ICONPRO

Better Quality. Less Waste. Less Inspection Effort

ARES SOFTWARE

Predictive Quality and Process Optimization. In-Cloud or On-Premise. Made Simple.

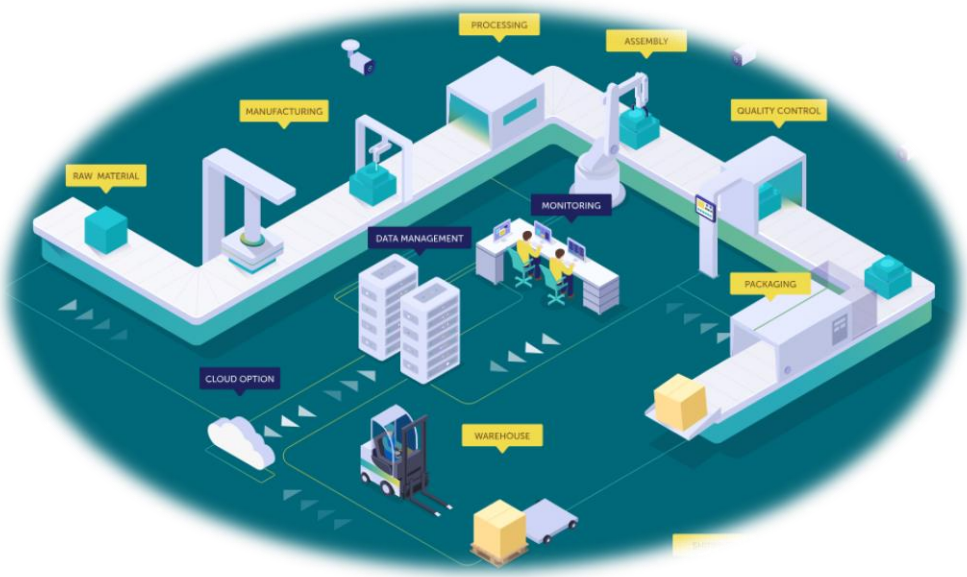
Compatibility With All Common File types, Databases & Standard Protocols.

WATCH DEMO

WHICH BENEFITS DOES ARES PROVIDE FOR PRODUCTION & INSPECTION?

50% LESS
Scrap or Waste
by Live Process Correction

70% LESS
Inspection Effort
by Prediction-Based Inspection



100% TRANSPARENT
Process Influences
and Scrap Root Causes

0% UNKNOWN
Risks or Uncertainties
due to Confidence Evaluation

Get Started Now

HOW CAN YOU EASILY TRAIN AN ACCURATE MODEL TO PREDICT QUALITY?

PROBLEM

Training predictive models is complex and time-consuming.
It also requires expert knowledge, especially for typical production data.

