AIR.
PERFECTLY ENGINEERED.
SILENT. RELIABLE. POWERFUL.
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Entrepreneurship takes courage. The kind that Peter Meier Sr. demonstrated when he founded Micronel AG in the late 1960s. His pioneering spirit can still be felt at Micronel today.

By fostering a corporate culture of creativity and innovation, we have been conceiving ground-breaking technologies for decades. Every day we pursue our core competency with passion and efficiency: the development of powerful yet ultra-quiet fans. As a high-tech company, we are committed to perfection and Swiss quality workmanship. And with this unparalleled performance we have been able to position ourselves successfully worldwide: Micronel is at home today on three continents.

With a steady stream of new ideas and in constant dialogue with our customers and partners, we are continuing on our dynamic journey. We are pleased to invite you to accompany us.

Peter Meier
Peter Meier, CEO/Chairman of the Board
From the outset, Micronel has relied on leading technologies in the conception and development of high-quality fans and blowers. Vision and innovation are the building blocks for engineering forward-looking applications featuring noise reduction combined with outstanding performance.

Our values

Tradition is the common bond that unites the company with its customers, and the employees with the company. In a perfect symbiosis, precision and expertise, loyalty and discretion form the foundations for innovative product quality at the highest level. Open communication is vital for creating synergies: with customers, partners and co-workers. Fairness and trust are the basis for long-term and sustainable ties.

Our goals

Whether in the continuous optimization of proven products or in the development of new solutions: Micronel technology combines air and movement efficiently and effectively. Products and processes are subject to strict quality management. Nationally anchored and represented internationally by a competent network of agencies, Micronel is positioned as a leading global manufacturer at the forefront of the market. In our daily work, we focus on the responsible use of resources.

Our quality / Swiss made

«Swiss made» stands for the highest standards, sustainable sourcing and thus for quality Swiss craftsmanship. Our high-quality products are a claim we have continued to live up to ever since the company was founded in 1968. The Micronel company stands by its products with its good name.
Airflow design and thermo engineering are among Micronel’s core competencies and are responsible for the worldwide success of our high-quality products. Our in-house laboratories provide optimal conditions for simulating and testing applications.

Air displacement, pressure, voltage and current are the key parameters for cooperative development in each project. The Micronel engineering team develops the desired application with and for the customer according to individual requirements. On the basis of a simulated set-up in the flow laboratory, the operating point is determined in conjunction with the customer. Already during the prototype phase, the first benchmarks, performance requirements and fan types can be defined in the acoustics laboratory. A wealth of experience gained from long-term test runs (MTTF) and valuable tips from users go into perfecting each design.

Micronel laboratory
- Motor and drive facility
- Airflow measurement circuit
- Acoustic measurements
- Vibration analysis system
- Imbalance measurements
- Thermal measurements
- Test chambers for long-term measurements
- Environment simulation
Medical
Micronel technology delivers powerful, dynamic and quiet solutions for medical respirators and systems for sleep-apnea therapy and oxygen therapy. Our products are relied on as well in analysis and laboratory equipment, as well as in the dental field.

Industrial solutions
Whether inflating bubble wrap or suctioning off fingernail dust, a Micronel blower is sure to be involved. Laser cutting machines and vacuum lifting tools also rely on our products for the best results.

Electronic cooling
For cooling in lighting systems or for engines, Micronel relies on proven standard products. Precision performance is called for in electronic measuring equipment used for industrial products.

Climate comfort/fresh air
A pleasant temperature creates a comfortable domestic environment. House ventilation systems are equipped with Micronel blowers. Here too, noise reduction plays a vital role.

Personal protection components
For industrial, military and civilian operations, efficiency is essential. These applications – from respiratory protection to ventilation for protective clothing – must master the most difficult of conditions. Deployed worldwide, Micronel blowers save lives every day.
MICRONEL INSIDE
OUR APPLICATIONS
IN ACTION

The best things are often hidden behind the scenes; Micronel products are usually permanently installed and not visible from the outside. This is another reason why quality must be ensured from the outset, because repeated disassembly generates costs and wastes time.

Our goal is to develop technologies that ideally fit the needs of our clients. As a reliable partner, we create technological options that make your life easier. R&D in medicine and health is becoming increasingly important and more and more challenging; working together with our clients, Micronel makes sure that innovations keep pace with changing requirements. Industrial solutions should be cost-effective, robust and have a long service life – our products offer all that and more. Nowhere are product requirements as high as in medicine and aviation; Micronel inside has proven its worth in these areas for over 10 years.

The world is always changing, and so are our habits. Our products are increasingly in demand today in beauty & lifestyle applications, taking on a crucial role in this segment.
Sleep apnea
Proven products: U51DL, U65MX, U71MX
Small, compact, with optimal performance: Low-noise, reliable radial blower for CPAP, APAP, or bi-level sleep apnea devices.

Breathing therapy
Proven products: U65MX, U71MX, U71HX
Low noise and high dynamics for home ventilator equipment.

