

March 2012

Alufoil Trophy 2012: Multi-layer tray coating speeds up cooking times

A multi-layer technology applied to aluminium trays and lids has won an Alufoil Trophy 2012 for Consumer Convenience. TIBON® was a joint entry from Plus Pack (preferred European vendor), Danapak Flexibles (production license holder) and Tibon Technology. Trays treated with TIBON® will result in reduced cooking times of between 25 and 40 per cent compared to conventional alufoil trays, they claim.

“At a time when energy costs and consumption concern everyone this technology makes a significant contribution by reducing cooking times. It also helps to improve food safety, when cooking from frozen, by rapidly increasing the in-tray temperature above the levels achieved in standard alufoil trays,” stated head judge Antoinette Devine, global packaging consultant for SABMiller.

Tests on both frozen and fresh foods have produced greatly reduced cooking times as well as more crispy and tasty foods, according to results from more than 10 major users of alufoil trays. The technology, which is patented worldwide, allows either faster cooking of food at a recommended temperature or lower temperature cooking for a recommended time. This can lead to reduced energy consumption and lower CO2 emissions.



Conventional alufoil trays and lids food cooks at around 100°C. Trays using TIBON® technology reach temperatures well above 100°C very rapidly because it allows the pack to absorb and retain heat from a conventional oven or grill.

Radiation heat represents more than 60 per cent of total heat in an oven. The TIBON® coating on the tray enables infrared (IR) radiation to be transmitted in a highly efficient way into the food. The heat transmission per cm² of the tray increases by up to 400 per cent, allowing frozen food to jump over the ‘water-phase’ and go directly from frozen to baked, resulting in a finished meal with improved taste and visual appeal, says Plus Pack.

“The Alufoil Trophy highlights a new technology that we hope might revolutionise standard aluminium containers,” explained managing director of Plus Pack, Steen Hastrup. While Lars W Hyldgaard managing director of Danapak Flexibles commented: “This technology has the potential to lead to the creation of a completely new range of customer convenient concepts.”

“This award recognises that TIBON® could be a major step forward in aluminium foil technology. We believe it is the fastest and best aluminium foil for cooking currently available, with the added advantages of less CO2 emission and less energy consumption,” concluded Tibon Technology’s chairman Lars Schøning.

The technology has already been applied to household foil lacquered with Tibon® inks which allows heat from a conventional oven to pass through the foil and keep it inside the wrapped food. It is now being marketed across Europe in the new tray formats.

The Alufoil Trophy is organised by the European Aluminium Foil Association. There are five categories – Consumer Convenience, Marketing + Design, Product Preservation, Resource Efficiency and Technical Innovation. Judges also award Overall Excellence. For 2012 there were 13 winners from 52 entries.

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

Further information:

Guido Aufdemkamp, Director Communication

The European Aluminium Foil Association is the international body representing companies engaged in the rolling and rewinding of alufoil and in the manufacture of alufoil containers and of all kind of flexible packaging. Its more than 100 members include companies in Western, Central and Eastern Europe.