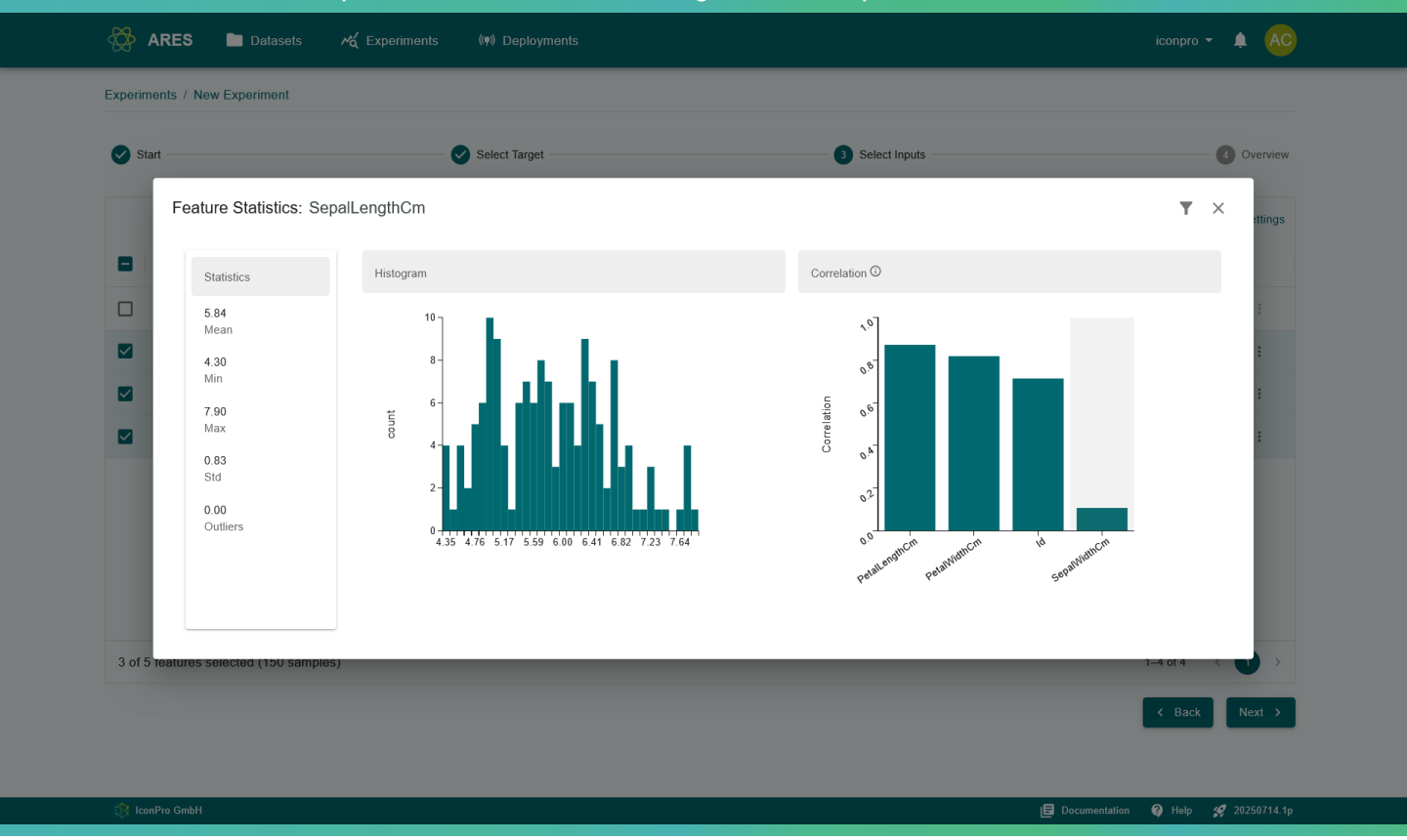
SOLUTION

ARES lets users upload data from files or databases, choose input and target variables, and build accurate models in a few clicks – no coding required.

ADDED VALUE

ARES reduces effort and costs for proof-of-concept and model training.
It enables fast and highly cost-efficient implementation of predictive quality.

Most Important Statistical Metrics & Figures for All Input Features at a Glance.



WHICH INFLUENCING PARAMETERS ARE MOST IMPORTANT FOR QUALITY?

PROBLEM

Machine learning models lack transparency. With accuracy values only you can't see how inputs affect the predicted quality and if they make sense.

