

Bottling up those Cost Reductions & Enhanced Site Safety

The Challenge

As one of the largest contract wine bottlers in the UK, they are capable of filling up to 90,000 bottles and boxes of wine per hour, equivalent to around 105 million litres per year. Working with some of the world's leading wine companies, they pride themselves on their high-tech production lines, outstanding quality and attention to detail. They have also installed the UK's first wine canning line.

Attracted by the possible cost savings and logistical benefits Nitrogen generation technology can offer they spoke to Maziak about a solution. They had three primary objectives, to:

- ◆ Reduce dependency on bought in bulk liquid—450,000m³ per year
- ◆ Reduce site traffic—Circa 3 truck deliveries/wk/50wks per year
- ◆ Reduce cost of production—from £110,500 per year

In depth data and cost benefit analysis clearly demonstrated the advantages of onsite N₂ gas generation and Maziak were able to provide a solution and very attractive payback on the investment.

Maziaks' Solution

The new installation produces high quality, **Food Grade Nitrogen** on demand at a fraction of the price of their current bulk liquid system. The N₂ plant, including a Parker NITROSource N2-65PBLV Nitrogen Generator was installed alongside one of the existing compressors. The set up provides 105.6m³/h max volume flow at 0.1% residual oxygen content and 6.7 bar minimum at outlet.

Parker's new range of OFAS, clean and dry the compressed air. This oil free air at class Zero 'food grade' quality is then delivered to the N₂ generator where the Oxygen is removed and the remaining Nitrogen gas is further filtered to sterile grade before supplying the production line.

Results

High Quality Food Grade Nitrogen Gas is generated on-site delivering a significant **53% cost reduction** with a payback period of under 1.5 years.

In addition, CO₂ emissions are reduced by two thirds compared to a delivered bulk supply and site safety is increased with drastically reduced gas company deliveries.

Testimonial

"Maziaks have provided a system for generating food grade nitrogen gas with significant advantages over the old bulk liquid tank, including a huge reduction in the cost of production. Plus installation was completed seamlessly during normal working hours without interruption to production." **Project Manager**

