BSW Timber's new centralised vac system keeps things a lot cleaner

Part of the largest sawmilling business in the UK, BSW Timber's Carlisle sawmill is achieving higher housekeeping and air quality standards courtesy of its recently installed centralised vacuum system from DISAB UK Ltd.

BSW Timber's Carlisle sawmill produces around 100 truckloads of sawdust and chippings a week, and this means a huge amount of dust and waste material to deal with on a daily basis, especially around the machine areas of the mill. This used to be dealt with manually i.e. blowing down the dust with air lines and then using brooms, buckets and barrows to shift as much as possible into the grading area, where sawdust and chippings are separated, graded, then bagged up for customers.

Finding a better waste removal solution

Project Manager Nigel Patrickson knew the manual approach wasn't the ideal way to do the housekeeping and was particularly concerned that blowing down the dust created significant levels of airborne particles. The Carlisle plant is inspected annually by the H&S Executive to check air quality and housekeeping standards, and the rigorous inspection involves sampling meters and other equipment to check different locations and the impact on operatives working there.

Determined to find a better solution, BSW Timber trialled a SkipVac to see how well a vacuum-based dust removal system dealt with the levels of dust and waste in the sawmill. The trial proved highly effective, and the decision made that a centralised vacuum system based on the more powerful PacVac combined with a separator would provide a better solution for handling the large volumes of dust and waste material, which can be as much as 20 to 40 tonnes at a time.

What Nigel really liked about DISAB's system was the ease with which not only sawdust but chippings up to 40mm were sucked away, within the limits of the diameter of the flexible suction hose. The centralised vacuum system is fully enclosed from nozzle to separator, and this reduces the risk of further airborne dust when cleaning up around the machine areas.

Better air quality standards

Nigel outlines his thinking in choosing a vacuum-based solution: *"My main objective was to find a way of keeping the dust levels down and ensure a higher standard of air quality in the working environment. To achieve this every day, the standard of daily housekeeping is absolutely key to attaining acceptably low airborne dust levels."*

"Blowing down dust from different levels then trying to sweep it up probably made airborne dust levels even worse. The SkipVac trial proved the point, as dust and chippings were sucked up from all sorts of awkward to reach places, and safely contained within the SkipVac's hopper. The centralised vacuum system is that much more powerful, sucks all waste into the grading area, and is even easier to use."

The system uses around 200 metres of fixed pipework and several inlet valves, making dust removal significantly easier. The sawmill operatives simply switch on the PacVac and attach the 60' flexible suction hose to a suitably located inlet valve, giving them the ability to clean up wherever needed. With an extension tube and appropriate nozzle on the end of the hose, cleaning up dust and chippings is not only easier, but a much quicker and safer task to perform.

A better solution from the HSE perspective

The new system is having a very positive impact: *"We now have a much higher standard of housekeeping, and while we've never had any issues with the external HSE inspections, our housekeeping standard is noticeably higher, and this is all taken into account. The HSE also take note of BSW Timber's investment in dust cleaning technology, as it demonstrates our progressive attitude to dealing with air quality, manual handling issues and operative safety."*

"The employees prefer this way of doing the housekeeping as well, which in turn makes it a more attractive task as part of their daily routine. Compared to when we were doing things manually, a powerful centralised vacuum system is a 'no-brainer' for a modern safety and environmentally conscious sawmill."