

meconet

Innovations are built together



Advanced metal solutions for cooling and airflow equipment

From airflow-critical fan components to housings, frames, brackets, springs and functional sub-assemblies, Meconet turns demanding requirements into manufacturable solutions.

Design support, prototyping and versatile manufacturing technologies help improve functionality and simplify product structures. Surface treatments and assembly complete the offering and support a reliable European supply chain.

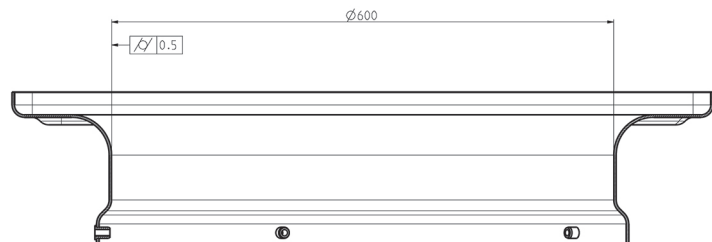
Applications & customer cases



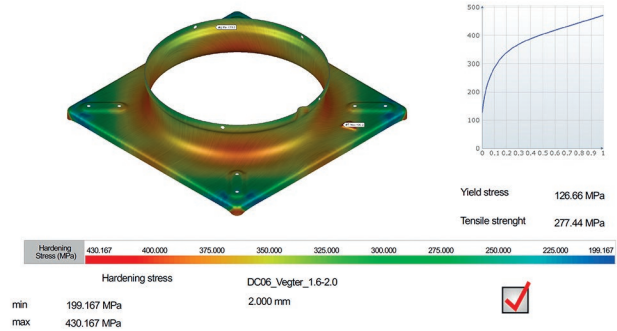
Fans & airflow systems

- **Fan housings, shrouds & collars** – Accurate formed geometry supporting controlled tip clearance, guided airflow and repeatable assembly.
- **Integrated functional features** – Stiffeners, mounting interfaces and other required shapes incorporated into the component design.
- **Brackets, supports & assemblies** – Motor brackets, mounting parts and related sheet-metal components co-developed as part of the complete fan structure.
- **Reliable serial production** – Design support, simulations and prototypes combined with scalable, IATF 16949-certified manufacturing.

Reference achievement
0.5 mm cylindricity at Ø600 mm



Customer example



Co-design of sheet-metal components for an optimised fan system

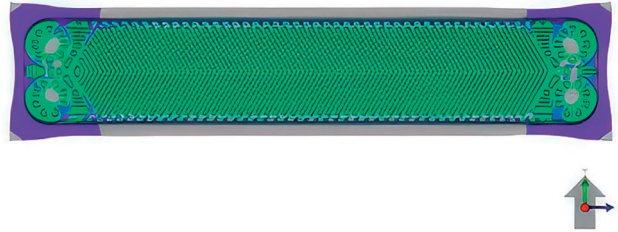
Meconet co-developed a production-ready fan-system structure using manufacturability analysis and forming simulations.

The optimised geometry provides repeatable dimensions, controlled tip clearance and integrated functional features. Fewer components and interfaces simplify assembly and support efficient industrialisation from prototype to finished serial production.

Heat exchangers & thermal systems

Heat-exchanger plates – Precise channel geometries and repeatable forming contribute to efficient heat-transfer performance. Simulation-based development supports the evaluation of material behaviour, critical forming areas and manufacturability before tooling. Servo-forming enables controlled material flow, consistent forming quality and reliable serial production.

Customer example



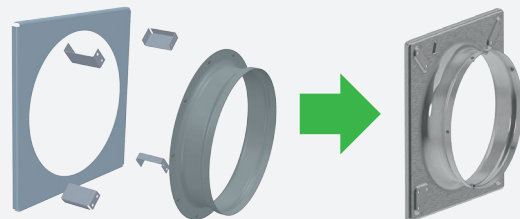
Simulation-supported development & Servo-pressing technology

Co-design and forming simulations help optimise material flow, geometry and critical areas before tooling. Controlled servo-pressing enables repeatable quality and efficient serial production from validation to volume manufacturing.

Fans & airflow systems

- **Fan housings, shrouds & collars**
 - Accurate formed geometry for repeatable assembly, controlled tip clearance and consistent alignment.
- **Integrated fan structures** – Functional shapes, mounting interfaces and reinforcement features incorporated into the formed component.
- **Assembly-ready components** – Fewer separate parts and interfaces support efficient assembly, handling

Customer example



Accuracy and simplicity

Six-part fan-system component created several interfaces and assembly phases. Through co-design and deep-drawing technology, Meconet integrated the functions into one component with repeatable geometry and accurate alignment. The one-piece design reduces interfaces, work phases and assembly errors while supporting efficient serial production.