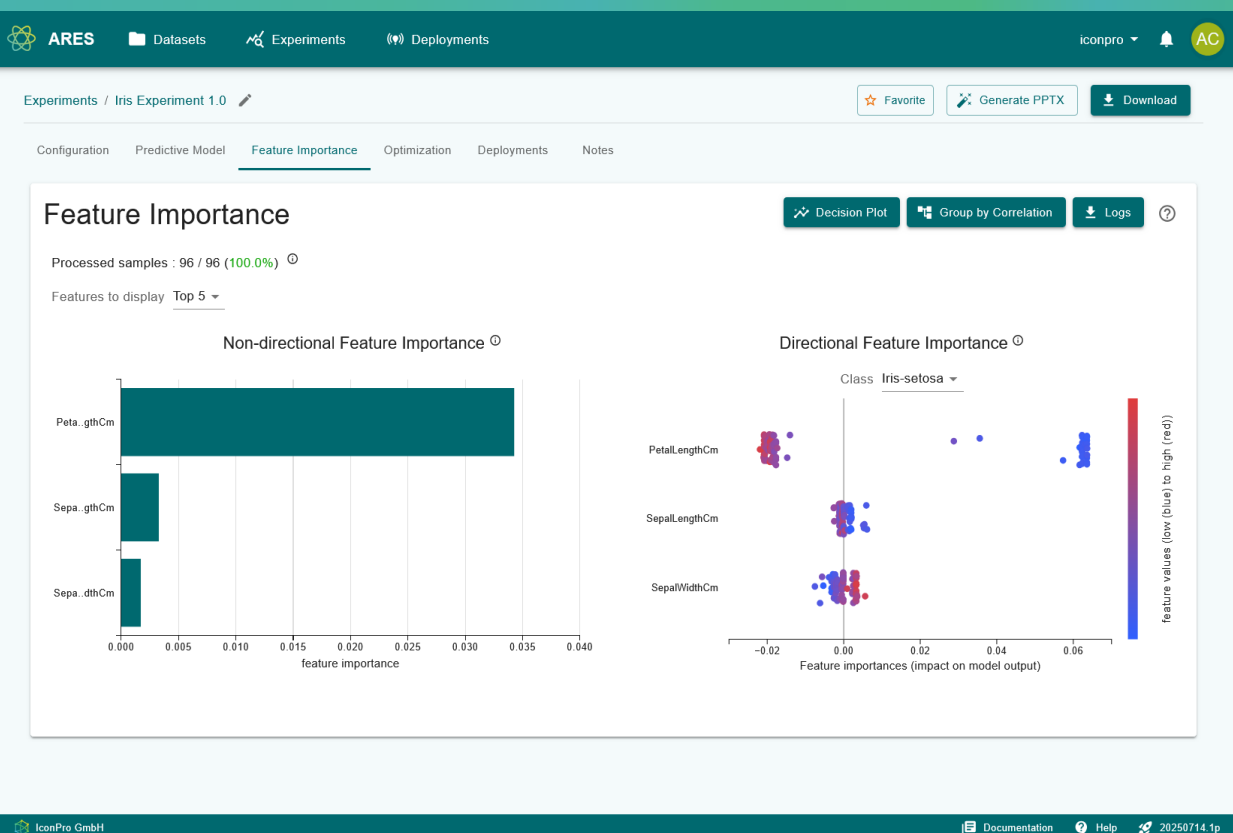
SOLUTION

ARES shows which inputs influence quality, to what extent and in which direction. Experts can validate results based on their process know-how.

ADDED VALUE

ARES increases model transparency, building trust in trained models.
It enhances process understanding and reveals hidden root causes of scrap.

Key Process Insights Through Influence Visualization



WHAT DOES A GOOD, BAD, OR TYPICAL PROCESS STATE LOOK LIKE?

PROBLEM

Production processes often involve many influencing factors, making it hard even for experts to understand why results are good, bad, or typical.

