



**Transform  
Your Data  
Into Solutions**

**MORE THAN 15 YEARS OF EXPERIENCE IN  
ADVANCED ANALYTICS SOLUTIONS FOR  
OPERATIONS AND MAINTENANCE IN INDUSTRY**

Software



**DATamaestro software\*** is based on cutting-edge machine learning technology adapted to real industrial challenges.

\* Software as a Service (SaaS)

Services



**OPTImaestro methodology** combines Advanced Analytics and plant staff participation to optimize manufacturing performance.

INCREASE PROFITABILITY BY OPTIMIZING:



ENERGY EFFICIENCY



PREDICTIVE MAINTENANCE



OVERALL EQUIPMENT  
EFFICIENCY (OEE)



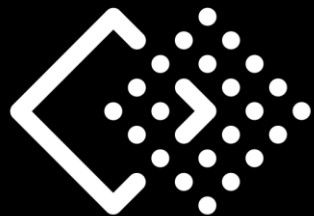
PRODUCTIVITY



QUALITY

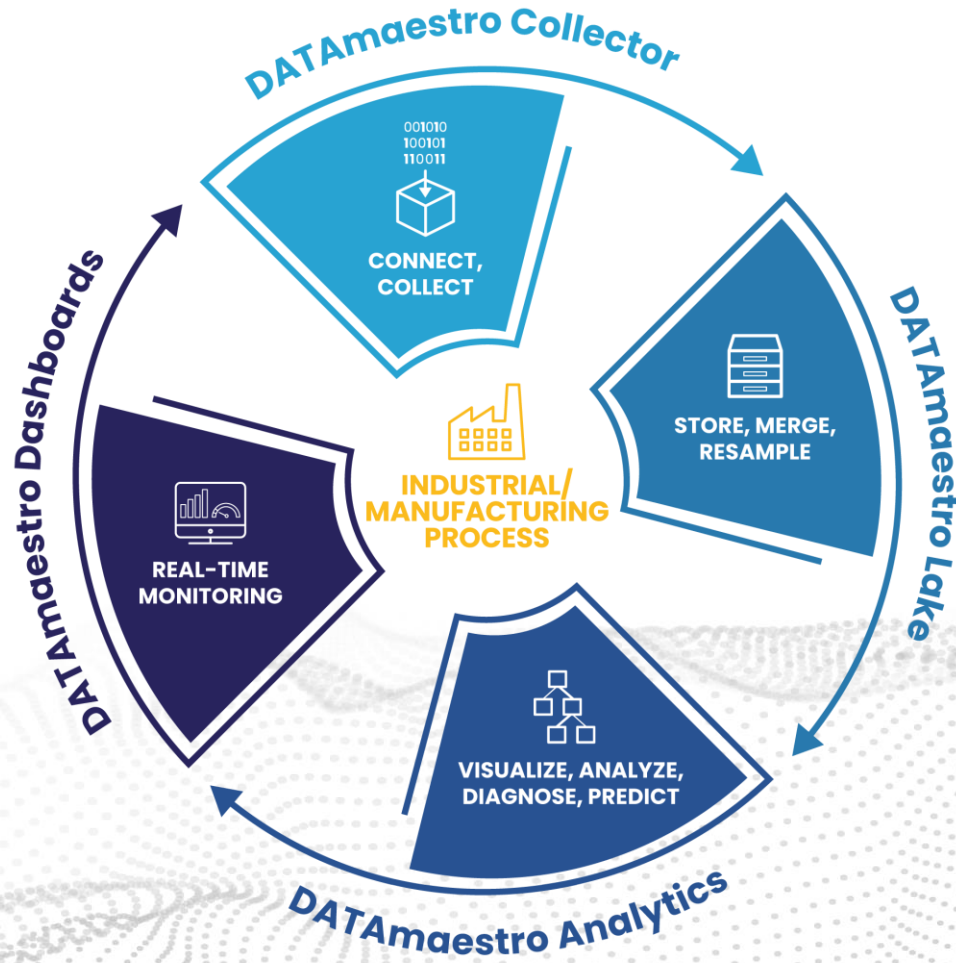


YIELD