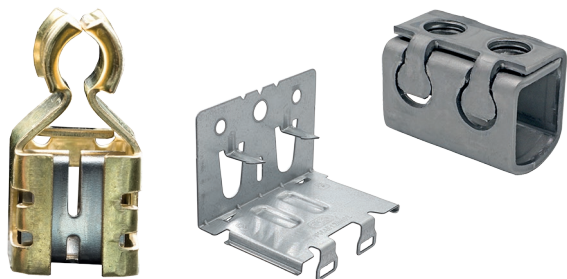
Customer-driven contract manufacturing

Supporting customers from the initial concept to full-scale production

- **Simulations & design support** – Early-stage collaboration with customers to optimize material use, weight reduction, and manufacturability with the help of our manufacturability simulation capabilities.
- **Prototyping** – Fast and flexible prototype production to validate designs.
- **In-house tooling** – In-house tooling department for designing and manufacturing tools.
- **High- and mid-volume manufacturing** – Scalable production with state-of-the-art stamping and versatile range of deep drawing presses combined with 2D and 3D lasers.
- **Flexible production for small volumes** – For smaller series or lower initial volumes, we offer laser-cut and press-brake-manufactured parts.
- **Assembly & sub-assemblies** – Integrating different manufacturing methods to provide fully or partially assembled components.
- **Effective logistics** – Over 200 freight routes to customers, intelligent packaging, and integrated services like surface treatments along the route for lower costs, CO₂, and higher efficiency.

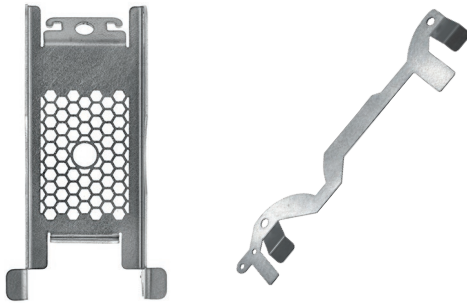
Technologies complement each other

Stamping, multi-slide forming, deep drawing, springs and assembly enable the production of both precise small parts and large, complex structures for various applications.



Prototypes & small series

Traditional sheet-metal manufacturing allows fast and flexible production of prototypes and small batches. With laser cutting, bending, threading and welding, we can create precise 2D and 3D metal parts with short lead times. This makes it possible to validate designs quickly, adjust geometry efficiently and support early-stage development.



Small series facts

- 0.1–6.0 mm sheet materials
- Production from blanks, tubes, rods and machined pieces
- Materials:
 - Uncoated and coated steel
 - Stainless steel
 - Aluminum
 - Copper
 - CuSn

Deep drawing

Deep drawing forms metal into robust and high-performance 3D shapes while hardening the material. This makes it possible to create lighter, stronger parts with excellent surface finish. In many cases, the number of components and welds drops dramatically, surface quality improves as well as lifecycle emissions shrink.



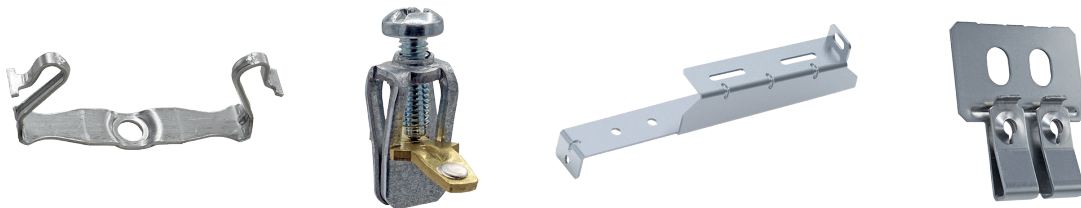
Deep drawing facts

- 0.5 mm – 6.0 mm raw material thickness
- Up to 2000 mm × 2700 mm maximum blank size
- Presses from small presses up to 1600-ton servo press for large and complex parts
- Materials:
 - Uncoated and coated steel
 - Stainless steel
 - Aluminum
 - Copper

Stamping

Different stamping technologies enable efficient and accurate production of metal components:

- **Progressive stamping** is ideal for high-volume production with fast, precise and costefficient forming.
- **Multislide technology** suits medium to large volumes and excels in small, complex and highly precise parts, easily integrating operations such as threading or welding.
- **Servo pressing** adds flexibility for medium volume needs, allowing complex and deepformed geometries with large tool sizes and short setup times.



