="checkbox"/>	1035-PI-0010	Linked With Differenc...	21	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1045-PI-0001	Linked With Differenc...	21	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1045-PI-0003	Linked With Differenc...	21	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1050-PI-0001	Linked With Differenc...	21	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1050-PI-0003	Linked With Differenc...	21	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1050-PI-0500	Linked With Differenc...	1	UserField1 (LINHAEQUP)	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1055-PI-0001	Linked With Differenc...	21	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1055-PIT-0500	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1055-PIT-0504	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1060-PI-0001	Linked With Differenc...	17	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1060-PI-0004	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0001	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0002	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0003	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0004	Linked With Differ...	17	TemperatureDesign (Temp...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0005	Linked With Differenc...	17	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0006	Linked With Differenc...	17	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0007	Linked With Differenc...	17	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0020	Linked With Differenc...	21	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0021	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PI-0022	Linked	0	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PIT-0001	Linked With Differenc...	15	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
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<input type="checkbox"/>	<input type="checkbox"/>	1065-PIT-0003	Linked With Differenc...	15	TemperatureDesign (TempDesi...	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1065-PIT-0021	Linked With Differenc...	16	UserField1 (LINHAEQUP)Temp	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
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<input type="checkbox"/>	<input type="checkbox"/>	1070-PDIT-0502	Linked With Differenc...	1	UserField1 (LINHAEQUP)	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
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<input type="checkbox"/>	<input type="checkbox"/>	1070-PI-0004	Linked With Differenc...	18	UserField1 (LINHAEQUP)Temp	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1070-PI-0005	Linked With Differenc...	18	UserField1 (LINHAEQUP)Temp	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1070-PI-0006	Linked With Differenc...	18	UserField1 (LINHAEQUP)Temp	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
<input type="checkbox"/>	<input type="checkbox"/>	1070-PI-0007	Linked With Differenc...	18	UserField1 (LINHAEQUP)Temp	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
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<input type="checkbox"/>	<input type="checkbox"/>	1070-PI-0010	Linked With Differenc...	18	UserField1 (LINHAEQUP)Temp	TagNo (TagNo),AreaNo (Area),AreaPath (Area Path),Class
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Instrumentos (144 Items - 123 Changed) | Attribute Details

PIDAttribute Name	Source Value	Target Value
TagNo (TagNo)	1065-PI-0004	1065-PI-0004
AreaNo (Area)	1065	1065
AreaPath (Area Path)	1000	1000
ClassName (ClassName)	INS	INS
TagFormatName (Tag...	AURA	AURA
ISAFunc (Function)	PI	PI
LNumber (Number)	0004	0004
Suffix (Suffix)		
PIDNo (FLUXOGRAMA)	ALM-D-FL-2020-...	ALM-D-FL-2020-PRO-H-0003
UserField1 (LINHAEQ...	1"-ASE-2020-C1...	1"-ASE-2020-C1A-027-N1
TemperatureDesign (T...	60 °C	60
pdFluidityPoint (pdFlu...	N	Não
pdPolymerize (pdPoly...	N	Não
pdSuspendedSolids (p...	N	Não
pdAbrasive (pdAbrasive)	N	Não
pdCorrosive (pdCorros...	N	Não
pdFoulingFluid (pdFou...	N	Não
pdH2S (pdH2S)	N	Não
FluidName (FluidName)	Água deselagem	Água deselagem
FluidState (FluidState)	L	Líquido
Density (Density)	997 kg/m³	997
Viscosity (Viscosity)	0,89 cP	0,89
MolWeight (MolWeight)	-	-
CpCv (CpCv)	-	-



AVEVA™ Electrical

The screenshot displays the AVEVA Electrical Engineer software interface, showing various modules and data tables.

