



**DIGITAL TRANSFORMATION**& INDUSTRIAL CYBERSECURITY
IN THE OIL&GAS INDUSTRY



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## Real-Time Optimization in Refineries

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## Pursuit of cultural change focused on operational excellence and margin maximization

Minimizing the gap between these approaches leads to cost reduction and asset value enhancement.

Beginning of cultural change.
Development of a tool to
optimize operational decisions
and maximize economic
benefits.



OPTIMAX

### Incorporation of tools to align the vision and strengthen commitment to financial outcomes

Through the implementation of **35 OPTIMAX panels**, a support system for operations and decision-making is created, leading to margin maximization.

Maximize **adherence time** to operational guidelines.



Minimize reprocessing and quality giveaways

Track **priority KPIs** for each unit through economic impact calculation



Guide operations toward the production of high-value products

Accelerate deviation detection



Ensure the correction of deviations in the shortest possible time.



### OPTIMIZATION TRANSFORMATION

## Evolution in the way operations are monitored and optimized

### TRACKING THE LOCAL OPTIMUM



EARLY DEVIATION DETECTION

Proactive deviation management.



EVENT LOGGING AND REDUCTION OF TIME OUTSIDE THE OPTIMUM

Measurement and benchmarking against standards



CHALLENGING EXISTING STANDARDS

Proposing alternatives to minimize event and intervention times



REDUCTION OF OPERATING COSTS

Minimize total energy consumption through efficient use of resources



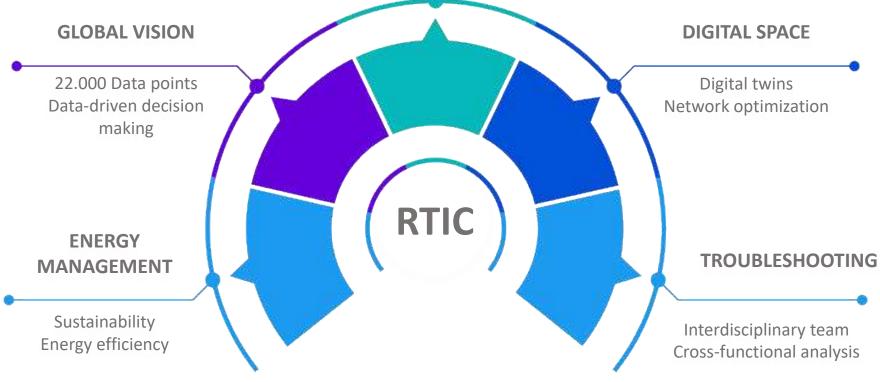
UNBLOCKING BOTTLENECKS

Identify operational constraints and generate initiatives to maximize efficiency

### REAL-TIME GLOBAL OPTIMIZATION

# Axes of Real-Time Optimization

# Initiatives to reduce impacts Process standardization



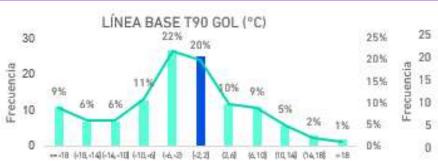
Click here to access the video.

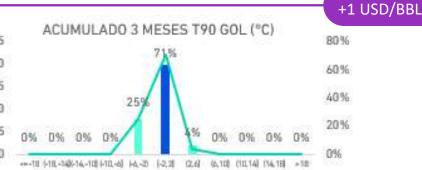
# REALTIME INTELLIGENCE CENTER

COMPLEJO INDUSTRIAL LA PLATA

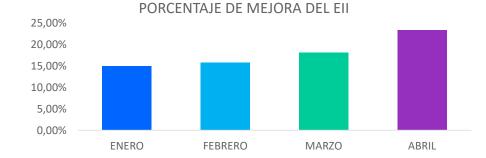
RESULTS

Reduced variability in quality parameters





Energy savings



- GAS RECOVERY
- BOILERS

  EFFICIENCY IMPROVEMENT IN FURNACES AND
- STEAM CONSUMPTION REDUCTION

Reduction in deviation times

