



Albannach Einnseanair Ltd

# client case study

## Macphie, Uddingston

Macphie is a Scottish based ingredients manufacturer. Established in 1928 and located in Uddingston, Scotland, they have been making quality added-value ingredients for food manufactureres, bakers and chefs all over the world.



*The Vital ingredient*

Having good quality, energy efficient refrigeration equipment is essential to Macphie's supplying the best quality ingredients to their clients. Macphie's approached Albannach Einnseanair to replace two of their existing blast freezers with enery efficient blast freezers with remote access and low GWP refrigerant.

As part of this project, we initially had to de-commission the old blast freezers and remove all plant and pipework. To ensure the new freezers were positioned accordingly, we had to re-design the room for maximum air flow and install the evaporator with their energy efficient EC fans. The outdoor plant room was landed and installation began.

The new equipments in a 40kW semi hermetic Bitzer economised screw compressor, air cooled condenser with variable speed EC fans, air cooled oil cooler and integrated control panel. Electronic expansion valves are used on the efficient evaporative cooler, controlled by a RDM PRO650TDB controller.



The installation has resulted in Macphie having two blast freezers that, once commissioned, can freeze their product to -25C and temper to 20C, quickly and efficiently.

Tom Rae, Site Manager for Macphie's said, "With the investments of the new blast freezers, we have brought a reliability we didn't have with the old blast freezers. During this warm summer there has been no down time. If the old blast freezers had still be in operation there would have been very little freezing of production due to constant breakdowns with the high demands and high ambient temperature."

"The new blast freezers are everything AE Ltd told us they would be and by far the most efficient blast freezer I have ever worked with and are easy to operate" said Jim Ballantyne, Engineering Manager, Macphie.