

Production boards are cleaner and the plant is safer with CrustCracker

In brief

- Client - Brett Landscaping and Building Products
- Looking to continuously improve the production process
- Partnered for decades to roll out problem-solving products
- Latest improvement - cleaning of production boards / pallets

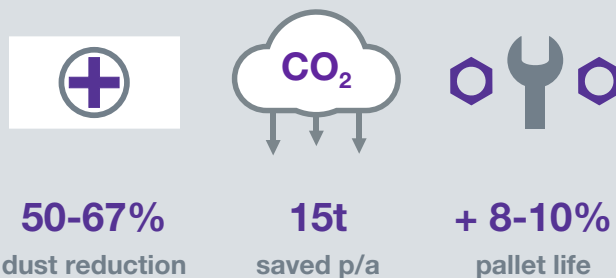
The problem

Brett Landscaping and Building Products have a long history of working with ConSpare to improve the performance of their concrete batching plants and concrete block machines.

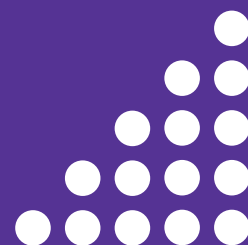
Over the years a number of component upgrades and equipment installations have helped Brett to improve their product quality, minimise plant downtime, and make the plant safer. Continuing to innovate, we then launched a new way of keeping production boards (or pallets) cleaner, and once Brett were introduced to CrustCracker they decided to trial the unit.

During the manufacture of blocks, production boards often become a magnet for different types of build-up. Encrusted concrete, dirt and rust adheres to the surface of boards and if left unchallenged affects the process. Product quality suffers, service life of the board is reduced, and boards become a source of dust emission around the factory. The latter was a particularly key consideration for the team at Brett.

Annual savings:



CrustCracker production board cleaning system



ConSpare

Make it better.

How ConSpare found a solution

CrustCracker was installed to keep the WASA plastic boards free from build-up, replacing the rotary cleaning brush. It was also hooked up to an existing LEV system to remove the errant dust.

Five overlapping wire disc brushes remove cementitious build-up and grime from every inch of the board surface without damage. The autonomous, inline system ensures production remains uninterrupted, with clean boards immediately ready for use.

After a year of operation we met Neil Frost, Production Director, and Rob Buston, National Engineering Manager, to assess CrustCracker's performance. The benefits were significant:

50-67% reduction in dust - Exposure to respirable dust and respirable crystalline silica (RCS) is a major concern for all producers. Site management introduced a number of measures to reduce dust, including CrustCracker. Respirable dust levels have subsequently dropped by 67% from 0.27mg/m³ to 0.09mg/m³. The RCS reading has also fallen below the limit of detection where personnel are routinely present, with at least a 50% reduction from 0.04mg/m³ to <0.02mg/m³.

8-10% improvement in board life - At £650,000, and CO₂ emissions of 1100 tonnes, production boards are a significant financial and environmental investment. As the board surface is now much cleaner, premature damage is avoided and the need to "skim" the boards reduced. The client estimates that boards will now last 8-10% longer, equating to 6 extra months operation. Given the reduction in the number of board sets used over time, annual savings of £8,500 and 15 tonnes of CO₂ are forecast.

Improved blocks - As boards are cleaner, build-up no longer interferes with the concrete product. Aesthetics of the blocks are improved with the bottom finish more even with straighter lines.



CrustCracker - Inline and automated board cleaning

Considered on their own, forecast board life savings of £8500 per year would pay for a standard CrustCracker in circa 3 years.

"Another great innovation. We regularly roll-out your problem-solving products across our sites. Keep them coming!"

Rob Buston, National Engineering Manager

Improving the process



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