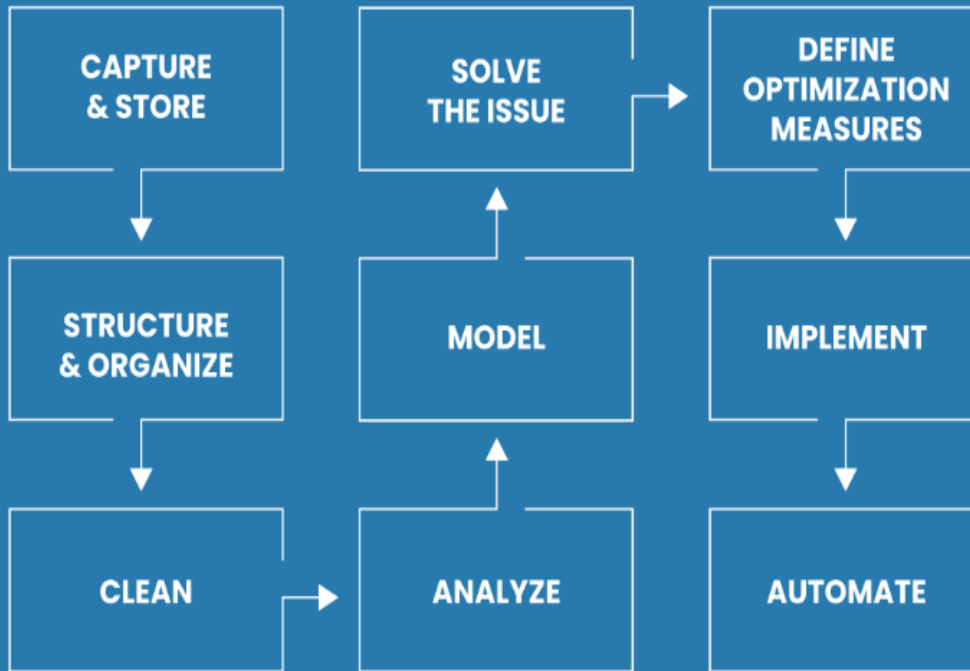
**DATamaestro**

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CLOUD / ON-PREMISE

## CREATE VALUE FROM DATA



## BENEFITS

- **Easy-to-use** collaborative web-based analytics platform
- Enables **self-service** cloud analytics, no coding required
- Extensive set of machine learning **algorithms fitting industry**
- Interfaces collecting **existing data** (Historians, PLC, DCS, SCADA, IoT)
- Data streaming **automatically updates** analytics workflow
- **Feature engineering** with thermophysical properties library
- Web API allows **easy integration** with other applications
- **Instantaneous deployments** of models in web-based dashboards
- Available on **cloud or on-premise**

