



GenSet Case Study: Glass



A Heliex GenSet utilises the steam generated by a waste heat recovery boiler using exhaust gases from the furnaces in a glass making plant to generate 400kW of electricity. The residual 4MW free heat is then supplied to the local residents in a district heating scheme.

THE CLIENT

Our innovative client in Milan produces over half a million glass bottles each day and puts sustainability first, having reduced 70% of fumes emissions compared to other traditional glassworks.

THE PROJECT

The Vetrobalsamo plant was required to produce electricity for the factory and heat energy for the district heating grid using the thermal energy from the process flue gasses in two furnaces.

THE SOLUTION

A number of technologies were considered, including Organic Rankine Cycle (ORC) however it was decided that a Heliex HP204 GenSet would be perfect for supplying both electricity to the plant and the heat at the correct temperature for the district heating hot water heat exchanger.

The Heliex GenSet uses steam produced by a dedicated heat recovery steam generator working at 17 Bar G.

At 111 °C, the steam available after the Heliex system is the perfect temperature to produce hot water for the local houses.

Thanks to the high overall efficiency (heat + electricity) and energy saving incentives, the complete cogenerative system will allow savings of more than 1 million Euros per year.



Industry:

Glass

Application:

WHR

Country: UK

Power: 400 kW

Model: HP204

Steam in/out:

19 Bar G / 0.5 Bar G