



Press release

FlowGrid air-inlet grille for axial and centrifugal fans Sound absorber for refrigeration, ventilation and air conditioning technology

The FlowGrid air-inlet grille from ebm-papst – the efficient way to drastically reduce noise levels in refrigeration, ventilation and air conditioning technology.

Disturbance of the flow of air into the fan produces a high noise level: Particular installation situations involving asymmetrical air intake for example can lead to great turbulence. Wherever there are constrictions, so-called vortex string formations develop. These collide directly with the rotating blades and generate unwanted noise – namely broadband noise and narrowband, tonal noise components, also referred to as propeller noise or blade passing frequency.

With this in mind, the Mulfingen engineers developed the special FlowGrid air-inlet grille which has a straightening effect on the inflowing air. The vortex strings are split upon hitting the grille and considerably weakened as they flow through it. In other words, the air-inlet grille drastically reduces noise-generating disturbance – resulting in a decrease in sound pressure over the entire frequency range, however particularly at the disturbing low blade passing frequency. The air-inlet grille is suitable for use with both axial and centrifugal fans. And best of all: There is virtually no effect on power input and air performance.

Use of the air-inlet grille for a condenser with axial fan for example makes it possible to reduce the noise level by 3.9 dB(A) and the blade passing frequency by 16 dB. There is thus considerably less need for insulation and noise protection and the corresponding standards can be more easily satisfied. Another way of improving the sound level is to combine the air-inlet grille described with the ebm papst AxiTop diffuser on the discharge side. This both increases energy efficiency and reduces noise emissions still further – above all in the medium frequency range.

The air-inlet grille is made of tough composite material and is available up to fire protection class UL94-5VA standard. In addition to condensers, the FlowGrid is also suitable for use with flat panel air conditioners, centralised air conditioning units, air purifiers and heat pumps. Purchasers will soon be able to benefit from the advantages of noise reduction in the low-frequency range: The first models will be available in spring 2014.

Press contact:
Caroline Bommès
Marketing Consultant

ebm-papst A&NZ Pty Ltd
10 Oxford Road
Laverton North VIC 3026
Australia

Phone: +61 3 9360 6400
Fax: +61 3 9360 6464

caroline.bommès@au.ebmpapst.com
<http://www.ebmpapst.com.au>

facebook.com/ebmpapstANZ
twitter.com/ebmpapstANZ
youtube.com/ebmpapstANZ
27/11/13- Page 1 of 3



Press release

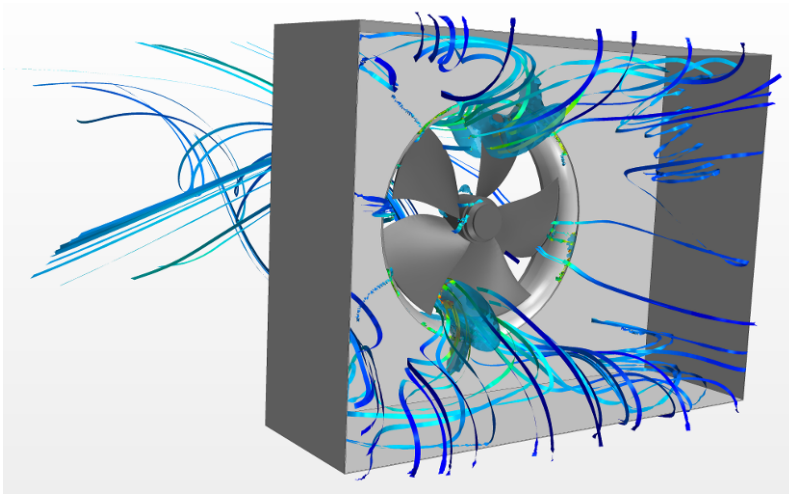


Fig. 1 Problem: Formation of air vortices due to an asymmetrical intake area.

Press contact:
Caroline Bommes
Marketing Consultant

ebm-papst A&NZ Pty Ltd
10 Oxford Road
Laverton North VIC 3026
Australia

Phone: +61 3 9360 6400

Fax: +61 3 9360 6464

caroline.bommes@au.ebmpapst.com

<http://www.ebmpapst.com.au>

facebook.com/ebmpapstANZ

twitter.com/ebmpapstANZ

youtube.com/ebmpapstANZ

27/11/13- Page 2 of 3



Fig. 2 Solution: The FlowGrid air-inlet grille drastically reduces noise-generating disturbance in the inflowing air.



Press release



Fig. 3 The air-inlet grille is equally effective with both axial and centrifugal fans. It has virtually no effect on power input and air performance.

About ebm-papst

The ebm-papst Group is the world's leading manufacturer of fans and motors and is a pioneer and pacesetter for ultra-efficient EC technology. ebm-papst fans and motors are represented in many industries, including ventilation, air-conditioning and refrigeration technology, household appliances, heating engineering, in IT/telecommunications, in medical technology and in applications in automotive and commercial vehicles engineering. ebm-papst EC motor technology, and the market leader's engineering and logistics expertise will add value to your business.

Find out more about ebm-papst A&NZ on www.ebmpapst.com.au.

Press contact:

Caroline Bommès

Marketing Consultant

ebm-papst A&NZ Pty Ltd
10 Oxford Road
Laverton North VIC 3026
Australia

Phone: +61 3 9360 6400

Fax: +61 3 9360 6464

caroline.bommès@au.ebmpapst.com

<http://www.ebmpapst.com.au>

facebook.com/ebmpapstANZ

twitter.com/ebmpapstANZ

youtube.com/ebmpapstANZ

27/11/13- Page 3 of 3