A TAILOR-MADE & SAFETY CRITICAL POWER PLANT ENGINE SOLUTION

CASE STUDY

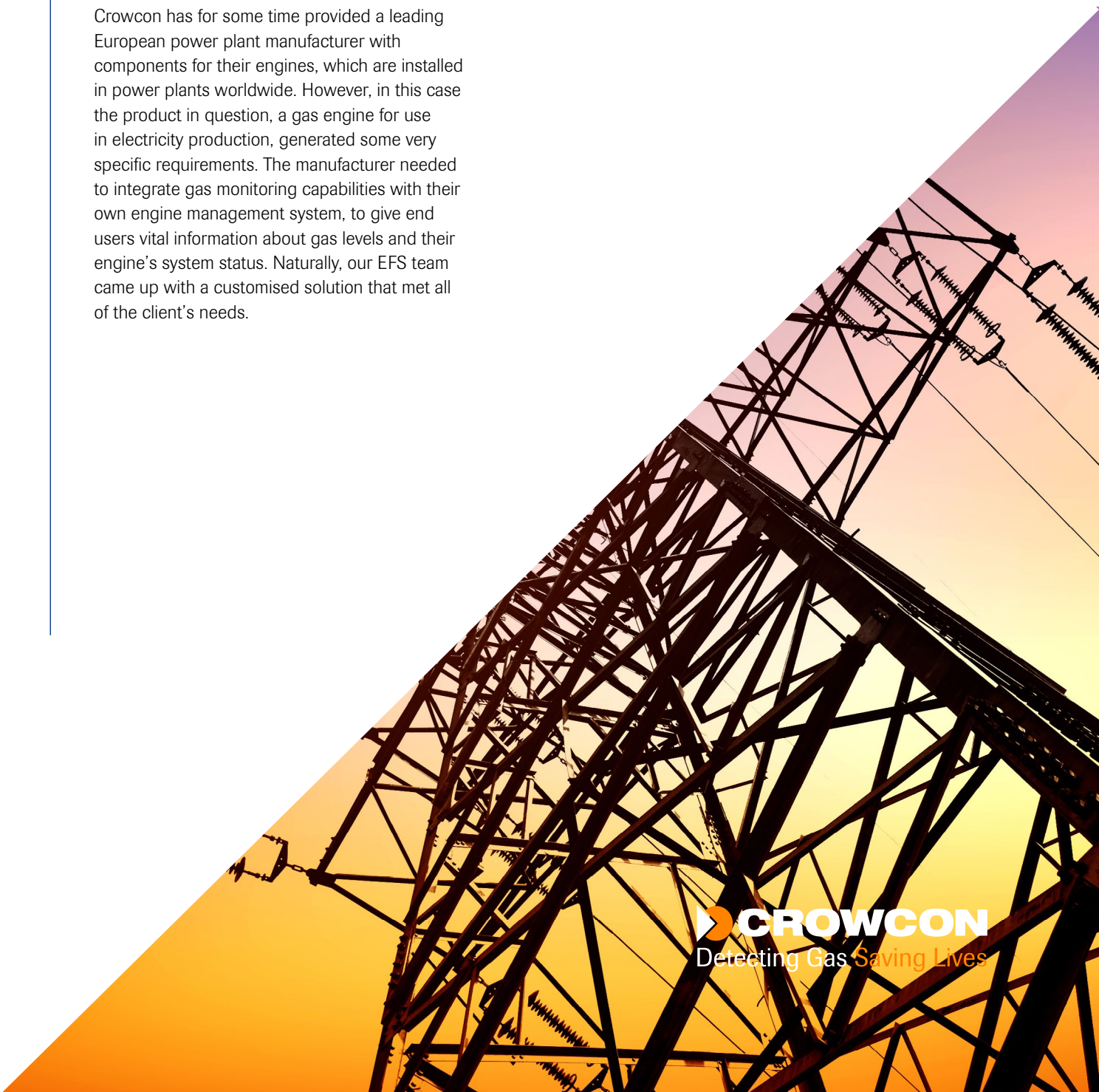
In this case, our client needed to integrate gas monitoring capabilities with their own engine management system, to give end users vital information about gas levels and their engine's system status.

CROWCON
Detecting Gas Saving Lives

THE MANUFACTURER NEEDED TO INTEGRATE GAS MONITORING CAPABILITIES WITH THEIR OWN ENGINE MANAGEMENT SYSTEM, TO GIVE END USERS VITAL INFORMATION ABOUT GAS LEVELS.

The Need - Requirements

Crowcon has for some time provided a leading European power plant manufacturer with components for their engines, which are installed in power plants worldwide. However, in this case the product in question, a gas engine for use in electricity production, generated some very specific requirements. The manufacturer needed to integrate gas monitoring capabilities with their own engine management system, to give end users vital information about gas levels and their engine's system status. Naturally, our EFS team came up with a customised solution that met all of the client's needs.



IN ANY POWER GENERATION ENVIRONMENT, INFORMATION ABOUT THE STATUS OF A GAS ENGINE AND LOCAL GAS LEVELS IS CRUCIAL.

Safety critical

As we have seen, the customer needed to integrate a gas monitoring system within a gas engine, which would in turn be used in electricity production – so, all components were safety critical. What was more, the customer needed to integrate the gas monitoring system with its own engine management system, which gave users of the gas engine easy access to vital information – including gas levels – via a human machine interface (HMI) panel, which the EFS team would also supply.

In any power generation environment, information about the status of a gas engine and local gas levels is crucial. This is because in the event of a gas leak, gas engines must be shut down and gas supplies isolated immediately to avoid catastrophe.

In this case, the customer asked for the HMI system to show a clear live display of complete system status, so that when the engine was in use, its operator could quickly and easily confirm this.

In addition, the client required the best possible traceability of all system components.

THE TAILOR-MADE SOLUTION USED VORTEX WITH A CUSTOMISED HMI DISPLAY TO SHOW THE ENGINE STATUS AND VORTEX INFORMATION, ALONG WITH IRMAX INFRA-RED GAS DETECTORS.

Close co-operation

The Crowcon EFS team worked very closely with the power plant manufacturer to make sure everyone understood what was needed from this complex and safety-critical project. Following extensive conversation and consultation, the EFS team designed a system that adapted a core unit – Crowcon's Vortex gas controller system – and integrated it with a range of other components to provide a bespoke solution that met all of the client's needs. The tailor-made solution used Vortex with a customised HMI display to show the engine status and Vortex information, along with IRmax infra-red gas detectors, open-path infra-red gas detectors and flame detectors.

Furthermore, the EFS team adapted its quality management system to provide a deeper level of traceability for all parts fitted to the system, along with customer- and site-specific labelling to extend traceability still further.

“THIS WAS A DEMANDING PROJECT” SAYS JACKIE MARSH, BUSINESS DEVELOPMENT ENGINEER OF CROWCON’S EFS TEAM.

“CLOSE CO-OPERATION REALLY MADE A DIFFERENCE HERE; IT ENSURED THAT WE DESIGNED A SOLUTION WHICH PERFECTLY MET A PRETTY COMPLEX SET OF REQUIREMENTS. WE ARE VERY PLEASED WITH THE OUTCOME.”

Find out how we can help

If your products could benefit from customised integrated gas monitoring, why not fill in our contact form? We’ll get back to you to discuss your requirements and how our EFS team can help.

Click HERE to access the form.

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