

## Case Study - Damping Sheet DS03 and Damping Compound Type DC

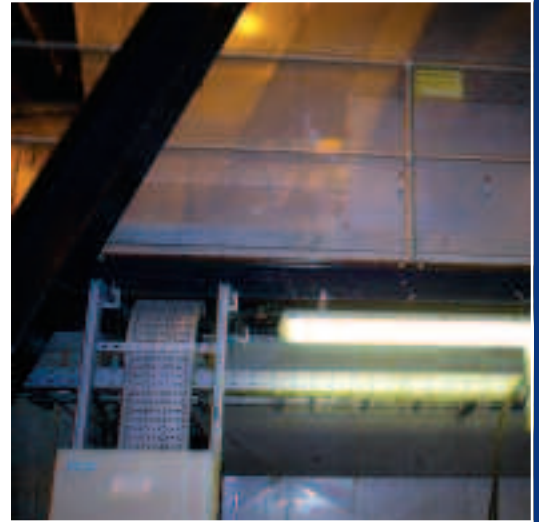


# Cottam power station

## The Challenge

To meet the specification for a Flue Gas Desulphurisation (FGD) project at Cottam power station, Vinci Services needed to soundproof the FGD units and prevent noise and drone reaching the surrounding villages.

Seeking to exceed the specified requirements, Vinci Services consulted CMS Acoustic Solutions to identify a high performing and cost-effective solution.



The installation of Damping Sheet DS03 and Damping Compound Type DC at Cottam power station exceeded the original specification and ensured that the FGD units were effectively soundproofed.



## The Solution

Vinci Services was required to use a damping compound of at least 2mm in thickness. In light of this, CMS Acoustics recommended its Damping Compound Type DC, a 3mm thick material which is applied to metal or plastic to reduce radiated noise levels.

Damping Compound Type DC was sprayed onto an aluzinc raw gas duct, which is used to absorb sulphur dioxide when it is omitted from the chimney. As a polymeric, water-based emulsion, the damping compound dries quickly between applications and can be protected by most types of paint.

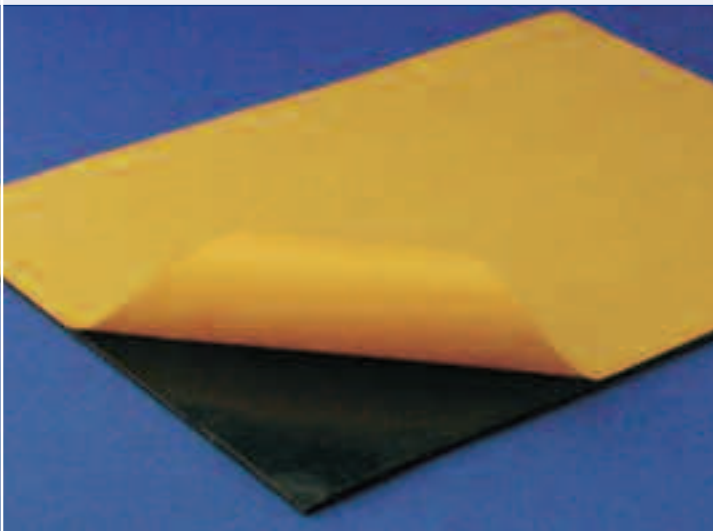
In a different part of the plant, CMS Acoustics' Damping Sheet DS03 was adhered to the aluzinc metal panels of an induced draft (ID) fan, which is used to remove sulphur dioxide from the boilers into an absorber. The absorber cleans the chemicals, creating products which are safe for release into the atmosphere.

The Damping Sheet DS03 is available in four standard weights, enabling its use with panels of varying thicknesses. The thickness of the sheet should be one or two times that of the panel being treated.

## Results

The installation of Damping Sheet DS03 and Damping Compound Type DC at Cottam power station exceeded the original specification and ensured that the FGD units were effectively soundproofed.

Commenting on the outcome of the project, Joe Hendry, Vinci Services, said: "The ID fan is an integral part of the sulphur dioxide removal process, but it is particularly loud, so it was necessary to find an effective soundproofing system. CMS Acoustics' Damping Sheet DS03 was easy to install, providing a cost-effective solution."



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