

Airmec Design Limited

Waste Extraction Systems for the Printing, Board Converting & Paper Industries

Case Study No. 8 – DAVID S SMITH PRIORY

DS Smith Packaging consists of 32 businesses located throughout Great Britain. Together with DS Smith Plc's paper division, they have a combined turnover of approximately £650 million and employ c. 3400 people.

Their customers represent an enormous spread of organisations, from the world's largest companies to small, local and entrepreneurial businesses.

They aspire to manufacture and supply packaging products to world-class standards of efficiency and reliability.



Airmec was first introduced to DS Smith Priory back in 2004; following a successful waste handling upgrade to DS Smith March in Redditch.

Priory was due to take delivery of a new Bobst SPO 1600 to further enhance their existing production capabilities and to service their ever expanding order book.

With this forthcoming installation of new production machinery, additional capacity had to be catered for in their current waste extraction methods. Priory needed the correct solution and they needed it quickly, to ensure the Bobst machine came on line with the minimum disruption to existing production.

Tenders were invited and Priory chose Airmec above all comers to ensure their waste handling plant upgrade was installed efficiently and on time.

With the steady increase in production that this upgrade had afforded, their waste production naturally increased as more and more boxes left the plant. Priory needed more flexibility in the way their waste was disposed of. After consultation with their Waste Contractor and the Airmec design team, it was decided that a twin compactor facility was the way to go, thus ensuring greater efficiency and maximising compactor bin payloads.

Priory also had an ongoing Health and Safety issue which had reared its head, with regards to the increase in board dust being exhausted from the existing system. With the funds now available, it was time to expand the system further to include a dust filtration plant. In September 2008, Airmec successfully won the contract to install a twin compactor divert system beneath the existing system, along with a

Reverse Jet Filter unit which cleaned the exhaust air and provided warm air return into the warehouse area.



"The new system design has made improvements to several areas of the business, it has increased production uptime by not having to shut down to change over the compactor bins, it allows us to better control the frequency of bin changes by ensuring that each off going bin is as full as it can be and that both bins can be changed at the same time. This has the benefit to the business of reducing the frequency of waste contractor vehicle movements (carbon footprint reduction) and therefore the number of lifts, which we are charged for and by also increasing the financial return on the increased weights in the bins.(win win)."



"It has also improved the business by totally eliminating the airborne dust which had created Health, Safety and Environmental issues and had cost the business time spent cleaning it up.

The staff have seen, and commented on the improvement in the way we work and cannot believe how their working environment has changed for the better.

We found Airmec to be very helpful in all aspects of the project and professional in the execution. The narrow window forced by production demands was utilised to its maximum potential with the installation following the Gantt chart prediction almost to the minute".....Nick Lyon of DS Smith.