**Whether in the kitchen, garden, workshop or office – the winners of the 2017 pro-K Award reflect plastic’s broad spectrum of applications. ebm-papst received an award for its AxiCool series – axial fans for evaporators and refrigerators – in the “Electrical equipment” category during the ceremony in Frankfurt on January 12, 2017. Over 100 submissions qualified for the competition.**

The jury was impressed, calling AxiCool a “sophisticated technical device with high production quality - a self-contained solution in 100% plastic.” AxiCool’s special design details counteract ice formation and optimize defrosting cycles. For example, both the patented fan housing and the fan blades are made of tough plastic, a material that is less prone to ice formation than metal. It is also possible to insert heating tape directly into the covered fan housing system to prevent unnecessary heat transfer to the environment. This reliably stops ice formation between the axial blade and the fan housing, which could block the fan. Coaming inside the fan housing ensures that melt water can drain into the drip pan: splash water must be prevented from contaminating food stored in open containers, for example. This design detail also allows plastic to show off its advantages.

**More air with less energy consumption**

Since the back pressures in evaporators are high, the design is based on a diffuser combined with guide vanes. The integrated guide vane system minimizes flow turbulence to achieve maximum efficiency and minimum noise. In this way, air performance can increase by up to 12% while the noise level falls by up to 5 dB(A) as compared to a conventional fan with a short nozzle. To put it in a nutshell: AxiCool transports more air with less energy consumption and reduced noise.

**About the pro-K Award**

Since 1979, “pro-K Industrieverband Halbzeuge und Konsumprodukte aus Kunststoff”, the German association for producers of semi-finished and finished plastic products, confer an award for outstanding products made of plastic. Its purpose is to showcase the performance properties of plastics to the general public. The outstanding products feature creativity, well-designed functionality and special properties.In 2017, the award was given in 10 categories, including storage & conveying systems, entertainment & communication electronics, garden furniture, toys and surface systems.



Fig. 1: Kai-Uwe Reiß from pro-K presents the award certificate to Thomas Sauer, Head of Development Dept. B and Electronics at ebm-papst.



Fig. 2: High-end AxiCool variant with covered fan housing and integrated diffuser with guide vanes

**Photo** ebm-papst

**Characters**  approx. 2,400, with headings and sub-headings

**Keywords**  EC technology, axial fan, evaporator

**Tags** EC fans, axial fan, AxiCool

**Link** [www.ebmpapst.com/axicool](http://www.ebmpapst.com/axicool)

**About ebm-papst**  
The ebm-papst Group is the world's leading manufacturer of fans and motors. Since it was founded, the technology company has continuously set global market standards. Developments have ranged from electronically controlled EC fans, through aerodynamic improvements of fan blades, on to the resource-conserving selection of materials, with sustainable materials being just one option.

In fiscal year 2015/16, the company achieved sales of almost €1.7 billion. ebm-papst employs approximately 13,000 people at 25 production sites (in Germany, China, the United States and elsewhere) and in 49 sales offices worldwide. Fans and motors from the global market leader can be found in many industries, including ventilation, air conditioning and refrigeration, household appliances, heating, automobiles and drive engineering.