# DATAMAESTRO IN PRACTICE: CHARGE AND EXPLORE YOUR DATA



Upload Explore View Export Manage

Help demo

/ demo / Chemicals

From date\*

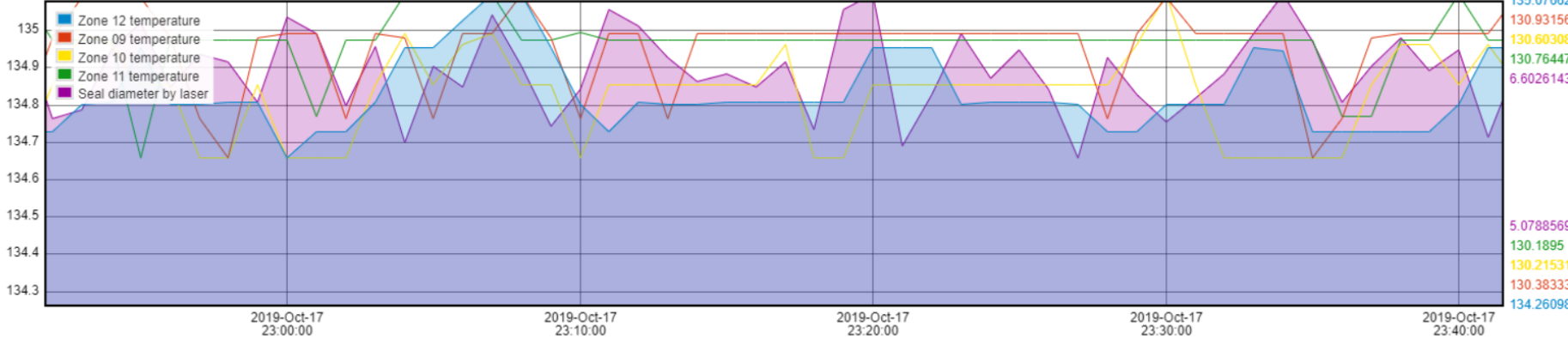
2019-Oct-17 22:51:46.75

To date

2019-Oct-17 23:41:30.953

+ Add trends

Zone 12 temperature



Info Zoom

FULL TAG NAME	STYLE	MIN	MAX	SMOOTHING
/demo/Chemicals/Zone 12 temperature	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	134,2609778121366	135,07661927514994	No smoothing
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/demo/Chemicals/Zone 11 temperature	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	130,18949987313033	130,76446538803347	No smoothing
/demo/Chemicals/Seal diameter by laser	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	5,078856932853262	6,602614340361847	No smoothing
/demo/Chemicals/Seal diameter by operator	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	5,310223511408545	5,495069926947216	No smoothing

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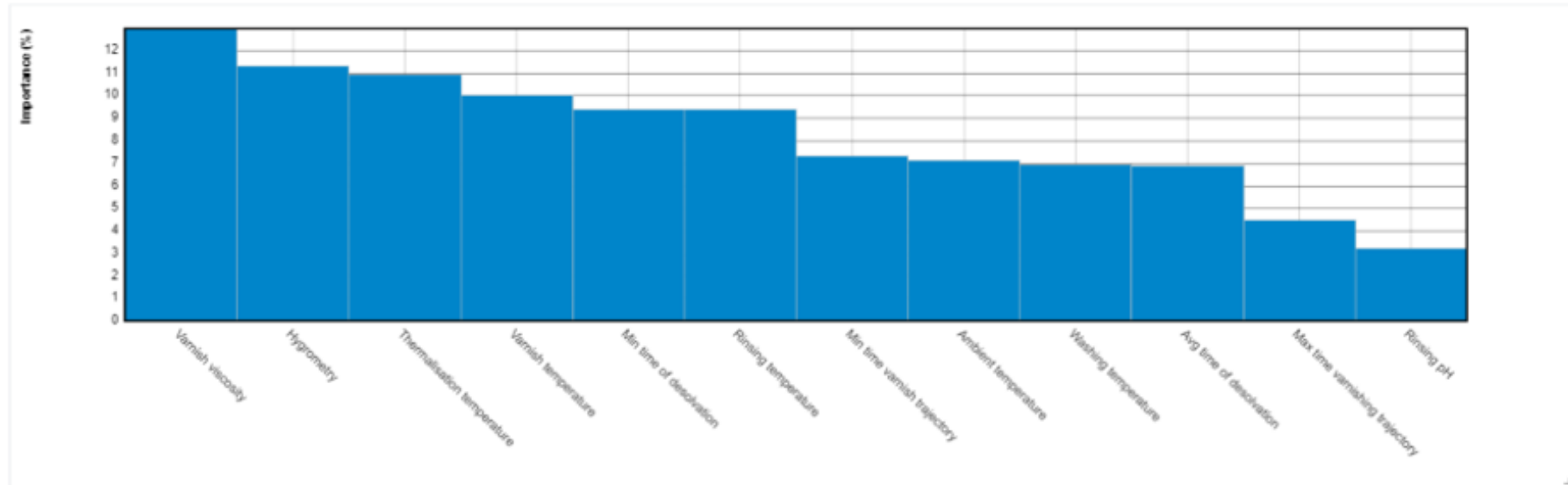
# DATAMAESTRO IN PRACTICE: PARETO - IDENTIFY KEY PARAMETERS THAT HAVE AN INFLUENCE ON YOUR ISSUE



