

Why Dust Collection is Essential

Dust generation is an inevitable byproduct of most bulk material handling systems. Even seemingly harmless food products can create dust that poses health risks. Inhalation of dust particles can harm the lungs, and when combined with air in certain proportions, many organic materials become a potential explosion hazard. For this reason, dust collection, air filtration, regular cleanup of spilled or settled dust, and selecting the right air handling equipment are critical for any operation involved in bulk materials storage, handling, or processing.



The wellbeing of your workforce is of utmost importance. Compromised health not only affects employees but can also negatively impact productivity, which in turn leads to financial losses over time. Proactively controlling dust contamination in your workplace is essential, both from a health perspective and to meet legal requirements under Health and Safety regulations. SHAPA members provide equipment tailored to dust collection and control, including dust extraction systems,

filters, monitors, and filter media. They also offer air handling solutions, such as air compressors, blowers, exhausters for pneumatic conveying systems, and industrial fans for ventilation purposes.

The specific dust control solutions you need will vary depending on your industry and the materials you handle. SHAPA members can offer expert recommendations. For instance, a high-quality dust filter bag not only minimizes particle emissions but also helps reduce the risk of explosions. These bags are fully sealed and adhere to the latest manufacturing standards. Additionally, when dust spills or settles, centralised or mobile vacuum cleaning systems are available to address the issue. Minimizing dust levels is crucial, whether in an enclosed facility or when handling materials outdoors. Dust detection devices, typically installed at key locations such as stack points or within air filtration systems, monitor particle emissions and trigger alerts when contamination levels become hazardous. Various dust monitors, control systems, and suppression technologies exist, so seeking expert advice is important before making a decision.

Implementing an effective dust collection system is vital for maintaining a clean and safe working environment. Failure to install appropriate equipment can negatively affect productivity, especially if employees are continuously exposed to harmful dust over extended periods.

For those involved in new projects or upgrading existing bulk material handling processes, SHAPA's Equipment Finder on the website offers an extensive range of solutions. SHAPA members are committed



to designing and developing systems that meet the highest industry standards. For further assistance, you can contact SHAPA directly at info@shapa.co.uk or by phone at 01904 373040.