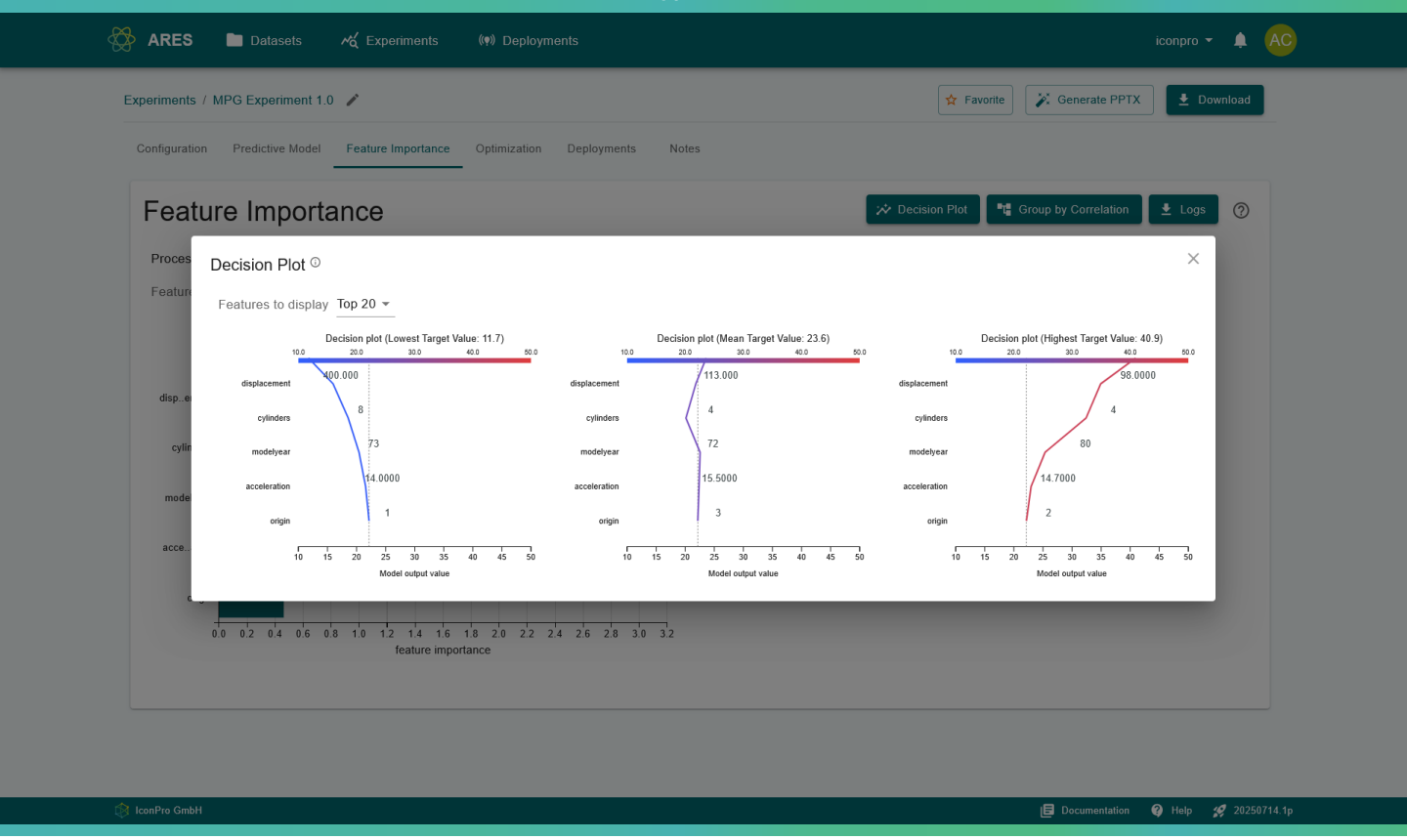
SOLUTION

ARES clearly visualizes representative good, typical, and bad process states. It shows how specific input patterns and values lead to these outcomes.

ADDED VALUE

ARES makes process states explainable, comparable, and actionable, boosting confidence and enabling targeted improvements that reduce scrap.

Visualization of a Bad, Typical, and Good Process State



HOW TO OPTIMIZE CONTROLLABLE PARAMETERS FOR OPTIMAL QUALITY?

PROBLEM

Deriving exact process correction values from validated predictions is complex, slow, and often unreliable.

