

Low Cost Nitrogen Gas Is Brewing In Bedford

The Challenge

Wells & Co are an independent, family-owned brewing business based in the heart of Bedfordshire. Since 1876 they have been focused on two things: running great pubs and making great beer. With a new brewery and an estate of almost 200 pubs across England and France, they have a busy and profitable future ahead.

One cost the brewery found spiralling out of control was the bulk supply of Liquid Carbon Dioxide. This is an essential component in making their great products, but was also used as an inert gas to move between tanks during the brewing process, called “pigging”.

Wells & Co looked to Maziak to provide an alternative to the liquid CO2 with the following key outcomes required:

1. Volume of Nitrogen gas used to be over 14m³/hr
2. Food Grade nitrogen quality < 500 ppm O2 content
3. Packaged solution housed within a weatherproof housing delivered plug and play ready to use

Maziaks' Solution

Maziak proposed an on-site Nitrogen gas generation system comprising a Parker NITROsource gas generator delivering 20m³/hr of Food Grade Nitrogen gas. This in turn feeds into a 4,000 litre storage tank with a ready to use 1,000 litre volume at 8bar pressure and a regulated supply back down to the required working pressure of 5bar.

The whole package is housed within a 4m galvanised steel container, fully mechanically and electrically connected, with a 63amp distribution board, lighting, ventilation, domestic electrics, cold weather protection and ambient oxygen level monitoring for personnel safety.

Driven by ultra reliable HPC compressor plant and backed by a Maziak service plan all this equipment is covered for 5 years with comprehensive warranty cover provided free of charge. The complete assembly is fully UKCA compliant and was provided with EIGA Food Quality Validation and Certification for the gas supply tested at point of use during commissioning.

Results

All of **Wells & Co's** desired outcomes were comprehensively met and the package is now fully operational 24/7 for the site to use whenever required.

1. **Long term cost control** with on site nitrogen gas generation
2. **No more delivery vehicles** and time and effort saved managing them
3. **Continuous availability of supply** with on-demand High Purity Nitrogen gas 24/7 whenever they need it

