

Michelin Stars For On-Site Liquid Nitrogen Generation

The Challenge

An unusual request came via our website from a Michelin star restaurant: "Is it feasible to generate liquid nitrogen on site". The answer was yes, and some quick calculations showed we could meet the stated daily needs. The restaurant uses liquid nitrogen in the preparation of certain specialist dishes and for years have used a dewar of liquid gas provided from a gas company. A delivery was needed by truck every couple of weeks and this was a logistical inconvenience due to the small village location in the countryside. Cost and supply issues were also factors in searching for an alternative supply.

Maziaks' Solution

We recommended a Noblegen liquid nitrogen generator, delivering on-demand liquid nitrogen. The self-contained package we installed includes a small oil-free air compressor, pressure swing nitrogen gas generator, and a Cryo-Engine to cool down the generated nitrogen gas into the resultant liquid nitrogen which collects in a vacuum flask ready for use.

All the client needed to provide was a suitable dry location and electrical power supply and Maziak took care of the rest. Delivery via a self-drive tail lift van, a pallet truck and some muscle made the installation work smoothly even with the constraints of a 16th Century building and uneven flagstone floors.

Results

The restaurant has got an on-site self-generated supply of Food Grade liquid nitrogen constantly on-tap for their use as the need arises. The return on investment was under 24 months, not only achieving cost savings and efficiencies but also delivering more peace! Guests staying overnight at the restaurant's high-end accommodation directly adjacent to the previous truck parking bay, and residents, are no longer having their sleep disturbed in the early hours with noisy deliveries.