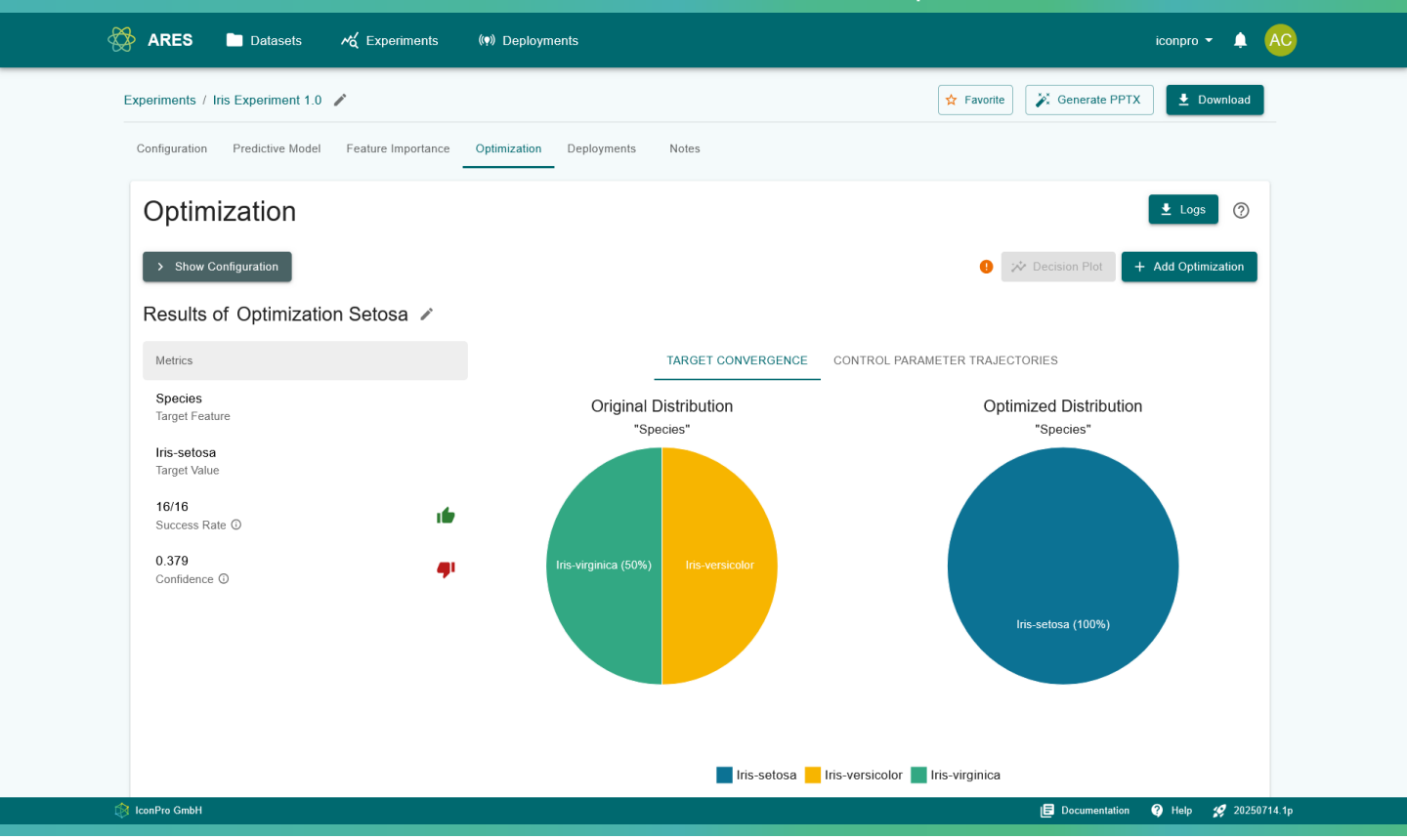
SOLUTION

With IconPro ARES, optimization models are derived in just a few clicks from validated prediction models, with clear accuracy reports.

ADDED VALUE

ARES shows the expected optimization impact of models before going live. Before-vs-after visualizations reveal potential quality improvements clearly.

Visualize the Process Results Before and After Optimization



HOW TO UTILIZE PREDICTIONS AND OPTIMIZATION IN-PROCESS?

PROBLEM

Live in-process predictions and optimizations unlock the value of predictive quality models but typically require IT support and coding.

