



Case Study

Serco - HMP Doncaster

Founded: 1994

Headquarters: HMP & YOI Doncaster, Marsh Gate, Doncaster DN5 8UX

Capacity: 1,145

“ We have developed a trusted partnership with the team at Thomas Dudley, one that has helped us achieve the goal of reducing lost revenue whilst providing a robust alternative to typical sanitaryware that proved costly to replace ”

**Tim Wilman, FM Deputy Director
Justice and Immigration UK&E, Serco**

The Company

HM Prison Doncaster, is a Category B men's private prison, located in the Marshgate area in South Yorkshire, England. The prison is operated by Serco.

The Challenge

HMP & YOI Doncaster cells were previously fitted with Armitage Shanks Portland WC pans and ceramic basins plus Mazak basin brackets. Despite the brackets being tested to 150Kg and breaking at around 200Kg, they were coupled with the expectedly fragile ceramic basins and were unable to withstand the heavy treatment to which they were being exposed. The decision was therefore taken to replace Portland WC pans with Resan models.

The prison walls are robustly constructed from concrete so any replacement products needed to be easily retrofittable. In addition, when ceramic sanitaryware shatters, the resulting fragments are extremely sharp and present an obvious and significant security risk. Under the terms of the management contract, Serco loses revenue of around **£300** for every night that a cell is left out of service whilst broken sanitaryware is being replaced.

The Solution

Our team began by talking to Serco about the breakages and the resulting operational problems. Site visits were also completed as part of the process in order to better understand the project requirements.

The first problem to be addressed was the weakness of the basins and support brackets. Serco confirmed that the previously specified Portland basin had been discontinued by Armitage Shanks. In order to provide a solution, Thomas Dudley's design team exploited state-of-the-art CAD/CAM and rapid prototyping capabilities to configure an alternative. Moulds were then produced along with a sample basin for approval. Thomas Dudley has an award-winning engineering foundry. Here, the team set about developing a new bracket to support the newly designed basin. Engineered using an exceptionally strong grade of ductile iron, this provided far greater durability than the old Mazak bracket.

Whilst a WC pan from the existing Resan range provided a compatible replacement for the Portland ceramic pans, a bespoke stainless steel backplate was needed in order to comply with the installation requirements approved by Serco. Bespoke anti-swivel taps completed the package.

The Result

The partnership with Dudley and the bespoke products that have been developed have enabled Serco to realise significant benefits:

- ~ 90% reduction in the number of basins and brackets broken
- ~ 95% reduction in the number of WC pans broken
- ~ 40% reduction in typical replacement sanitaryware installation time
- ~ 90% reduction in revenue lost due to cell downtime
- ~ Convenience of being able to order WC pans, basins, brackets and other products from a single source of supply
- ~ Security of and responsiveness of supply via Thomas Dudley's customer-driven stock agreements which provide the reassurance of knowing that a guaranteed, predetermined stock level will be maintained for every specified product

