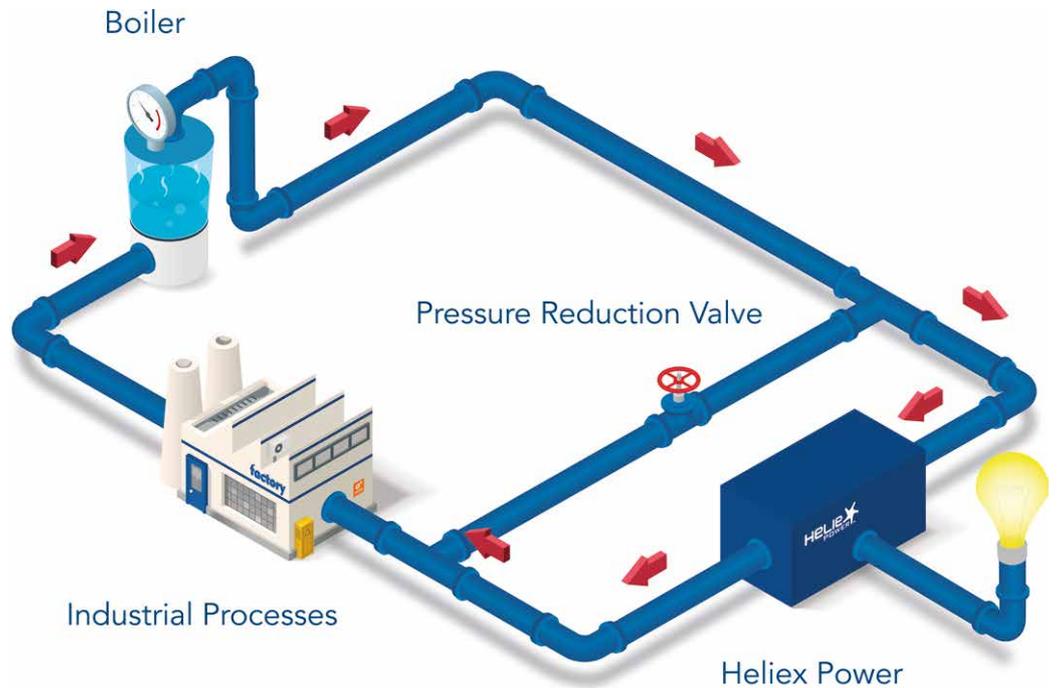


Chemical Manufacturing



The global chemicals industry is one of the world's largest energy consumers, with energy efficiency high on the agenda and significant savings to be made.

Most chemical production sites utilise steam, which is frequently used in processes and offers many opportunities for the installation of a Heliex Steam Expander System.

By generating a supply of low cost electricity our customers benefit from an attractive return on investment, security of supply and improved environmental impact.

A Good Fit

The high temperatures and significant amounts of steam required in the chemical industries results in many opportunities for energy recovery. The Heliex Steam Expander System is an excellent solution for the chemicals industry because:

- Wet steam can be used without damage to the machine
- A range of steam pressures and varying flowrates can be accommodated
- It is an excellent utilisation of excess steam that may otherwise be wasted
- Installed in parallel with an existing Pressure Reduction Valve (PRV) it does not interfere with the production process
- The packaged machine is a simple plug and play installation

Recent Projects:

Industry: Chemicals

Customer Profile: Global Speciality Chemicals Company

Application: Pressure Reduction Valve (PRV)

Country: UK

Power: 2 x 123 kW_e

Model: 2 x HP145

Committed to sustainable development, our client investigated how to exploit the energy in their process steam.

Our client enjoys carbon saving of 348 tonnes CO₂e and financial savings of an estimated £122,000 each year, with a payback of under 3 years.

Two Heliex HP145 Systems were installed in parallel with the Pressure Reduction Valve (PRV) in the existing steam distribution system. This delivers significant economic benefits, while having two systems allows for additional operational flexibility.



Industry: Chemicals

Customer Profile: Poland's largest chemicals company

Application: Pressure Reduction Valve (PRV)

Country: Poland

Power: 120 kW_e

Model: HP204

Our client, one of Europe's leading chemicals manufacturers, is involved in chemical processing and plastics for the agricultural and construction industries.

They use a large amount of low pressure steam at 6 barg, which formerly went through a PRV to atmosphere. Now the steam is rerouted through the Heliex system, where the pressure is dropped and a supply of electricity is generated, before being vented.

Looking to further increase sustainability and efficiency, they recently installed a Heliex HP204 Steam Expander System into their existing steam distribution system.

Our client now benefits from a low cost source of electricity for use on site simply by utilising a steam supply that would otherwise have been wasted.