

Job Reference

BASF high-performance flooring system provides solid platform for new Hawker De Havilland plant

High Quality Architectural Flooring Systems

**Project:**

Hawker de Havilland
Aircraft Wing Assembly
Manufacturing Plant

Client:

Hawker de Havilland

Contractor:

Firmstone Flooring
Specialists

Location:

Bankstown, NSW

Completed:

2008

Products:

Concresive[®] 2525

Mastertop[®] 1230



The Chemical Company

Project Background

When it comes to manufacturing aircraft components there is understandably no margin for error. Utilising state-of-the-art robotic manufacturing equipment and the latest in high-tech materials technology, the manufacture of aerospace and aircraft components involves precision engineering within minute tolerances.

The buildings that house these precision manufacturing facilities must meet an array of strict design and construction requirements – particularly in level flooring.

The Challenge

The new wing assembly manufacturing plant has been established in several existing buildings at Hawker de Havilland's Bankstown facility in the western suburbs of Sydney. Understandably, installing state-of-the-art robotic manufacturing equipment into existing buildings that are several decades old, presented significant design and construction challenges.

Richard Egan, Firmstone Flooring Specialists epoxy flooring projects manager, stressed that when a precision engineering and manufacturing facility was being created, the selection of an appropriate flooring solution was of paramount importance.

“The primary challenge for Hawker de Havilland's facility was to achieve this flat and smooth finish in a refurbished facility with existing concrete slab floors,” expressed Mr. Egan. “Mastertop® 1230 from BASF was easy to apply, looked good and provided an extremely level and smooth floor to ensure the successful operation of the equipment, leaving everybody happy with the results.”

“What's more, the extremely hard-wearing nature of the floor – and the fact that it's easy to clean and look after – also means it will stay looking good in such a busy manufacturing environment.” Mr. Egan added.



The Solution

When it came to selecting an appropriate flooring solution for the new Hawker de Havilland aircraft wing assembly manufacturing plant in Sydney, engineers specified Mastertop® 1230, an epoxy-based, coloured, seamless, self-smoothing architectural flooring system from BASF Construction Chemicals.

In order to meet the tight requirements, the existing concrete slab floor was first prepared with BASF's Concreate® 2525 – a solvent-free, high performance epoxy resin binder and structural adhesive, followed by a top coat of BASF's Mastertop® 1230 in a pale green colour. The solution has provided Hawker de Havilland's facility with a flat and smooth floor that is critical in enabling the state-of-the-art robotic wing manoeuvring system to function correctly.

Mastertop®1230 was applied at a thickness of between two and four millimetres. The new floor was applied in two stages, encompassing a total area of about 3,600 square metres.



The Result

The Mastertop® 1230 floor has provided a high quality extremely flat and smooth architectural flooring solution which meets the strict performance criteria for this major aircraft component manufacturing facility.

Speaking about the project, Dr Boris Gorella, Group Vice President and Head of BASF Construction Chemicals Business Unit, Asia Pacific, said: “We are committed to offering intelligent and reliable solutions that can address customer's needs exactly.”

Importantly, Mastertop® 1230's unique performance characteristics also ensure that that the floor has the durability to withstand rigours of an industrial manufacturing environment, whilst remaining easy to clean – ensuring that it will stay looking good for years to come.