AVEVA Electrical Engineer - Contextual Actions

- Project: Home, Data Management, View, Loads
- Database Audit Log, Claims, Publish to AVEVA NET, AVEVA Integration, Import, Export
- Database Audit Log, Claims, Publish to AVEVA NET, AVEVA Integration, Import, Export

AVEVA Electrical Wiring Manager - Contextual Actions

- Home, Data Management, View, Cable Schedule
- Audit Log, Claims, Publish to AVEVA NET, AVEVA Integration, Import
- Database Audit Log, Claims, Publish to AVEVA NET, AVEVA Integration, Import

Table 1: Equipment Data

WireName	Area	Equipment	Description	Equipment T	DataShe	Supply	Mechanical	Name	No L	Ph	Power	No	OffPhase
RotorkBasic	01	PCV0102	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0103	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0109	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0105	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0106A	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0106B	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0107	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0108	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
RotorkBasic	01	PCV0109	RW Inlet Vlv	Motor	MCB602 (EMG	0.21	0.21	k	10	0.21	kW	415	3
3phMtr/3pSta	83	PH0301	AMU1	Motor	MCB601 (NO								
3phMtr/3pSta	83	PH0302	AMU2	Motor	MCB601 (NO								
3ph_SupplyLo	83	H03001	Heater Bank	Heater	MCB601 (NO								
3ph_SupplyLo	83	H03002	Heater Bank	Heater	MCB601 (NO								
3ph_SupplyLo	83	H03003	Heater Bank	Heater	MCB601 (NO								

Load Detail

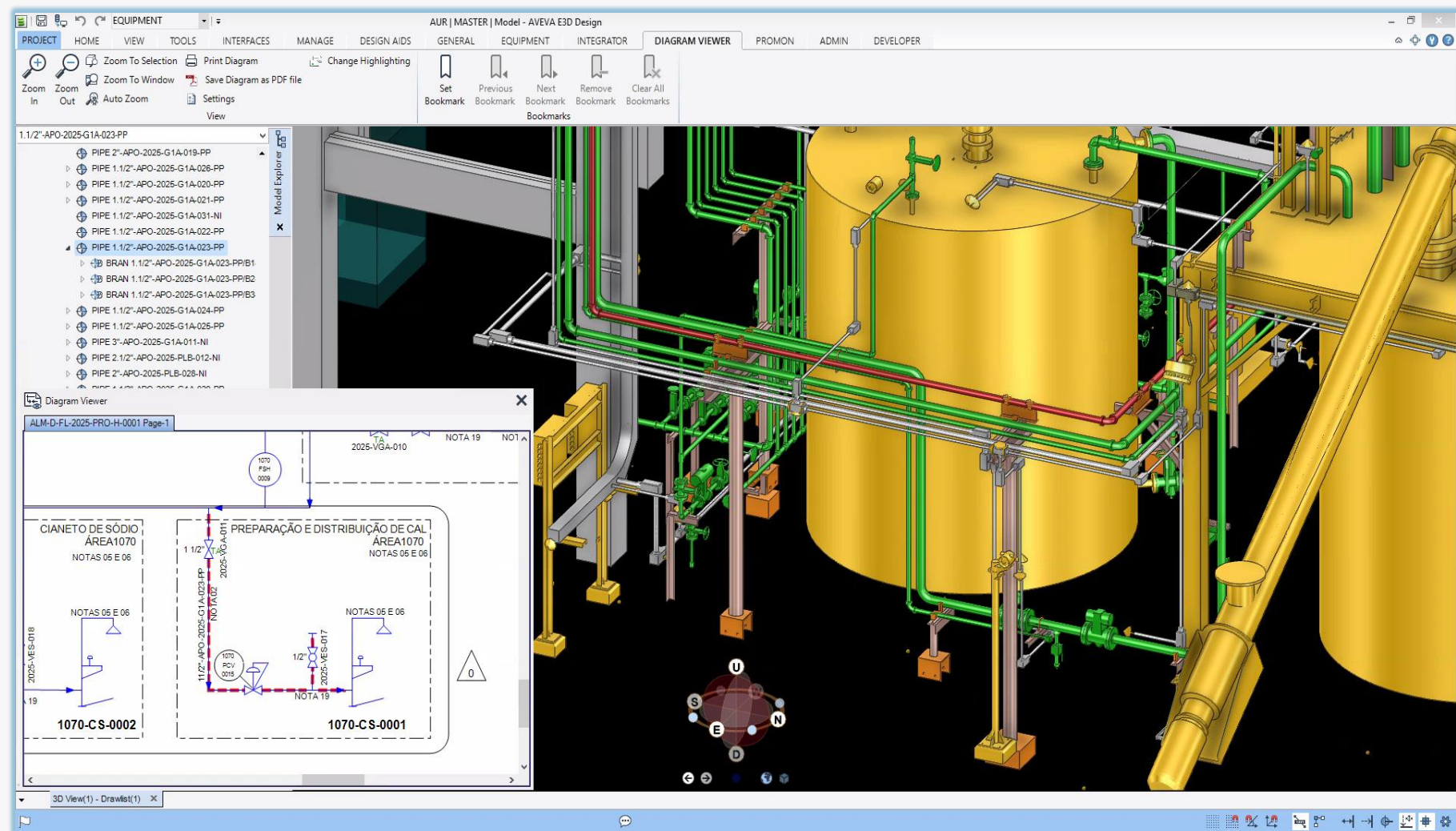
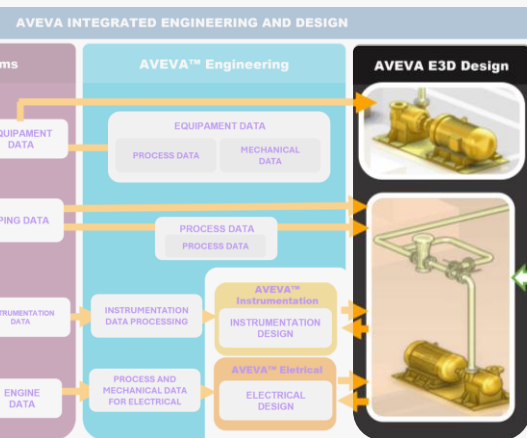
Load Type: Motor
Equipment No: PCV0102
Plant Area: 01
Description: RW Inlet Vlv
Service: Intermittent
Mechanical Load: 0.21 kW
Electrical Data: Voltage: 415V 3Phase 50Hz
Nameplate: Rated Power: 0.21 kW
Power Factor: 0.41 LAG
Efficiency: 100 %
Absorbed Power: 0.21 kW
Loading Factor: 100 %
Efficiency: 53 %
Electrical Power: 296 W
Power Factor: 0.41 LAG
Power Factor Correction: 0 kvar

