



April 2019

Lacquered aluminium foil improves performance of energy recovery rotors

Hygrosieve®, an innovative lacquered aluminium foil developed by **Italcoat**, part of the Laminazione Sottile Group, was a clear winner in the Resource Efficiency category at this year's Alufoil Trophy. The development consists of a new hygroscopic lacquer, with a molecular sieve effect, which improves the performance in terms of selective vapour adsorption/desorption resulting in a 15% energy saving. The product has been specifically developed for energy recovery rotors.



"This clever device scored the highest marks of all category winners," said the 2019 head judge Laura Fernandez, Senior Packaging Technologist at Marks & Spencer. "This was a completely different entry from the usual packaging and end-consumer oriented products. The technology shows a clear and significant saving in energy and demonstrates just how alufoil can be used to great effect outside the packaging arena," she explained.

The aluminium foil is chemically degreased and lacquered both sides with an innovative hygroscopic formulation and anticorrosion primer. The formulation is applied through coil coating. An additional benefit is a reduction of the flow rates of refrigerant fluid, which also contributes to higher efficiency of the rotor.

"The award of an Alufoil Trophy represents, for us, a recognition of the job done by the R&D team at Laminazione Sottile Group, which is always ready to meet customers' evolving needs and design innovative solutions. Hygrosieve summarizes in a single product: long life, efficiency, constancy and protection," commented R&D Director of Laminazione Sottile Group, **Ciro Sinagra**

Hygrosieve® offers good adhesion on aluminium surfaces without risk of pulverisation, higher and quicker adsorption of water moisture, a molecular sieve effect with rejection of pollutants, anticorrosive performance as well as the major energy saving, says the company. In addition, with the Hygrosieve® coating, the aluminium foil does not allow water to become an obstacle to air circulation.

The total absence of silica gel means there is an absence of bad odours caused by the build up of bacteria and it is possible to add a biocide to the formulation.

The Alufoil Trophy is organised by the European Aluminium Foil Association. There are five categories – Consumer Convenience, Marketing + Design, Product Protection, Resource Efficiency and Technical Innovation. For the Alufoil Trophy 2019 there were nine winners.

High-resolution pictures can be downloaded and all winning entries can be viewed at trophy.alufoil.org

The European Aluminium Foil Association (EAFA) is the main trade association, specifically representing companies engaged in the rolling and rewinding of aluminium foil and the manufacturing of semi-rigid alufoil containers and household foil in Europe. With its more than 40 members, the organisation represents the total aluminium foil rolling market in Europe. www.alufoil.org

Further information: Henning Grimm, Manager Communications & Global Relations
communications@alufoil.org