

Getting a SLICE of the action

The Challenge

A market leader with their dessert-based food products, supplying their own outlets, UK supermarkets and global fast food brands, quality has been at the heart of this customer's brand since the 1980s.

Attracted by the services Maziak were showcasing at the FoodEx Show 2018 they wanted to discuss significant projected expansion needs alongside some critical issues with their existing compressed air system. This consisted of 2x HV04 and 1x HR07 Hydrovane that were running uncontrollably into a desiccant dryer which could only flow 60% of the total air created.

Maziaks' Solution

Bearing in mind the two key priorities of immediate systems issues and future growth, Maziak proposed the following:

- ◆ Using an HPC ASK40 as the lead compressor due to its high-spec motor and easily accessible controller.
- ◆ Redesigning the plant room to pair the compressor with a Parker SPE052 dryer and Oil-X filter set up to provide the main factory air to ISO8573-1:2010 Class 2.4.2.
- ◆ Using the old desiccant dryer to treat the limited air that required Food Grade Air to Class 2.2.1 (-40°C dew point). Only 1 single drop required 17 cfm for this purpose. Removing the moisture before reaching the desiccant dryer allowed for the unit to revert into ECO mode and stop purging.
- ◆ Changing the position of the air receiver to allow for more access into the room.
- ◆ Fitting the fridge dryer in-line with a bypass to allow for ease of servicing and filter changes.
- ◆ Refitting the plant room with Mapress 42mm Pipework, linking the single food grade drop into the desiccant dryer, thus removing it from the ring-main.
- ◆ Fitting a new oil water separator to allow for extra condensate from the larger compressor.
- ◆ Installing ductwork to remove the excess heat from the compressors, lowering ambient temperatures from 35°C to 20°C to assist with creating a reliable, dry system, free from contaminants and moisture.



Results

The customer has experienced ZERO downtime caused by their compressed air system since the installation. The intelligent plant room redesign and measured expenditure on new equipment are delivering the quality, capacity, efficiency and not least the savings they were looking for to achieve their key objectives.