Table 2: Cable Schedule

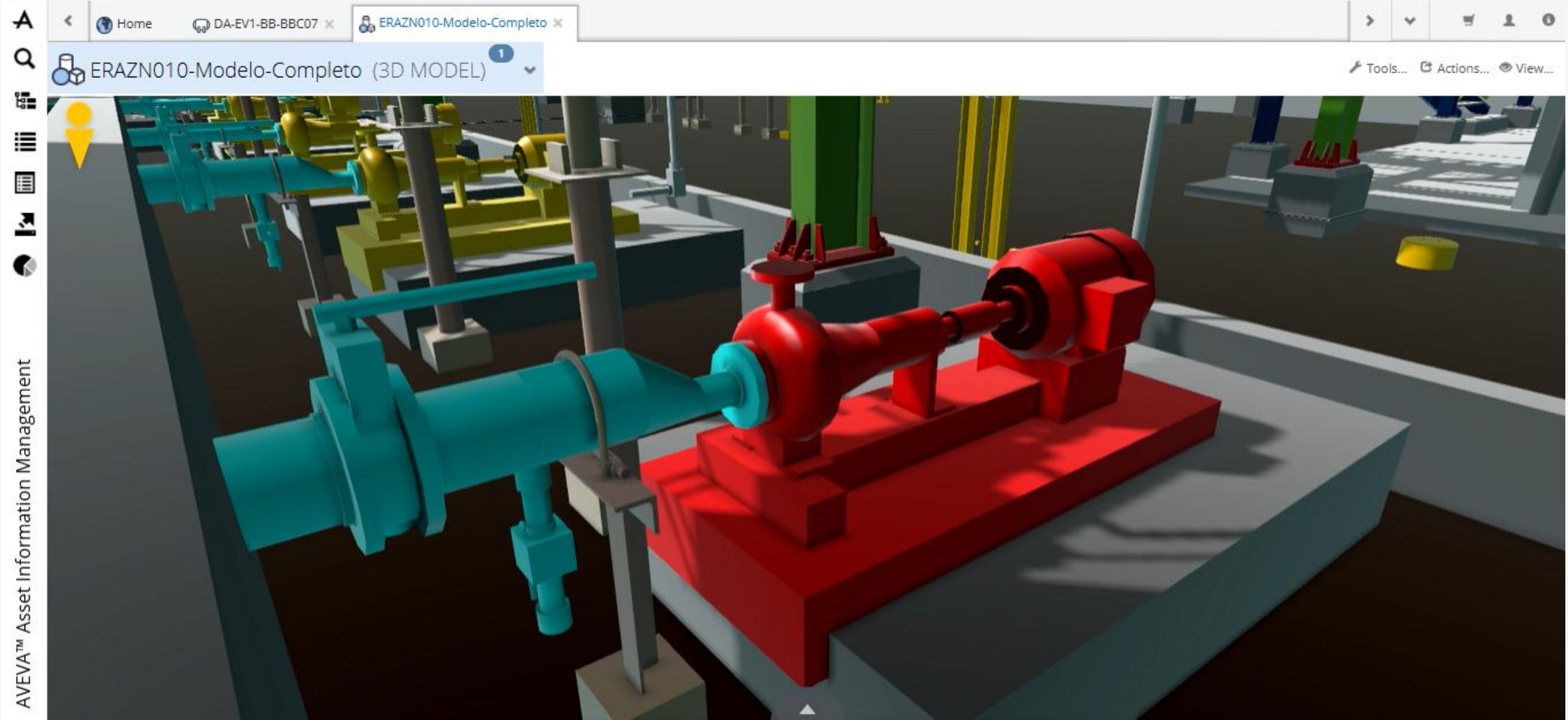
Mr No	From	To	Cable
102-C1	MCB602	PCV0102	MCB602
102-P1	MCB602	PCV0103	MCB602
103-C1	MCB602	PCV0109	MCB602
103-P1	MCB602	PCV0105	MCB602
109-C1	MCB602	PCV0106A	MCB602
109-P1	MCB602	PCV0106B	MCB602

11 KV SUBSTATION

The diagram shows a 11 KV Substation with various components including cables, switches, and transformers. The substation is connected to a 11 KV busbar and a 11 KV feeder. The substation is also connected to a 11 KV busbar and a 11 KV feeder.



AVEVA™ E3D Design



Connecting Engineering and Contractors

Challenges in Project Oversight (Before AIM Implementation)

- ✓ Project monitored via **document issuance**
- ✓ Analyses based on **outdated information**
- ✓ **No real-time visibility** into project status
- ✓ Dependent on **manual communication** with stakeholders, resulting in **delays and waiting times** for critical information

Project Oversight with AVEVA AIM (After Implementation)

- ✓ **Real-time project monitoring** with consolidated information
- ✓ Clear visibility of **work-in-progress vs. document issuance**
- ✓ **Information searchable by asset**, eliminating dependency on communication and waiting time
- ✓ **Unified and reliable data access**
- ✓ **Reduced rework and fewer errors**
- ✓ **Faster and more agile decision-making**

Identified Benefits



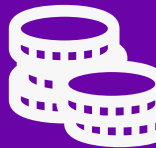
Faster and more reliable Vendor Drawing and Technical Data Sheet validation compared to traditional methods



Efficient asset information retrieval within supplier-issued documents



Direct access to engineering data during construction and project management



Real-time access to project data without requiring an extra engineering software license (cost savings)



Simplified information search, eliminating the need for expertise in engineering tools



Faster and more accurate access to information from any source (3D model, EDM, ERP, P&ID, etc.)

