Surface Coating for Fans

ebm-papst have applied the latest in surface coating technology to develop two new fan ranges for applications where hygiene and cleanliness are prime considerations.

Ant-bacterial coating
Specially developed for the medical and food industries, ebm-papst and US-based company AgION have developed an entire range of axial fans equipped with an antibacterial feature. A special compound of zeolite doped with silver ions is worked into the basic polymer of the fan to render viruses and bacteria harmless in two different ways. Catalytic oxidation cuts off their oxygen supply while a reaction with the cellular membranes and the DNA of the pathogens prevents them from ingesting nutrients or reproducing.

AgION are experts in silver-based antibacterial agents and have successfully researched and used this technique in a variety of applications for over ten years. The permanent coating is long-lasting and complete harmlessness to people, animals and plants, attacking only micro-organisms and fungi. It is also invisible so to visually distinguish the treated fans the new range is coloured in the typical green of operating theatres.

The five new fans are based on the extremely successful Energy Saving Motor (ESM) range with diameters of 172, 200, 230, 250 and 300 mm giving an air flow of 200 m³/h to 1400 m³/h at ambient temperatures between -30 °C and +50 °C.

Nano-coating
Already used in various other industrial applications, the use of a complex surface treatment on a nanoscopic scale ensures that small particles can no longer adhere to the surface of impeller blades. This substantially reduces the amount of contamination on fans that are exposed to high levels of dust or textile particles. The technology, which doesn’t visibly change the appearance of the fan, helps to maintain the efficiency of the impeller to ensure constant air performance, allows for longer cleaning intervals and reduces the risk of corrosion.

Centrifugal fans of various sizes (R2E146, R2E175, R2E220, R2E280) are already available with nano-coating but the technology can be applied to other types of fan as required.

For further details on the new surface coated fan ranges call ebm-papst UK on 01245 468555, email info@uk.ebmpapst.com or visit www.ebmpapst.co.uk/nano.