

Creating a productive environment through dust and fume extraction



Manufacturing of BOFA's dust and fume extraction products at its HQ

Dust particles and fumes are the enemy of process-based operations. Not only can airborne contaminants present a health risk to employees, they can also significantly impact productivity by causing contamination to finished products and depositing extraneous matter on process-critical components.

"All businesses have a legal obligation to ensure safe working environments for the people they employ," says John Horsey, technical manager at BOFA International, which has operated in the dust and fume extraction market for 30 years. "This means maintaining a dust and fume-free workplace through the removal of solid particles, liquid droplets and vapours or

gases by way of an appropriate dust and fume extraction system.

"Exposure levels to potentially harmful airborne emissions are tightly mandated through the COSHH (Control of Substances Hazardous to Health) regulations under the direction of the Health & Safety Executive, and are expressed as workplace exposure limits (WELs). Airborne emissions vary according to the materials being worked, and some of the fumes resulting from productive processes can be toxic or harmful."

BOFA's technology portfolio serves sectors as diverse as laser, electronics, mechanical engineering, printing, medical and beauty in over 100 countries.

The company's Intelligent Operating (iQ) System, for which it won the Queen's Award for Innovation this year, has introduced performance enhancements, such as independent filter status monitoring, to improve extraction efficiency. This ensures that filters are changed at just the right time, thereby reducing the risk of downtime and lowering the overall cost of ownership. The technology includes local and remote diagnostics capability – and this connectivity is set to expand into enhanced configuration and diagnostics.

BOFA's investment in extraction R&D is also enabling employers to stay ahead of regulatory guidance, through designs such as the FumeCAB range – a partial enclosure system that satisfies the HSG258 code of practice for operator protection from hand soldering, solvent use and other processes.

Filtration technology is also advancing, for example through the company's patented DeepPleat Duo pre-filtration, which uses reverse airflow operation to reduce the velocity of contaminant as it enters the filter chamber. This means that larger particulates fall into the large steel drop-out chamber, with smaller particulates drawn into the main High Efficiency Particulate Air (HEPA) filter, while vapours and gases are removed via a layer of activated carbon.

www.bofa.co.uk

EMADA launched to combat workplace respiratory deaths

The Extraction Manufacturers and Designers Association (EMADA) recently hosted its launch event at the National Motorcycle Museum in Birmingham. Workplace extraction and ventilation is critical to the health and wellbeing of employees and despite many employers appreciating this position, UK industry is responsible for 12,000 workplace-related respiratory deaths every year.

EMADA has been formed by manufacturers and designers of dust and fume extraction systems to ensure best practice and support the Health & Safety Executive (HSE) in reducing the impact of poor work practices.

At the launch event, EMADA association chairman, Paul Rowlands, said: "By forming this association, we are creating a conduit between the industry experts and the HSE. There is already a good level of regulation and guidance from the HSE, but there remain opportunities for improvement in many systems and their application. Lung latency is a 'long term' workplace accident and EMADA is taking a moral imperative to push best practice to industry."

Also, Sarah Mallagh, the head of Health & Chemicals Unit at the HSE, mentioned to attendees that: "Many employers overlook controlling



contaminants at-source and look to PPE equipment as a solution. We need to inform, instil and even enforce the message that 'control at-source' through effective Local Exhaust Ventilation (LEV) systems are the best-practice solution to a healthier workplace.

"The HSE has just re-published the HSG258 'Control of Airborne Contaminants at Work Guide' and this has shifted the emphasis from the supplier to the employer. We have also launched the 'Healthy Lung Partnership' and will be hosting a 'healthy lung' summit in November." EMADA www.emada.org.uk