

BUSINESS CASE

Managing process reliability and safety with TÜPRAŞ

Sector: Oil & Gas
Client: Tüpraş
Module: SIFpro
Timeframe: 10+ years

THE NEED

Operating four oil refineries, with a total annual crude-oil processing capacity of approximately 30 million tons, Tüpraş is a leading producer in Turkey's refining sector and the country's largest industrial enterprise.

Tüpraş manages its safety instrumented functions using SIFpro and supports its operations with reliable, high-performing safety software that works for each site, as well as making risk performance accessible company-wide with one interface for all refineries.

THE ASSIGNMENT

As a multi-faceted and comprehensive program, SIFpro enables Tüpraş to review and analyze more than just SIFs.

From instrument failure rates and maintenance Task Interval Optimization to LOPAs and SILs.



"Each of our refineries has between two and three thousand safety instrumented functions (SIFs) in place to protect our people and equipment. Cenosco's program is robust and easy to use – it eliminates daily problems and gives us peace of mind.

Doğuş Uzun

Process Control Superintendent at
Tüpraş İzmir Refinery

THE APPROACH

Throughout the collaboration between Tüpraş and Cenosco, the teams have worked together to create valuable feedback –upgrade cycle.

This ensures that the software always meets Tüpraş's needs as well as complying with all international standards, including IEC 61508/61511.

THE RESULTS

The SIFpro software shows users all the key information they need on a single dashboard and provides clear links between process safety and reliability issues.

Moreover, the latest versions of SIFpro are hosted on a central server, avoiding any delays in downloading or uploading information.

Tüpraş has been using SIFpro for more than a decade.

THE FUTURE

The teams at Tüpraş and Cenosco are planning to grow their partnership, with more upgrades in the pipeline.

The overall goal is to increase the visibility of the intricate relationships between safety processes and equipment maintenance and reliability.

"Cenosco listens to our feedback and understands our concerns.

Safety processes are paramount, but better safety is closely linked to maintenance cost optimization, reduced downtime, and other efficiencies.

Over the years, we've provided a lot of feedback on the different features of the program and on the overall dashboard, and with every upgrade we can see how it has all been taken into account.

SIFpro is constantly being improved, so, even if our processes change, we know we can rely on the software.

SIFpro has long been essential to our daily operations at Tüpraş. That's a big advantage in our eyes!"

Doğuş Uzun

Process Control Superintendent at
Tüpraş İzmir Refinery

About Cenosco

Meet the IMS Suite: Asset Integrity the way engineers want

The IMS suite runs on cloud-based, mobile-friendly, and highly configurable technology. The suite comprises multiple products to cover a range of asset-specific needs. The IMS platform calculates optimal intervention periods and lays out efficient maintenance strategies. Our predictive maintenance software is used widely across asset-intensive industries, including chemicals, oil & gas, pulp & paper, and renewable energy.



With IMS you will...



Upgrade to predictive maintenance

Upgrade your maintenance maturity from reactive to predictive.



Manage Inspections

Never miss an inspection again, thanks to Inspection Data Management.



Gain insight

Gain insight into bad actors and equipment performance with easily accessible and accurate data.



Track all events

Track all events in an equipment's lifetime, including inspections, leaks, and temporary repairs.



Adopt Risk-Based Inspection

Adopt a practical and transparent Risk-Based Inspection approach (Shell's RBI).



Visualize

Visualize your data in 2D and 3D (digital twin).



Use on all devices & offline

Access your data anytime and anywhere. IMS works on all devices, online or offline.



Automate reporting

Streamline your reporting process with automated reporting.



Bulk import and export

Save time with bulk data import and export wizards, along with other bulk actions.



Integrate

Interface with other platforms, tailored to your specific requirements.

Trusted by world leaders



[Find out more about IMS](#)



Our Solutions

Unify your asset integrity management capabilities

IMS PEI

IMS PEI provides you with the overall integrity status for pressure and civil equipment. Determine when and what to inspect on your pressure equipment using RBI, advanced corrosion calculation, and analytical tools. Capture your inspection history to have a proper audit trail of your inspection results.

[FIND OUT MORE](#)



IMS PLSS

IMS PLSS provides you with the overall integrity status of your pipelines. It records the pipeline design data in detail and the user can specify differences in design data by creating different sections of the pipeline. It performs ILI and fit-for-service calculations based on intelligent pigging data and supports full scheduling and history recording in alignment with IMS PEI.

[FIND OUT MORE](#)



IMS RCM

IMS RCM optimizes the preventive maintenance plans of your asset. It does this by supporting the user in prioritizing equipment based on risk. Using the equipment's risk profile, the user determines the best maintenance plan for said equipment, either by defining this manually or using library functions.

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IMS SIS

IMS SIS offers maximum flexibility for users, as the HAZOP, LOPA, and SIF design verification modules can be used as stand-alone modules or as fully integrated modules where data from one module flows flawlessly into the downstream module.

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IMS FCM

Flanges are one of the main causes of leaks. With IMS FCM you can manage your flanges using a strict guided maintenance protocol on the basis of tool usage, tension, and torque calculations while keeping track of all assembly and disassembly work done on your critical flanges.

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IMS CIVIL

Manage civil integrity by defining when and what to inspect or repair, using RCM & RBI adopted for civil degradation dynamics.

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Cenosco can help you identify your needs and requirements.

Get in touch for a free consultation.

[Contact Us](#)