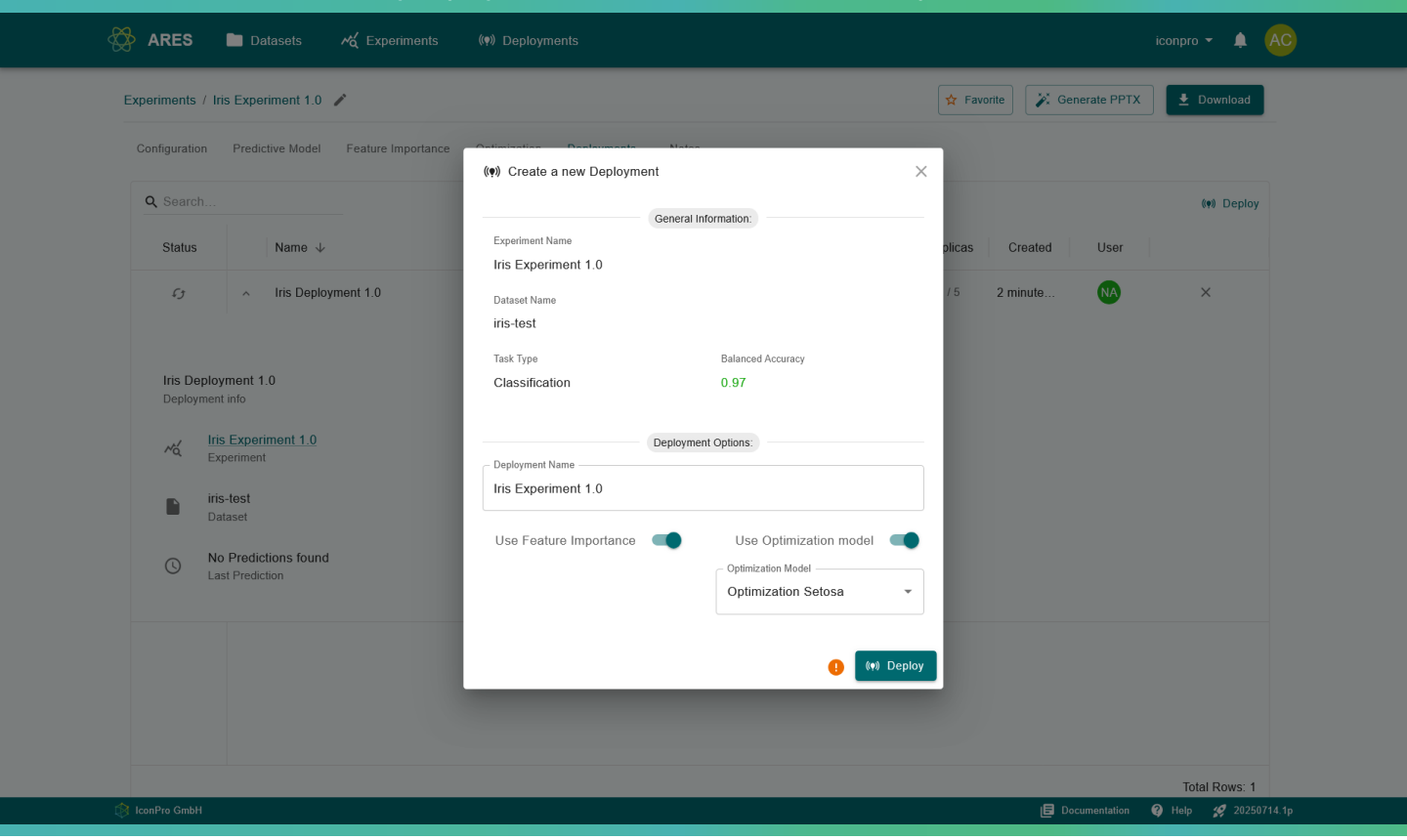
SOLUTION

With IconPro ARES, validated models can be deployed in just a few clicks — no coding required.

ADDED VALUE

Real-time predictions and process correction values with minimal coding or IT support — for immediate process improvement.

Easy Deployment of Live Process Prediction or Optimization



HOW TO ENSURE CORRECT LIVE PREDICTIONS & OPTIMIZATION?

PROBLEM

Reliable in-process predictions and correction values are vital for quality assurance. However, validating models during operation remains difficult.

