



ENGLISH

# **OUR ONE-PIECE MOULDED IMPELLERS**

Using state-of-the-art technology and our unsurpassed expertise, we have created one-piece moulded impellers optimised for your specific application. Our one-piece solutions provide outstanding performance while reducing power consumption and noise.

Our one-piece moulded impellers are the perfect answer for high volume projects. We develop and produce the impellers for all types of applications including ventilation, cooling to industrial heat exchanger units.

Multi-Wing's product development tools ensure that your impeller is optimised for your specific application. Our rapid prototyping machine, CAD system, FEA software and wind tunnel provide precise data to test impeller and housing performance.



## **Design Features**

Fixed pitch angle.

Custom designed for your specific application.

9 different one-piece moulded impellers in stock of different designs and with varying no. of blades.

Built for flange mountings and will adapt our boss series which is available in a range of bore/fixing configurations. Extremely affordable one-piece design.

#### Materials

Available in PPG or PAG to suit applications with different speeds and ambient temperatures.

PPG Glass reinforced polypropylene Temperature range: -10°C to +90°C PAG Glass reinforced polyamide Temperature range: -40°C to +110°C

Please observe penalty factors for temperatures above 40°C

We reserve the right to change the materials of manufacture. The values for the mechanical properties are mean values and can be subject to variations due to the use of different suppliers.

### Diameters

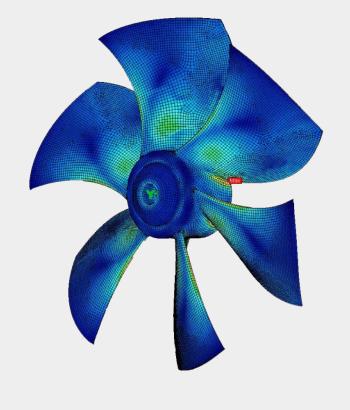
Our one piece moulded fans are available in diameters ranging from 147 - 720 mm.

Call your local sales person for information about customized solutions.

#### **Profiles**

Available profiles: airfoil, sickle & broad paddle

# Example of Finite Element Analysis (FEA)



## Our Research & Development process

The Multi-Wing system is based on flexible solutions using standardised components. However, we also design highly customised solutions like one-piece moulded fans.

The success of our R&D process ties directly to the strength of our customer relationships. Using each customer's performance data and geometric requirements, we develop a distinctive fan solution. Multi-Wing has developed fans for a spectrum of industrial applications, specialising in ventilation, cooling and industrial heat exchanger units

Using our product development tools, we can create an exact scale model of your project and test it in our in-house wind tunnel to ensure that it meets your requirements. You may also benefit from our wind tunnel by testing the performance of your application.

It is a process with a high degree of reliability and expertise.