Transport ventilators
Proven product: U71HX
Robust, dynamic and highly efficient, especially for battery-operated respiratory equipment.

Intensive care ventilators (ICU)
Proven products: U51D2, U65H2
Reliable and powerful up to 110 mbar. Oxygen-resistant. Successfully used by leading international ventilation equipment manufacturers.

Analysis systems
Proven product: D600
Error-free, secure, flexible: Special devices for variable solutions in clinical chemistry and homogeneous immunology. The flexibility and proven features of our systems make it possible to analyze specific parameters or conduct short analysis series, in addition to providing a consolidated routine serum workplace solution.
INDUSTRIAL SOLUTIONS
DURABLE, RELIABLE, INEXPENSIVE

Forklifts
Proven product: K9238
Nothing is too tough for our blowers: The established flat blowers suction off noxious gases from the battery area in electric forklifts, and are also used for cooling the engine area.

Bubble wrap machines
Proven products: U65M2, U85MX, U51DL
Secure transport: Thanks to our blowers, bubble wrap can be inflated in no time to provide perfect protection for a variety of goods.

Coffee machines
Proven products: F62, D340
For the best in coffee enjoyment: In industrial and professional coffee machines, Micronel flat blowers ensure that electronic controls don’t overheat.

Laser machines
Proven product: U51DX
Not to put too fine a point on it: Laser cutting and welding machines rely on high-performance Micronel blowers.

Explosion protection
Proven products: D480, D600, U97
Safety on duty: Protective equipment and systems are needed in areas where explosions are a risk. Our products are certified according to the conformity assessment procedure and Directive 94/9/EC.
**AVIATION**

**HIGHSTANDARDS,** **STRICTEST CONTROLS**

**Eurocopter**
Proven product: D751 EMV
Taking to the skies with fresh air: Our reliable axial blowers, which generate high air flow in a compact space, are responsible for cabin ventilation.

**A380**
Proven product: U97 Mod.
Safety on board: To ensure intact door electronics, a Micronel blower is used for air control in aircraft doors.

**BEAUTY & LIFESTYLE**

**STATE-OF-THE-ART COMFORT**

**Bathroom**
Proven product: R801 Mod.
Well-being taken to a new level: Micronel products pamper sensitive areas with gentle warm-air drying.

**Nail dust suction device**
Proven product: U71HL
The first impression counts: With well-groomed hands, the first handshake is a good basis for building a successful cooperation.
THREE LINES
PERFECTLY TAILORED
TO YOUR NEEDS

80 per cent of Micronel applications are developed according to customer-specific requirements. The product portfolio consists of three main product lines offering all applications in different versions.

Micronel manufactures miniature fans, micro-miniature fans and blowers for various industries. Different applications require different types of performance: while high speeds and minimal noise distinguish the U-line, the D-line stands for continuity in terms of airflow volume and pressure. When air displacement is required, the F-line is the right choice.
**U | Line**
Radial Blowers

High performance in a minimum of space: The U-line features high speeds, dynamic switching and minimal noise. These precision products, ideal for high-pressure applications, are designed primarily for the medical field.

**D | Line**
Axial Fans

The D-line stands for continuity in terms of airflow volume and pressure. In the power axial blowers, high flow rates are combined with high pressure – in a compact package. The qualities of these wide-ranging solutions are in particularly high demand in the aerospace industry.

**F | Line**
Fans & Blowers

For cooling electronics or to dispel odours or heat – in short, wherever air must be displaced – the F-line is the right choice. These products are particularly well-suited for applications with large airflow volumes.
The U-line blowers generate extremely high pressure ratios and require little space. A fan the size of a golf ball can already produce over 4’000 Pa. The airflow in this blower type is diverted by 90°. These specifications are ideal for the medical sector. For example, U-line products are deployed in respirators and filters with very high system resistance. Radial blowers in the smallest and most compact designs are available for special applications requiring static pressures up to 10’000 Pa. Highest performance is achieved through electronically commutated 3-phase motors.

Below is a selection of our U-line products.
**COMPACT, QUIET AND EFFICIENT**

For further technical information, visit our website: [www.micronel.com](http://www.micronel.com).

**U Line**  Radial Blowers

### U64, U97, U150

**Technical data**

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<tr>
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<tr>
<td>RPM; n [min⁻¹]</td>
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<tr>
<td>Airflow rate; Q [l/min]</td>
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<tr>
<td>Static pressure; delta P [Pa]</td>
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<td>Noise; Lp [dB(A)]</td>
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### U51, U65, U71, U85

**Technical data**

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<th>Value</th>
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<td>10–150</td>
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<tr>
<td>RPM; n [min⁻¹]</td>
<td>25'000–50'000</td>
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<td>Airflow rate; Q [l/min]</td>
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<td>Static pressure; delta P [Pa]</td>
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<tr>
<td>Noise; Lp [dB(A)]</td>
<td>50–70</td>
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### PQ Chart

![PQ Chart](image)