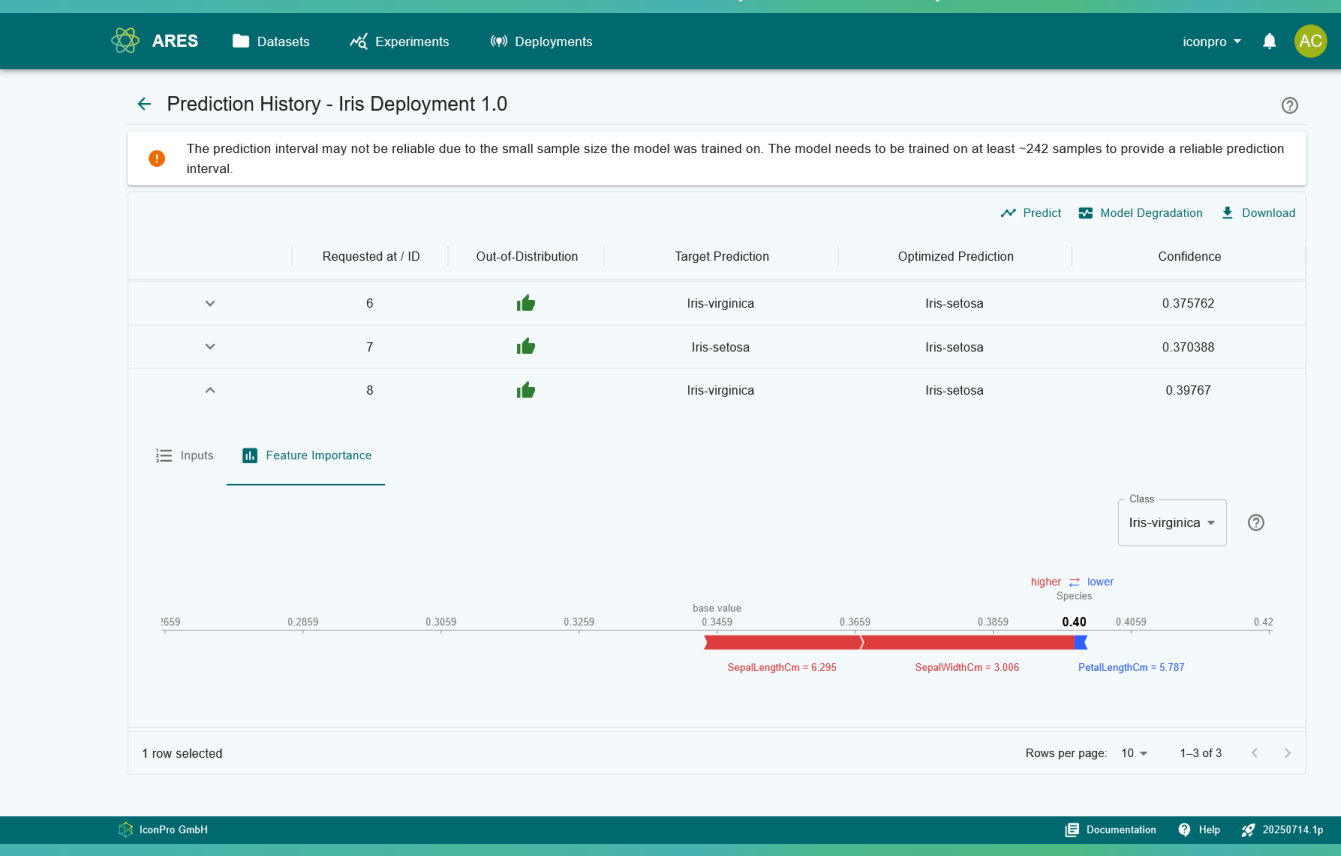
SOLUTION

IconPro ARES continuously logs and monitors model outputs. It alerts users automatically if anomalies occur or data deviates from normal patterns.

ADDED VALUE

ARES ensures ongoing reliability of predictions and optimizations - fully automated. This maximizes process outcomes while minimizing risk.

Confidence Evaluation for Every Prediction or Optimization



HOW TO EASILY MONITOR & MANAGE LIVE MODELS IN PRODUCTION?

PROBLEM

Managing deployed optimization or prediction models — from deactivation to updates — is often expert-driven, IT-dependent, and hard to oversee.

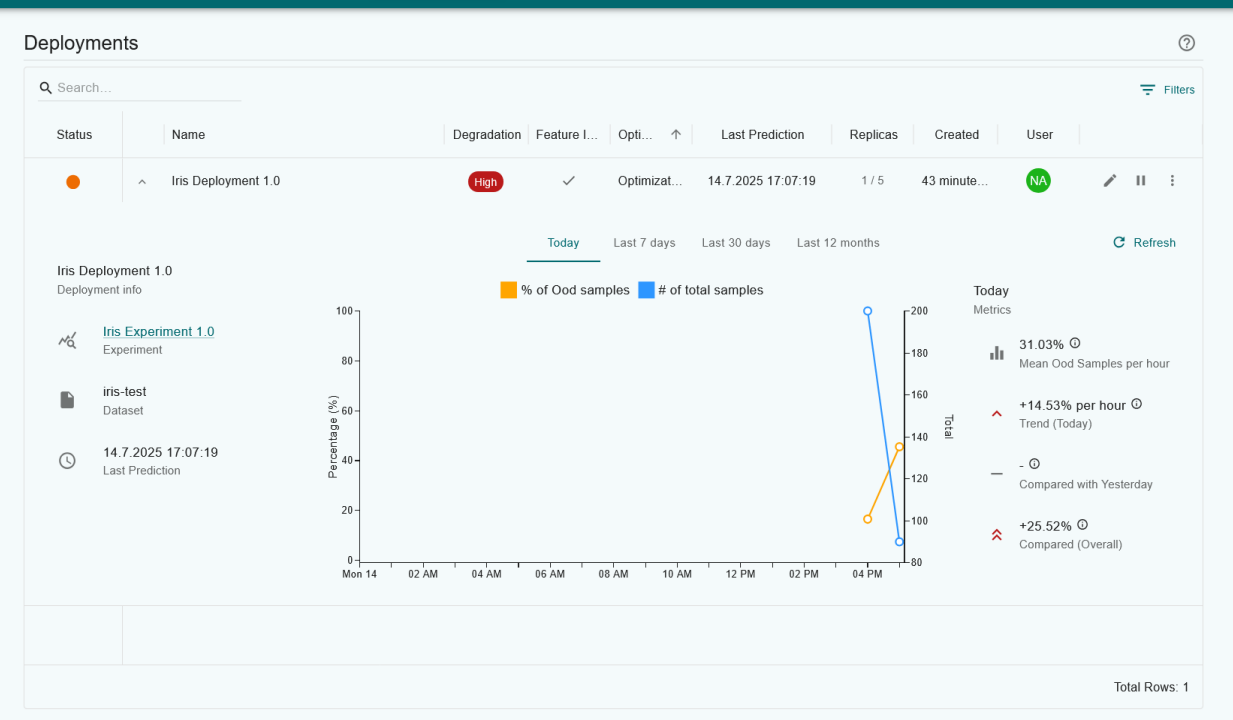
SOLUTION

IconPro ARES lets process and quality engineers manage all live models without coding or IT support.

