

## Project Profile - Utilities

### PROJECT

Urea Prill Tower, Doha, Qatar

### SUMMARY

Protective lining to concrete silo containing urea prills

### PRODUCTS

**Cementitious Coating 851**

### CLIENT

Qatar Fertiliser Company, Doha, Qatar

### CONTRACTOR

Mouchel Group

### BACKGROUND ►

**11 metres in diameter, QAFCO's Prill Tower is designed to allow liquid urea at 150°C to form into pellets as it drops through a counter-current of air.**

Elevated operating temperatures had weakened the concrete pore system and urea at high concentrations, mixing with washdown water, had formed crystals inside the open pores and cracks, further weakening the structure.

### THE SOLUTION ►

Inadequate reinforcement was first strengthened to prevent further cracking and, after a 1 year trial of 4 potential lining products, **Cementitious Coating 851** was chosen because not only had it performed well but "its mechanical characteristics were as close to the parent concrete as possible" - a vital point for the specifying Engineers. Also important was that **851** has a degree of flexibility to cope with the varying conditions inside the Tower. With excellent abrasion, chemical and water resistance, there was no doubt that **851** would provide the sustainable lining material that would protect the concrete and give the plant trouble-free operation for many years.



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Quality  
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