

New Factory Installation Not To Be Sneezed At

The Challenge

British Pepper and Spice are based in Northampton where they mill, process and pack powder products. Significant growth in sales meant they needed to expand their production capacity and taking over a nearby warehouse building meant they had room to install the machinery required. However as the new building was not attached to the existing factory, completely independent utilities were required, including compressed air.

Powder product, being hygroscopic, is very much affected by contaminants. This was a key consideration as the nature of the production process means that compressed air could contact the product directly or indirectly at many points. The site also wanted “future-proofing”, for expected further development and additional, as yet unspecified, production machinery. Maziak were engaged to design an urgent solution.

Maziaks' Solution

As is often the case, plantroom space was at a premium, so packaged air compressors were recommended as they have built-in air treatment to reduce foot-print. Namely two HPC ASK40T 22kw fixed speed compressors with Food Grade lubricant, ultra-premium efficiency IE4 motors and Sigma Controllers.

With the general site air quality specification agreed as Class 2.4.1, as measured by ISO8573.1:2010, HPC filtration was used to ensure particulate and residual oil contaminants were removed centrally, all verified at commissioning by air quality testing.

Food Grade Transair aluminium leak free piping was installed as it is found to be the most energy efficient, guaranteed particle shed free and can be easily modified in the future, with minimal or no down-time, should site needs change. Stainless steel drops were used in “clean room” production areas to complete the Food Grade look with specific high flow food safe regulators, couplings and pipes to machinery.

Results

The whole system was signed off as Food Safe via an exhaustive IQOQ process following completion of works, and is running 24/7 providing air to the site and is covered by a comprehensive 5 year warranty and service plan from Maziak.

