



Welcome to the very first edition of freshair news, a new quarterly publication from Patent Filtration, designed to keep you up-to-date with legislation, health and safety issues and product advances relating to air purification in the home, workplace and commercial environments. We hope you find freshair news informative and that it will become a useful tool in your policy making process.

Secondary smoking



Scientific papers have shown that signs of physiological damage from passive smoking can occur within just twenty minutes. To protect non-smokers from this

risk, and even smokers to a degree, Patent Filtration has developed a range of highly effective air purifying systems.

Some countries, like Canada and the US, have already adopted non-smoking legislation. It seems likely, therefore, that the EU and possibly other countries will introduce similar laws to restrict smoking in public areas, minimising the risk from passive smoking. In fact, there has been much international pressure to ban smoking altogether in public places. Despite pressure on governments there has been little response to date.

For areas where smoking is, and will continue to be permitted, there is a clear need to protect people from the dangers of passive smoking. An ideal solution is the installation of air purifiers with the proven ability to dramatically reduce the concentration of tar, nicotine and smoke particles and circulate fresher air.

The damage caused by tar and nicotine is well documented, but the affect of other particles that could potentially lead to lung, heart disease and allergies is not so clearly defined. Tobacco fumes

contain burnt leaf particles that can be as small as one hundredth of a micron. To remove particles down to these lower size, effectively virus sizes, PFL developed a new Filtaire Series.

Further information about the hazards of passive smoking have been published by a number of organisations, including ASH, whose website, www.ash.com, offers detailed information on the subject.

Laboratory



Labs carrying out bio-tests can benefit from the installation of air purifiers to remove airborne microbial particles, reducing cross-infection and spoilage of assay plates... as well as personal infection!

The Filtaire range of purifiers employs carbon filters that can be tailor made to remove a wide variety of organic vapours (VOCs), acidic and basic vapours, toxic contaminants such as mercury, sulphur compounds and amines. Small molecules such as methanol and ethanol (eg formalin and cidex sterilants) which are absorbed but then desorbed by carbon, can be chemically destroyed with other absorbents... in this case, permanganate prilled with alumina. A selection of carbons is available with a wide range of absorption functions.

The Filtaire Ranges

The 200/300 Series



Filtaire systems were developed around 25 years ago, using spinning polypropylene discs to act as HEPA filters. The 200/300 Series can remove particles as small as 0.5 microns, including, therefore, bacteria and microfungi which have a diameter from 1 micron upwards. As a comparison, a sugar grain has a dimension of approximately 1000 microns.

The Filtaire 200 Series has been designed for suspension above working areas, whilst the 300 Series is suitable for wall installation, but is also free-standing.

Since the introduction of these ranges, a variety of applications have been identified, including the containment of infections and passive smoking.

The 5000 Series

Lower sized particle filtration called for the development of a new purification technique. The result was an impeller with the power to propel air through a more highly efficient filter. The removal of odours is done in the same way, using carbons selected for various applications.

The 5000 Series now offers options of wall or ceiling mounting, increased power for greater air recirculation, and a variable speed control for a wider range of room sizes. The ability to control air circulation, to remove virus size particles and employ a new range of specialist carbons has opened up a whole new selection of application possibilities.



Article Requests

Please send all article submissions for the **freshair** news to: The Editor, Freshair News, Patent Filtration Ltd, RAM House, Vandyke Road, Leighton Buzzard, Bedfordshire, LU7 3HH or email: info@patentfiltration.com



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