ADDED VALUE

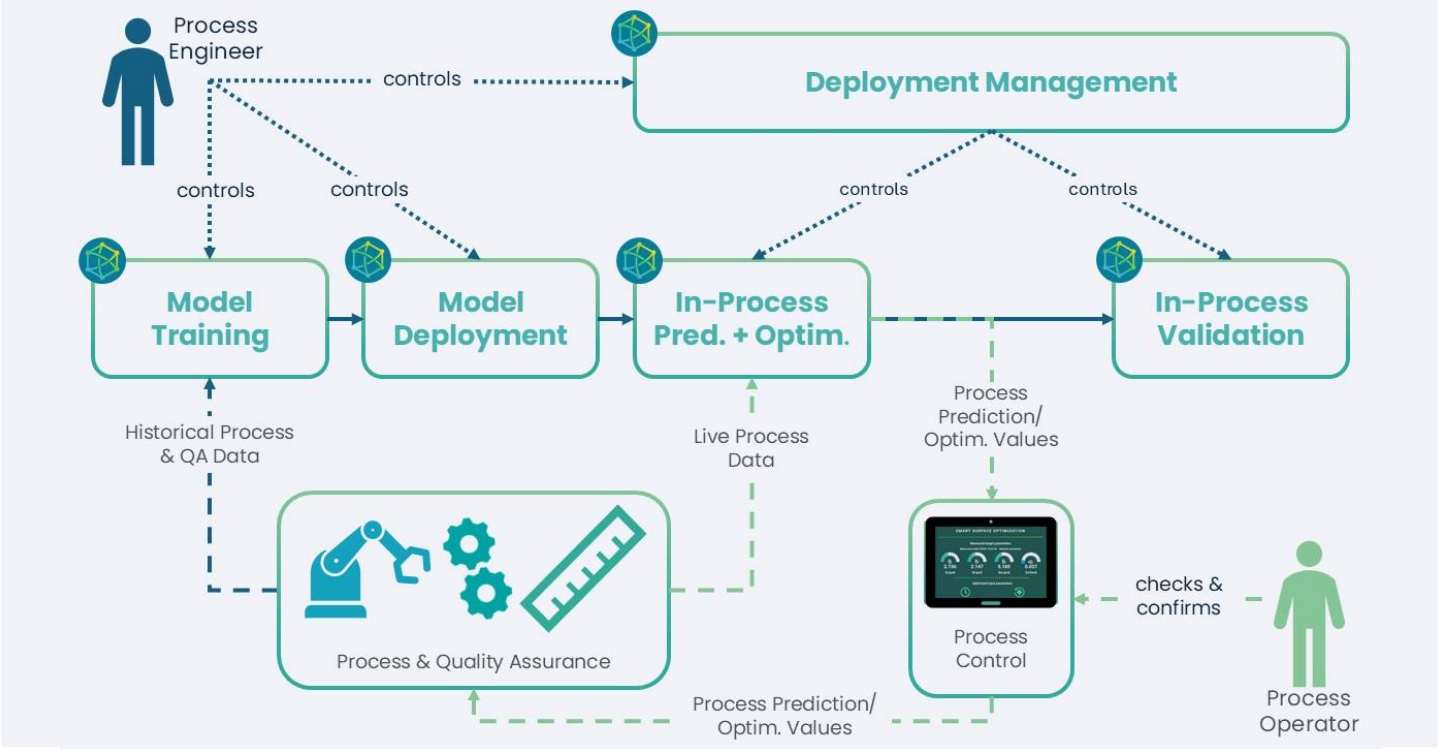
Full control for process engineers, faster reaction times, and cost-effective model management.

Intuitive Display of Current Live Model Reliability



HOW TO INTEGRATE ARES INTO PRODUCTION?

With interfaces to common file types, databases, and standard protocols, ARES integrates seamlessly into any IT/OT infrastructure - in-cloud or on-premise – without coding and with minimal IT effort.



Let's Talk!

Book Your FREE Appointment With Us to Discuss Your Options.

[Get Started Now]

IconPro is a leading technical provider of software solutions for predictive quality & predictive maintenance as well as process & energy optimization in production.

IconPro software helps manufacturing companies of all sizes to achieve more efficient and sustainable processes and machines. Our customers produce more competitively with lower costs and reduced resource usage.

Originating from the Machine Tool Laboratory of RWTH Aachen University, the largest institute for production research in Europe, we offer in-depth production expertise and software tailored to the shopfloor.

Learn more about IconPro at **iconpro.com** and follow us on **LinkedIn**. Feel free to write to us at **info@iconpro.com**.