

ECO PARTICLE FOAM AIR OUTLET

SUSTAINABLE FEATURES



WEIGHT
SAVING



CO₂
SAVING



RECYCLABLE
MATERIAL

CHARACTERISTICS

As the market leader in air distribution in aircraft cabins we are constantly expanding our product portfolio. The combination of innovative materials and a special joining method developed by Diehl Aviation guarantees a new level of efficiency and weight reduction and knows no equal on the current market. Air outlets made of granulated foam plastic offer many benefits in lightweight construction and in manufacturing processes. First customers are able to profit from this benefits. The technologies not only make faster customization processes, lower cost, and weight reduction possible, it is above all ecologically efficient.

BENEFITS

- Weight reduction
- Reduced CO₂ in manufacturing
- Reduced fuel consumption due to lower weight
- Very fast manufacturing
- Lower manufacturing cost
- Improved recycling through the use of thermoplastic material

SUSTAINABLE FEATURES*



WEIGHT
SAVING

Compared to the state-of-the-art sandwich technology for air outlets the particle foam outlets are approximately 35% lighter. This adds up to a weight saving of 12kg per single aisle aircraft.



CO₂
SAVING

Due to the weight saving we can estimate a fuel saving of 1.6 tons per aircraft per year. This fuel saving can be converted into a saving of 5 tons CO₂ emission per aircraft per year.**



RECYCLABLE
MATERIAL

The innovative air outlets produced from particle foam material are easily recyclable as they are designed as nearly mono-material parts. The material itself is a thermoplastic material that can be granulated and then reused.

Diehl Aviation aims to contribute to the industry's goal of achieving net-zero aviation by utilizing lightweight, recycled, or bio-based materials to optimize resource consumption and reduce CO₂ emissions. These initiatives are at the core of the ECO efficiency product range.

*More Infos about the Sustainability Features you can find here:
<https://www.diehl.com/aviation-highlights/en/eco-efficiency/>

** estimated for a current generation single aisle aircraft e.g. A321, operating on medium range missions, e.g. Paris-Istanbul, with average operating hours of 3600 per year