

*"Providing the perfect climate for your business"*

Case Study:



## Sintra Pulsion® Temperature Control Solution

### Background

Uniphar Group plc is the largest integrated healthcare supply and services provider in Ireland. Innovative and technology driven, Uniphar operates in Ireland and the UK and has an annual turnover in excess of €1bn.

In 2017 Uniphar invested €65m in a purpose built state of the art complex in West Dublin, This new facility offers some 518,000 sq. ft of temperature controlled warehousing, and is the most technologically advanced of its kind throughout Ireland and the United Kingdom, designed to meet the exacting needs of the pharmaceutical industry.

Cross Group provided the Sintra Pulsion temperature control system design, and carried out the onsite installation with minimum disruption to the production work schedules.

Cross Group have over 80 years experience in refrigeration and air conditioning, and are sole Sintra Pulsion® distributors for UK and Ireland

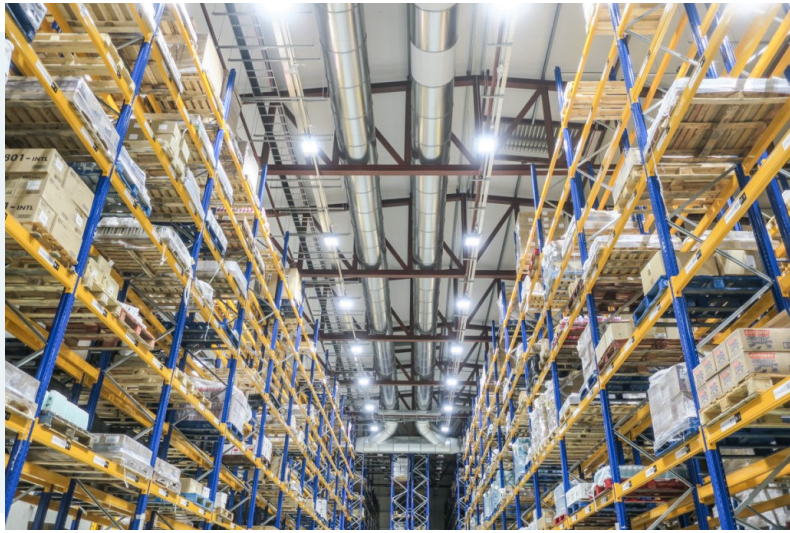


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## The Challenge

Stable and stringent temperature control, combined with operator comfort were key elements identified by Uniphar for their warehousing areas.

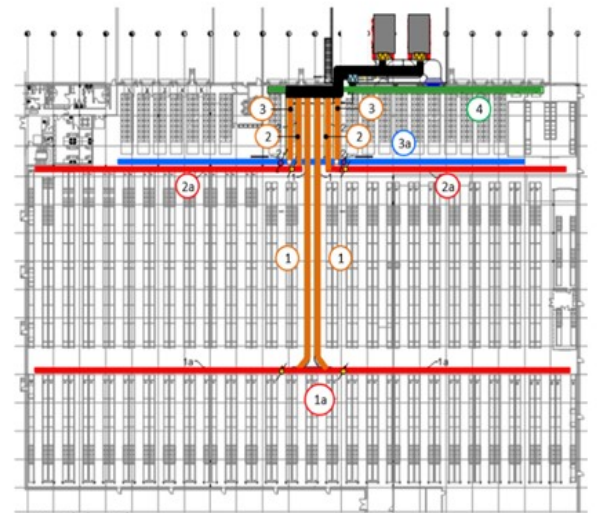
Capital and lifecycle costs along with ease and speed of installation were key drivers for Uniphar, in their decision for the innovative, customised Sintra Pulsion® solution.

## The Solution

Sintra Pulsion® is a unique high-induction solution that delivers tempered air across all the areas, ensuring homogenous temperature stability to +/- 1 degree C, and maximum comfort for the operatives, with no draughts or stratification. The Pulsers® recall large quantities of ambient air to mix with the input air. This mixture of input and surrounding air approaches design temperature within 1m of the Pulser and sets the total environment air mass in controlled motion.

Heating, cooling and fresh air is provided to the Sintra Pulsers by Rhoss Air Handling Units, incorporating fresh air, free cooling, and inverter driven fans.

AHU control strategy is bespoke, modulating the primary, secondary and technical Pulsers .



## Summary

Uniphar continue to deliver excellence and quality to their global customer base, aided by a unique, innovative, and patented temperature control solution.

3rd party Temperature mapping, using 300 sensors throughout the warehouse showed a maximum of plus or minus 1 degree from set point.

Sintra Pulsion® provides a stable, safe environment for Uniphars pharmaceutical products, with significant capital and running cost savings, as compared with conventional diffusion type systems.