**High-speed blowers with up to 50,000 rpm**

<table>
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<tr>
<th>Model</th>
<th>Dimensions</th>
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<tbody>
<tr>
<td>U51, U65, U71, U85</td>
<td>Ø 50, 65, 73, 82 mm</td>
</tr>
<tr>
<td>U71, U85 ECO</td>
<td>Ø 73, 82 mm</td>
</tr>
<tr>
<td>U51, U65, U71, 2-STAGE</td>
<td>Ø 50, 65, 73 mm</td>
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The power axial blowers are characterized by balanced airflow volume and pressure. This compact, cylindrical series – with or without flange, placed right or left – combines high flow rates with high pressures in a compact package. In addition to the eco, medium-line and high-line versions, the D-line offers explosion-proof high-end solutions. The performance-enhancing proprietary Micronel twister profile is employed here. Airflow is parallel to the axis of rotation.

Below is a selection of our D-line products.

**Plastic housing**

- **D241**: Ø 24 mm
- **D304**: Ø 30 mm
- **D343**: Ø 36 mm
**THE RADIAL FAN FOR HIGH-END SOLUTIONS**

For further technical information, visit our website: [www.micronel.com](http://www.micronel.com).

**D Line Axial Fans**

**D241, D304, D343**

**Technical data**

<table>
<thead>
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<th>Parameter</th>
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<th>D304</th>
<th>D343</th>
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</thead>
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<td>6–24</td>
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<td>0.5–5</td>
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<tr>
<td>RPM; n [min⁻¹]</td>
<td>12'000–14'000</td>
<td>12'000–14'000</td>
<td>12'000–14'000</td>
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<td>Airflow rate; Q [l/min]</td>
<td>40–500</td>
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<td>Static pressure; delta P [Pa]</td>
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<tr>
<td>Noise; Lp [dB(A)]</td>
<td>30–50</td>
<td>30–50</td>
<td>30–50</td>
</tr>
</tbody>
</table>

**PQ Chart**

![PQ Chart for D241, D304, D343](image1)

**D481, D604, D804**

**Technical data**

<table>
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<th>Parameter</th>
<th>D481</th>
<th>D604</th>
<th>D804</th>
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<tbody>
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<td>6–24</td>
<td>6–24</td>
<td>6–24</td>
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<tr>
<td>RPM; n [min⁻¹]</td>
<td>7'000–10'000</td>
<td>7'000–10'000</td>
<td>7'000–10'000</td>
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<tr>
<td>Airflow rate; Q [l/min]</td>
<td>200–3'200</td>
<td>200–3'200</td>
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<tr>
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<td>100–1'400</td>
<td>100–1'400</td>
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<tr>
<td>Noise; Lp [dB(A)]</td>
<td>50–60</td>
<td>50–60</td>
<td>50–60</td>
</tr>
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</table>

**PQ Chart**

![PQ Chart for D481, D604, D804](image2)

**Aluminum housing**

**D481**

Ø 48 mm

**D604**

Ø 60 mm

**D804**

Ø 80 mm
F-Line

Fans & Blowers

Ultra-quiet, the F-line fans are ideal especially for cooling electronics and for air circulation. Wherever air displacement is required – to dispel odors or heat – the F-line has the right specifications for the job. This series is therefore a good choice for applications with large airflow volumes. Extremely long product life thanks to brushless electronic motor commutation is another point in its favor.

Below is a selection of our F-line products.

Miniature fans

<table>
<thead>
<tr>
<th>F16 LM</th>
<th>F25</th>
<th>F40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 16 mm</td>
<td>Ø 25 mm</td>
<td>Ø 40 mm</td>
</tr>
</tbody>
</table>
THE ULTRA-SLIM FAN FOR A VARIETY OF USES

For further technical information, visit our website: www.micronel.com.

F|Line Fans & Blowers

F16, F25, F40

Technical data

Voltage; U [V] 5–12
Power consumption; P [W] 0.3–1
RPM; n [min-1] 4'000–10'000
Airflow rate; Q [l/min] 50–200
Static pressure; delta P [Pa] 15–50
Noise; Lp [dB(A)] 15–20

PQ Chart

C5010, K8038, G1751

Technical data

Voltage; U [V] 5–48
Power consumption; P [W] 1–35
RPM; n [min-1] 2'000–15'000
Airflow rate; Q [l/min] 150–1’000
Static pressure; delta P [Pa] 20–350
Noise; Lp [dB(A)] 20–65

PQ Chart

Standard series

C5010 Ø 50 mm
K8038 Ø 80 mm
G1751 Ø 172 mm
GLOBAL NETWORK

With our subsidiaries in the UK & USA we can be sure the company will continue on its successful course; our expertise and value-oriented corporate culture enhance our unique market position.
**Micronel Group Companies**

Highest Swiss-quality workmanship available internationally: Micronel agents and Micronel products can be found on four continents and in twenty countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Company Name</th>
<th>Address</th>
<th>Phone Number</th>
<th>Fax Number</th>
<th>Email</th>
<th>Website</th>
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</thead>
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**Micronel Agent**