

Challenge

Issue

The tiled floor adjacent to a paper machine experienced extensive cracking and delamination, creating a tripping hazard and housekeeping concerns.

Goals

To provide a protective coating for the concrete which does not come loose and become a tripping hazard.

Root Cause

Contaminated wash water wicks in through grout lines leading to spalling of the tile.



Old tile removed and concrete scarification.

Solution

Preparation

All tiles were removed and the surface was ground to an ICRI CSP 3-4 finish.

Application

Chesterton® ARC EG-1 was applied as a grout at 6 – 9mm to level the floor after the tile removal. A final coat of Chesterton ARC CS2 was then applied at 375 – 500 µm (15 – 20 mils). While still wet, a broadcast aggregate was applied to provide slip resistance and a final 250 – 375 µm sealer coat was applied.



Resurfacing with ARC EG-1.

Results

Client Reported

The treated floor area is almost completely intact after 2 years in service. Very little lifting or delamination has occurred. The surface is sealed with no visible attack to the underlying concrete. The plant is expanding use of ARC EG-1 and CS2 with an additional 600M² to be coated in 2024.



ARC S2 with broadcast and sealer coat.