## ET\_Quality conformity

More actions Edit

Attribute Importances Model quality Model Accuracy Report



Navigation icons: Home, Previous, Next

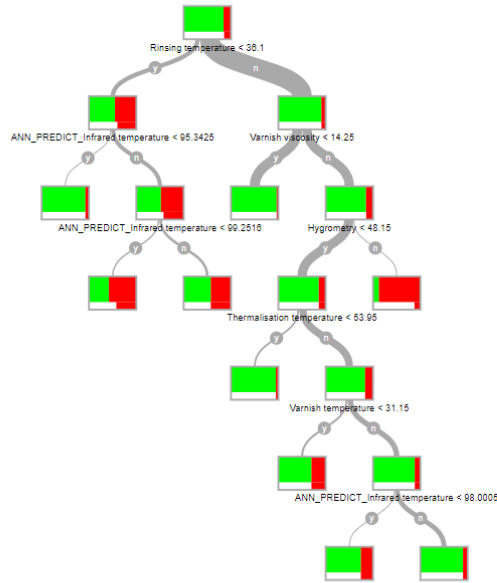
# DATAMAESTRO IN PRACTICE: DECISION TREE - FIND THE ROOT CAUSES OF YOUR ISSUE



## DT\_Quality Conformity

More actions Edit

- Tree
- Attribute Importances
- Model quality
- Model accuracy report
- Model Results
- Model Results Summary
- Cross validation





Reset 🔍 🔍 ⓘ

## PRIM Analysis for Quality passed

More actions Edit

Rules Results Graphs

### Box 1: Objective maximize 'OK' occurrence for Quality passed

Rules Nb	Rules	Manipulated Attributes	Lower Limit	Upper Limit	Nb Objects	Symbol probability	Cumulated Improvement	Graph
-	No Rule	None	-	-	1560	<b>0.870513</b>	0%	
1	if	Varnish temperature	31.6	32.1	392	<b>0.971939</b>	<b>11.6513%</b>	
2	and if	Thermalisation temperature	54.7	59.4	380	<b>0.973684</b>	<b>11.8518%</b>	