Stamping facts

- 0.1 mm – 6.0 mm raw material thickness
- Up to 600 mm maximum coil width
- Press power 25–400 tons
- Materials:
 - Uncoated and coated steel
 - Stainless steel
 - Aluminum
 - Copper
 - Brass
 - Tin bronze

Springs

We manufacture custom springs and wire forms for various applications. Our components are designed for long life, consistent force characteristics and dependable operation in demanding environments.



Compression springs

Torsion springs



Extension springs

Wire forms

We produce tailor-made compression springs from wire diameters **0.1–12.0 mm** and torsion springs and wire forms from wires **0.1–8.0 mm**.

Wide raw material range

- Uncoated and coated spring steel
- Oil-hardened spring steel
- Stainless spring steel
- Acid-proof steel
- Heat-resistant wires
- Non-ferrous wires

After treatment options

- Annealing
- Grinding
- Shot peening
- Pre-stressing
- Surface treatments
- Dynamic fatigue testing

Assemblies and complementing technologies

Across our units, we provide assembly for every volume class from small, robotized subassemblies to large structural modules. Our solutions combine metal forming, welding, machining and automation to deliver complete, customer-ready assemblies.



Automatic assembly

- Bihler Multi-Centers
- Customer-specific automatic assembly lines
- High-volume, precise and repeatable assemblies

Manual assembly

- Tailored solutions for small and medium volumes
- Capable of handling complex, multi-stage assemblies

Large structural assemblies

- Larger visible and structural assemblies that combine forming, laser cutting, welding and surface coated finishing into durable, high-quality modules

Complementing technologies

- 3D laser cutting for trimming, holes and final shaping
- Serial machining
- Threading
- Riveting
- Robotic welding + MIG/MAG/spot welding
- Heat treatment
- Grinding & deburring
- Washing & cleaning



Meconet locations

● Production, Sales & Customer Care

● Sales & Customer Care



Established

1896



Experts & personnel

450



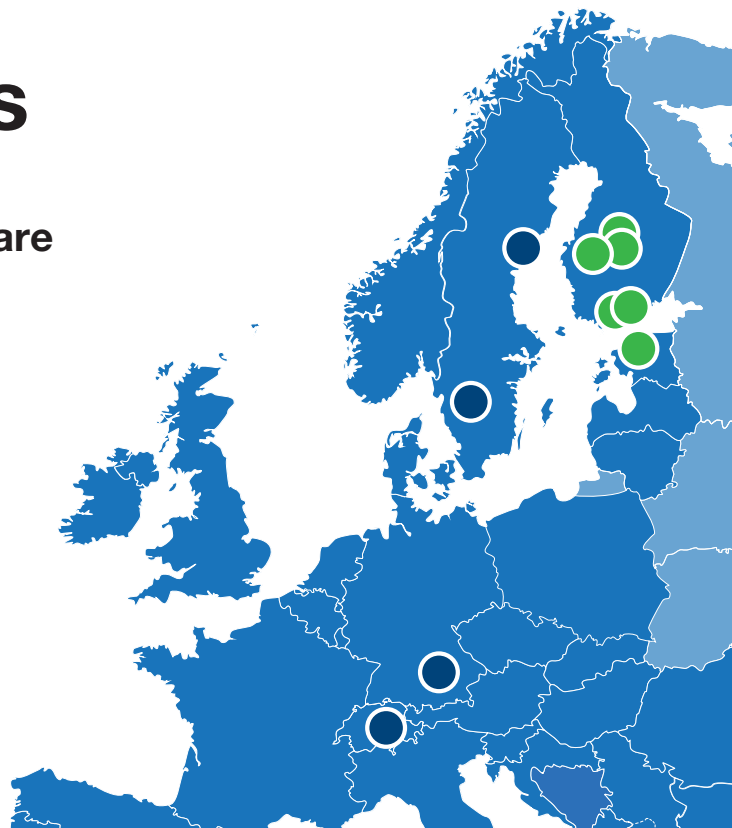
Turnover

85M€



Quality certified

IATF 16949



Let's shape the future of sheet metal solutions together

Are you ready to optimize your components? Contact our expert team to learn how Meconet can support your projects with high-quality, sustainable sheet metal components.

Protos • Springs • Stamping & assemblies • Deep drawing

Contact us:

Tomi Ropanen

Account Manager

Tel: +41 76 608 4854

tomi.ropanen@meconet.net

www.meconet.net