AXTRA® is the first new fan design patented in over 100 years

We believe AXTRA® outperforms the world’s leading fans and typically provides the following benefits across the entire domestic, commercial and industrial fan range:

- Noise reduction — 7 to 10db to displace the same volume of air as competitors
- Energy efficiency — up to 20% improvement
- High volume, more efficient air flow — up to 100% improvement. For the same power AXTRA® displaces more air more quietly
- Stability across the entire operating range
- Potential for reduced manufacturing costs
there has been no rival to current fan technology for over 100 years

1800s

Axial fans produce high air flow under low pressure

1900s

Centrifugal fans produce lower air flow under high pressure

2003

AXTRA® fans produce high air flow under high pressure
As an example, our research shows AXTRA® is quieter and more efficient at displacing the same amount of air, compared with leaders in the market for small computer fans.

<table>
<thead>
<tr>
<th></th>
<th>Noise (dB)</th>
<th>Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AXTRA®</td>
<td>31.4</td>
<td>1.187</td>
</tr>
<tr>
<td>Papst (Germany)</td>
<td>38.8</td>
<td>1.301</td>
</tr>
<tr>
<td>Sunon (Taiwan)</td>
<td>40.0</td>
<td>2.088</td>
</tr>
</tbody>
</table>

It is conservatively estimated that 350 million small fans are manufactured annually for the computer and telecommunications market\(^1\) with growth forecasts estimated at 15% p.a\(^1\)

\(^1\) Gartner Group
there are numerous examples for consumer applications that value quietness and efficiency …

<table>
<thead>
<tr>
<th>IT / Telecommunications</th>
<th>Household Appliances</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCs</td>
<td>Refrigerators</td>
</tr>
<tr>
<td>Servers</td>
<td>Rangehoods</td>
</tr>
<tr>
<td>Laptops</td>
<td>Dehumidifiers</td>
</tr>
<tr>
<td>Laser printers</td>
<td>Air Purifiers</td>
</tr>
<tr>
<td>UPSs</td>
<td>Air-conditioning</td>
</tr>
<tr>
<td>Routers</td>
<td>Heating</td>
</tr>
<tr>
<td>Switches / multiplexes</td>
<td>Vacuum cleaners</td>
</tr>
</tbody>
</table>

Transport (motor cooling & air-conditioning)
- Motor vehicles
- Trucks
- Aircraft

… and with further R&D
- VTOL (vertical take-off and landing aircraft)
- Hovercraft
- Wind farms
- Frost protection systems
comparative operating ranges between 80mm diameter Papst and AXTRA® fans
comparative sound, pressure and volume flow curves for 110mm AXTRA® and Nidec fans
AXTRA®’s superior performance has already received recognition from Government and industry …

- De Rolfe in collaboration with the School of Aerospace, Mechanical and Mechatronic Engineering at Sydney University have been awarded an Australian Research Council grant to further studies of the aerodynamic properties of the AXTRA® technology, chiefly in regard to aircraft propulsion systems.

- Peter Rollo — engineer and developer of the AXTRA® has recently been named in the *The Bulletin*’s ‘Smart 100’. A recognition for those who have developed new ways of doings things that have helped, or are helping, to better lives and industry in this country.

- De Rolfe is a member of the Australian Technology Showcase, a Government initiative to promote leading-edge Australian technologies.
want to know more?

For more information please visit our website @ www.derolfe.com

Expressions of interest can be directed to:

Jenny Rollo: jenny@derolfe.com