# DATAMAESTRO IN PRACTICE: DASHBOARDS - VISUALIZE YOUR OPERATIONS IN REAL TIME



New Dashboard

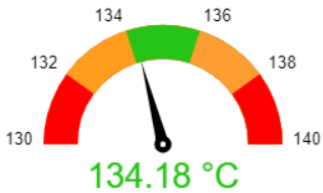
Help demo

demo / Chemicals - Foam Seal Quality Analysis

## Seal diameter at Extruder outlet



## Seal temperature at Extruder outlet

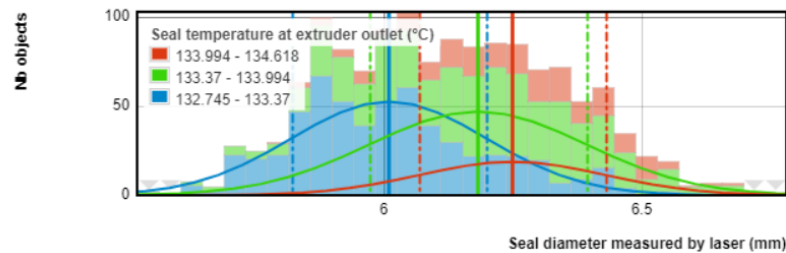


## Extruder monitoring

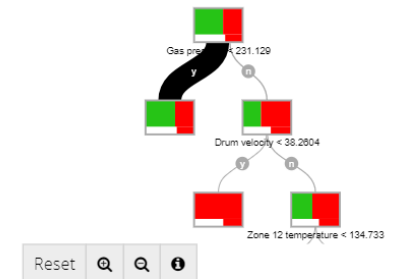
### Inlet gas properties & temperatures

Gas flow 17.91 m<sup>3</sup>/h  
Gas pressure 218.12 mbar

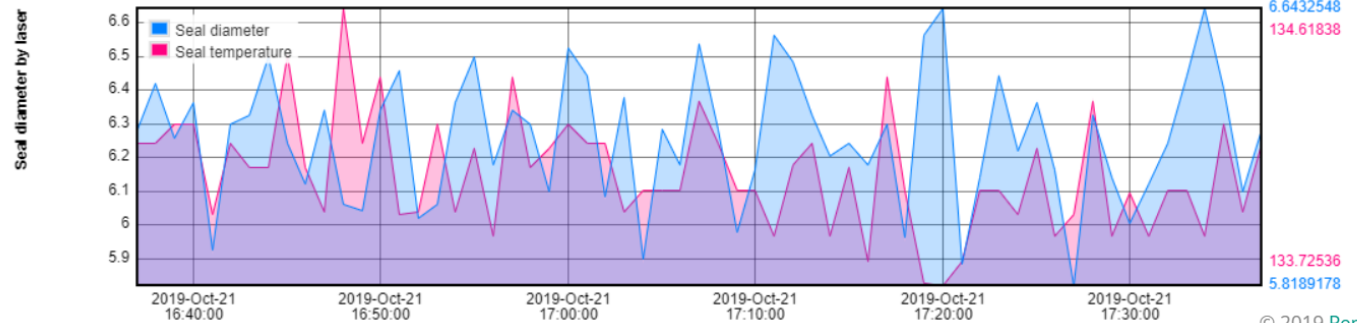
## Seal diameter distribution



## Decision Tree for Seal diameter 2-classes



## Seal diameter & temperature



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**Transform  
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**STEP 01** **DIGITAL DATA DIAGNOSTIC**  
 Diagnose technical and economic feasibility of Analytics projects

1-2 MONTHS

Where is the data ?  
 What are the data flows ?  
 How is it organized ?  
 Can we stream data to the cloud ?  
 What are the savings opportunities ?  
 How big are these opportunities ?  
 How to leverage opportunities with analytics ?

**STEP 02** **PILOT PROJECT**  
 Implement optimization projects via Advanced Analytics and staff participation

3-6 MONTHS

From identified opportunities, a pilot is selected with the client.  
 Analytics is applied to solve the case (OPTimaestro).



**STEP 03** **KNOWLEDGE TRANSFER**  
 Implement your own optimization projects with self-service Analytics

SaaS\* ACCESS FEE PER USER PER YEAR

**CLIENT WITH ANALYTICS CAPABILITY**

The pilot enables client training in advanced analytics capabilities.  
 The client can implement analytics projects using DATAmaestro technology.

\*Software as a Service



**STEP  
01**

**DIGITAL DATA DIAGNOSTIC**

Diagnose technical and economic feasibility of Analytics projects

- Where is the data ?
- What are the data flows ?
- How is it organized ?
- Can we stream data to the cloud ?
- What are the savings opportunities ?
- How big are these opportunities ?
- How to leverage opportunities with analytics ?

## STEP 02

### PILOT PROJECT

Implement optimization projects via  
Advanced Analytics and staff  
participation



From identified opportunities, a pilot  
is selected with the client.  
Analytics is applied to solve the case (OPTImaestro).

#### OPTIMAESTRO : 6 PHASES

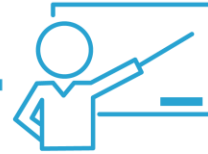


## OPTIMAESTRO : 6 PHASES



3-6 MONTHS

1. What are the **Key Performance Indicators** (KPIs) for driving my industrial process?
2. What are my **potential savings** after implementing full pilot project? → “GO / NO GO”
3. How do you combine AA with plant staff and involve operational level?
4. What parameters are key to maintaining **optimal performance**? → “GO / NO GO”
5. What **tools, dashboards** or **reports** are required to support operators in maintaining optimal performance?
6. How can I ensure **long-term** follow-up and **sustainable results**?



**STEP**  
**03**

## **KNOWLEDGE TRANSFER**

Implement your own optimization projects with self-service Analytics

## **CLIENT WITH ANALYTICS CAPABILITY**

The pilot enables client training in advanced analytics capabilities.  
The client can implement analytics projects using DATAMAESTRO technology.

## PEPITE:

**Advanced Analytics** solutions based on Artificial Intelligence to **optimize industrial process**.

Productivity, OEE, product quality, yield, energy efficiency, predictive maintenance.



## SOFTWARE:

**DATamaestro**: platform and software able to collect, store, analyze and report.



## CONSULTING:

**OPTimaestro** methodology guides you through the project and the change implied by Advanced Analytics.



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