**Cost Analysis of Inadequate Interoperability in the
U.S. Capital Facilities Industry**

Michael P. Gallaher, Alan C. O'Connor, John L. Dettbarn, Jr., and Linda T. Gilday

“...large owners and production operators have conducted internal studies and determined that typical engineers in design, construction, operations, and maintenance spend 40% to 60% of their time searching for and validating information. One owner and operator with a large portfolio of commercial properties indicated that a typical on-site construction engineer spends more than 15% of each day simply tracking down information to handle maintenance requests.”

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Data is, in fact, the new oil of the digital age.

Data is knowledge, but that alone is not enough.

The new oil is wisdom through data.

"Knowledge is understanding that a tomato is classified as a fruit; wisdom is understanding that it has no place in a fruit salad."

"...large owners and production operators have conducted internal studies and determined that typical engineers in design, construction, operations, and maintenance spend 40% to 60% of their time searching for and validating information. One owner and operator with a large portfolio of commercial properties indicated that a typical on-site construction engineer spends more than 15% of each day simply tracking down information to handle maintenance requests."

Before

3 projects

134,3K

Project Engineering Hours

7,813

Quantity of Documents

17.25

Average KPI
Hours/Doc



3.10

Average KPI
revisions/Doc



After

2 projects

199,5K

Project Engineering Hours

12,306

Quantity of Documents

16.07

Average KPI
Hours/Doc



2.82

Average KPI
revisions/Doc



Comparing Industrial projects from the same sector, using the same Engineering tools (BIM methodology)

7.34%



**Efficiency
increased**

9.93%



ForzyLAB

creating **connections** for a new world

ForzyLab is a space completely **focused on the customer experience**, enabling interaction with projects through highly technological equipment



Immersive Reality

Navigate through a 3D model of an asset with a 1:1 scale sensation

Agility and Precision

An integrative platform (3D models, data, or documents).

Team Experience

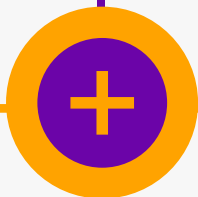
Access digital asset information directly using a '75" smartboard, ideal for team discussions.

AIM as a Lever for Data Integration



Roadmap: Connecting operational data (e.g., PI System).

We are empowering ourselves to become true System Integrators — bridging technologies, data, and people to unlock the full potential of digital ecosystems and deliver smarter, connected solutions.



Expected Benefits:

Data-driven decisions, smarter asset management, and a new level of operational excellence through real-time, integrated insights.



Challenges & Opportunities:

A transformative journey that requires overcoming technical complexity and cultural shifts — but opens the door to innovation, collaboration, and continuous improvement.

Conclusion & Next Steps



AIM has proven to be more than a digital tool — it's a strategic enabler



What comes next is even more exciting



Driving transformation: Turning information into insight, and insight into action — across the asset's entire lifecycle.



It addressed critical business challenges and set the foundation for a more connected, intelligent, and agile asset lifecycle.




Expanding the ecosystem: Integrating AIM with field systems to bridge engineering and operations.

Unlocking intelligence: Evolving the digital twin with real-time data and analytics to empower proactive decisions.



Transforming Data into Results: The Forzy AIM Experience

In operations and maintenance,
the digital twin goes beyond
solving challenges — it anticipates,
optimizes, and transforms, making
today simpler and tomorrow
more efficient.





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Forzy enabled up to 10% efficiency gains in industrial projects by implementing AVEVA AIM for Promon Engenharia

Challenge

- Promon's projects faced scattered data and isolated systems
- Centralized and ensured reliable information
- Improved fragmented communication
- Integrated engineering systems into a unified platform.

Solution

- Forzy chose AVEVA AIM for its ability to integrate with existing systems, offer scalability for future demands, and enable real-time collaboration—key requirements for supporting complex industrial projects.

Results

- **7.34% reduction in engineering hours per document.**
- **9.93% fewer revisions per document, reducing rework.**
- **Real-time project visibility, eliminating delays from manual updates.**
- **Improved document validation and asset data retrieval speed.**
- **Cost savings by avoiding extra engineering software licenses.**
- **Streamlined access to engineering data during construction and management.**

