


Reducing energy consumption at Zeeland Refinery



Installing Howden
Uptime has
resulted in **annual
energy savings
of €3,000.**

Zeeland Refinery is located in The Netherlands and is owned by Total and Lukoil. The refinery turns crude oil into fuels and has been in operation since 1973. The refinery has Howden Uptime installed on several reciprocating compressors and one turbo compressor.

The challenge

Zeeland Refinery had many unmonitored critical assets in operation at the plant and required insight into how to maintain and operate them efficiently. They found that conventional equipment monitoring solutions were too expensive to install on existing equipment in the plant.

They also had, and continue to have, a clear focus on energy savings, in order to protect the environment.

The solution

Howden Uptime is the perfect solution for Zeeland Refinery as it provides them with immediate actionable advice without the need for rotating engineers and maintenance teams having to analyse masses of data.

Zeeland Refinery first installed Howden Uptime on two non-Howden reciprocating compressors. The installation process was simple and non-intrusive, and providing IIoT-driven data capturing and communication hardware, suitable for hazardous areas, avoided any expensive cabling costs.

Within the first year of having the solution installed, the Howden experts detected an issue with the compressor actuators.

There was a sudden drop in interstage pressure and without Howden Uptime there would have been no obvious explanation for this.

The experts reviewed the data available on Howden Uptime and advised Zeeland Refinery how to correct the issue before any downtime had occurred.

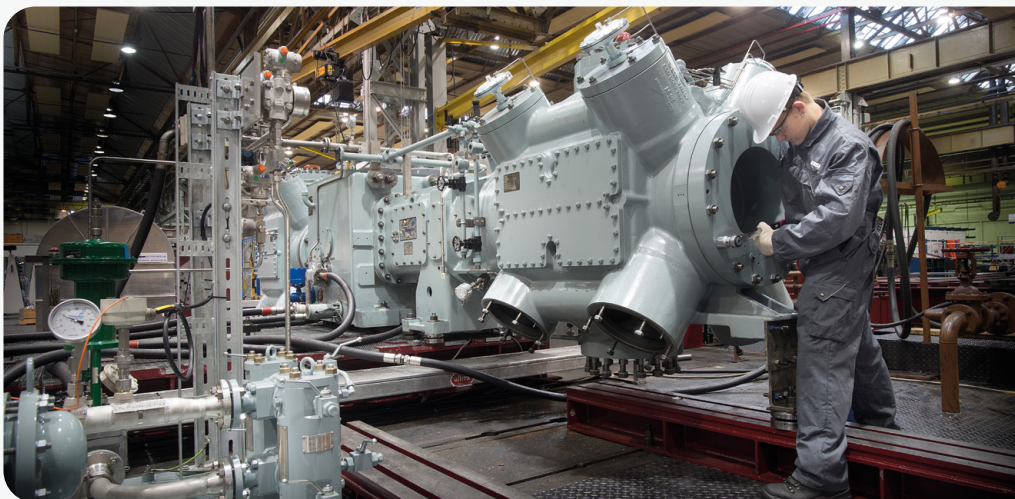
The Howden Uptime system later detected another issue. The power consumption of one reciprocating compressor was too high when it was running at 50% load. Howden performance monitoring engineers picked up on this and advised Zeeland Refinery to open the head end clearance pocket valve at 50% load step, in order to reduce the energy consumption.

The outcome

With the proactive intervention from Howden, using the insight available from Howden Uptime, the customer prevented high interstage pressures and economical loss.

Furthermore, by taking action to reduce the energy consumption, Zeeland Refinery are running the compressor with an open clearance pocket valve when the head end is unloaded.

This has resulted in an energy saving of €3,000 per year.



“Without Howden Uptime we wouldn’t have noticed that the compressor was not running optimal at 50% load. With only a small operational modification, we were able to have a small but positive impact on the environment and save money!”

Mickey de Kanter,
Rotating Equipment Specialist, Zeeland Refinery



Howden Uptime



**Safe and reliable
operation of
critical assets**



**Reduce unplanned
downtime to minimise
production loss**



**Safely increase
maintenance
intervals**



**Understand how to
operate equipment
efficiently**

Howden Uptime is a unique digital solution that gathers the physical sensor data from rotating equipment and analyses how it operates and responds to the environment. The solution is designed to give invaluable insight into asset performance that can increase the availability and reliability of the equipment.

For further information get in touch with our team today:

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