

SUCCESS STORY

Avoiding costly peaks in demand



ZF leverages the benefits of **autonomous peak load management**, resulting in **sustained reductions in energy costs**



Autonomous system



Long-term energy cost savings



ROI within 18 months

THE CHALLENGE

Avoiding costly peaks in demand

- ZF has set itself the goal of continuously **optimising energy consumption** throughout its internal operations. A preliminary analysis of energy consumption identified **peaks in electricity loads**.
- These were driving up costs and were consequently defined as a priority for taking action.

THE ENGAGEMENT

Use of IoT platform sphinx open

- After conducting a detailed and thorough analysis GFT proposed the introduction of an **autonomous system for managing peak loads** based on **sphinx open**.
- The **rule-based solution** would also forecast demand using machine learning processes in the cloud.

THE BENEFIT

Long-term cost savings and unrivalled returns on investment

Over time, the solution introduced by ZF has evolved into an integral part of its energy management strategy. On a day-to-day basis, the system makes continual adjustments to changing conditions and regulates parameters. It also makes it possible to predict potential peaks in demand up to a week in advance, providing ZF with valuable information for production planning.

The autonomous solution has also brought long-term benefits when it comes to energy management:

- Peaks in demand can be forecast and automatically smoothed based on predefined rules – **permanently cutting energy costs**.
- Bottom line, peak consumption has been **reduced from 24 to around 20 megawatts**.
- The investment paid for itself within **18 months**.