

IFS helps SDIC Qinzhou reduce operational costs by 20%



The Chinese power industry has undergone market reform, faced increased market pressures to improve operational performance and output, and digital disruption is re-imagining business. By implementing IFS, Qinzhou Electric Power is addressing these challenges. The results are improved productivity and quality, reduced operational costs, greater process automation and better decision-making, all while enhancing its competitiveness.

Disparate, costly and outdated systems

Qinzhou Electric Power had used a series of independent systems according to its various business needs. Data was dispersed and lacked integration, leading to a lack of real-time insight into operations. Managing the supply chain to generate power was reactive. Staff over-ordered coal based on assumptions and past experience, and didn't know when to order more, what grade was required, and whether they were purchasing at the right time or getting the best rates. There was no insight into procuring spare parts and what was actually needed to ensure maximum asset uptime. This resulted in an oversupply of parts in case an asset needed to be repaired. There was the occasional unplanned shutdown, which impacted power generation, and there was no analysis or tracking of assets to monitor asset reliability and when to repair or maintain it.

Back-end operational costs were labor-intensive, reliant on spreadsheets, in a very manual and paper-based environment. There was limited insight into daily operations in real time, and producing reports was time-consuming, resulting in outdated business intelligence that impacted daily decision-making.

IFS gives staff a 360° view of vendor information and has better equipped the team to manage demand and forecasting, enabling it to purchase coal at the right time at the right price, as well as manage production, which has reduced lead times and inventory levels. Procuring spare parts more efficiently and better warehousing processes ensures staff can proactively plan for maintenance and repairs, thus increasing overall asset uptime and reducing unnecessary storage costs.

About SDIC Qinzhou electric power

Qinzhou Electric Power is the largest thermal power plant in Guangxi, with a large domestic thermal power base.

Established on January 8, 2004, the company was formed by the SDIC Power Holdings Co., Ltd. and Guangxi Investment Group with 61:39 of the shares. In 2007, 2 × 600 MW supercritical coal-fired generating units were put into operation; in the first half of 2016, 2 × 1000MW supercritical units project was gridconnected and commenced generating power. The environmental indicators of the company reach the highest level in the power industry in Guangxi.

Benefits

- Reduced maintenance and repair costs by 15%
- Reduced management cost by 10% through labor force control and improving operational efficiencies
- Enhanced inventory turnover rate by 30%
- Reduced inventory cost by 33% through improved demand estimates
- Reduced unscheduled asset downtime through predictive maintenance

Qinzhou Electric Power can now better manage resources and allocation across its plant, driving further operational efficiencies. Human resource management can schedule employees to ensure the plant is operational 24/7, while monitoring time and attendance and automatically calculating and paying the correct salary. Health and safety is now actively managed and monitored across the plant, and document management provides full online control over all workflows and variations, ensuring that tighter contract management is achieved. IFS provides user-friendly software that enables employees to proactively use the system, and certain tools are especially appreciated. These include sticky notes, messenger, tools for planning tasks and managing work orders, as well as the ability to easily create custom fields and individual inquiries.

Since implementing IFS, Qinzhou Electric Power has commissioned another two coal-fired units, going live in the first half of 2016. IFS managed the project lifecycle of the design, build, resource management, procurement and the financial project costs. Qinzhou Electric Power has now become the largest generating power plant in Guangxi, another testament to the support IFS provides to help the company in its to improve operational efficiencies and increase power generation through increased asset uptime.

Qinzhou Electric Power gains 360° view

Qinzhou Electric Power implemented IFS Enterprise Operational Intelligence™ (EOI) to further achieve better enterprise management with rich business intelligence.

While IFS emphasizes highly-integrated and centralized operations to manage core business processes, IFS EOI delivers visual insight in real time, orchestrating business processes that align with company strategy to better understand business performance and enable improved decision making. As a result, Qinzhou Electric Power has already realized further operational efficiencies and cost savings.

Digitally transforming the business to support tomorrow's challenges

Right now the utilities industry is focusing on digitally disruptive technologies such as IoT, big data and cloud computing to capture data on assets more easily, enhance performance and improve itself. "Of course, we are also considering the fast integration of field device data and applications through IoT on equipment to reduce maintenance costs. In the next phase, we look to enable field and operational work through mobile tools to create further efficiencies. It is comforting to know that IFS is taking a leading role in supporting disruptive technologies such as IoT and WeChat-based solutions to enable mobile access and more easily capture data."

Solutions

- IFS Financials™
- IFS Human Resources™
- IFS Project Management™
- IFS Enterprise Asset Management™
- IFS Enterprise Operational Intelligence™

"IFS not only meets the needs of our business and management team, but has reduced supply chain, procurement, asset operation and maintenance costs by an average of 20%. It also enhanced power generation capacity and elevated our core competitiveness through digitally transforming our business."

Zheng Xianjin, Supervisor of Information Equipment, SDIC Qinzhou Electric Power

Find out more

For further information contact your local IFS office or visit our website, ifs.com

