Case Study: Dalmunach Distillery, Moray



A Scotch whisky distillery features architectural glazing by Kawneer

Kawneer's AA®110 dry glazed and externally-capped curtain walling was specified by Archial Norr alongside series 350 severe-duty entrance doors for the award-winning Chivas Brothers' Dalmunach Distillery on Speyside, on the site of the former Imperial Distillery on the banks of the iconic River Spey.

Building: Dalmunach Distillery

Location: Moray Architect: Archial Norr

Main Contractor: Robertson Construction

Installer: Linn-Tech Scotland



Kawneer systems help to distil a sense of transparency

Architectural aluminium glazing systems by Kawneer have helped the Dalmunach Distillery to also be ground-breaking in its transparency. It replaces the former Imperial Distillery as the 15th Scotch whisky distillery operated by the company. Chivas Brothers were not looking for an industrial shed but rather a building that would demonstrate the manufacturing process in a transparent and easy-to-follow way. The distillery was designed to showcase the equipment including malt mills, malt bins, mash tuns, washbacks, stills and the spirit safe, in a bright and spacious environment. Built using the latest innovations and environmental expertise such as heat recovery technology, the layout was inspired by the shape of a sheaf of barley, Scotch whisky's core ingredient. Its design sets out to create a strong sense of place while remaining honest to the aesthetic of a crisp, modern industrial building.

Set over two levels with the main production level at the first floor, in a departure from distillery traditions the eight copper pot stills have been positioned in a circular design that gives a feeling of spaciousness and provides a unique aesthetic for the future. The stills feature tulip shapes for the wash stills and onion shapes for the spirit stills, replicating those used at the Imperial Distillery. The use of a traditional series of pitched roofs reinforces a connection with the past while resolving functional issues such as head room for the malt silos and enhancing the building's passive ventilation system. The massing opens up to form a welcoming main entrance area flanked by a drum containing offices and staff facilities for passive supervision. The simple palette of dark grey profiled metal, white wet dash, oiled timber and Kawneer's curtain walling with 65mm sightlines keeps the elevations deliberately simple and crisp and recalls classic distillery heritage. Kawneer's curtain walling has been used as the principal screens in the Mash House and Still Room, including the striking gable screens which also accommodate the large louvered timber access doors. On both, subtly radiused corners help soften the overall appearance. The design of the curtain wall, with glass units more than 10m² in size and weighing up to 540kgs, allowed for partial demountability to allow for future removal of the glass for maintenance of the equipment inside. The Kawneer systems were installed over five months for main contractor Robertson by approved specialist sub-contractor Linn-Tech Scotland.

Director Dennis Whiting said: "Due to UK manufacturing limitations all the double glazing units were manufactured and crated by Mayer Glastechnik in Austria for road shipping to Scotland but there was only one breakage on the entire project! Kawneer was considered most appropriate for the design requirements which entailed large, heavy and thick double-glazing units - some 36mm thick, the largest being almost 11m² each and weighing 540kgs. In addition, the 65mm profile of the AA®110 curtain walling provided the necessary rebate depth to ensure adequate edge cover and to accommodate movement and rebate ventilation in service.

All the cooling water - 400,000 litres per hour - comes from the River Spey, making the thermal vapour recompression technology in the spirit condensers one of the most efficient distilleries in the world. Dalmunach is named after a nearby pool in the Spey and its annual output of 1,000,000 litres of alcohol per year makes it the second highest capacity distillery that Chivas owns, just behind The Glenlivet. This provides an increase of 10% in the company's malt whisky distilling capacity.

The new distillery has won and was shortlisted for several of the UK's leading architectural awards, which is unusual for such an industrial plant. In addition to awards from RIBA and RIAS, it was shortlisted for a Stirling Prize.

Please contact our Architectural Services Team if you have a project you would like to discuss: Tel: 01928 502604 / Email: kawneerAST@arconic.com









