

SONCEBOZ
from mind to motion

Automotive

Your partner for **mechatronics**

From **mind** to **motion**

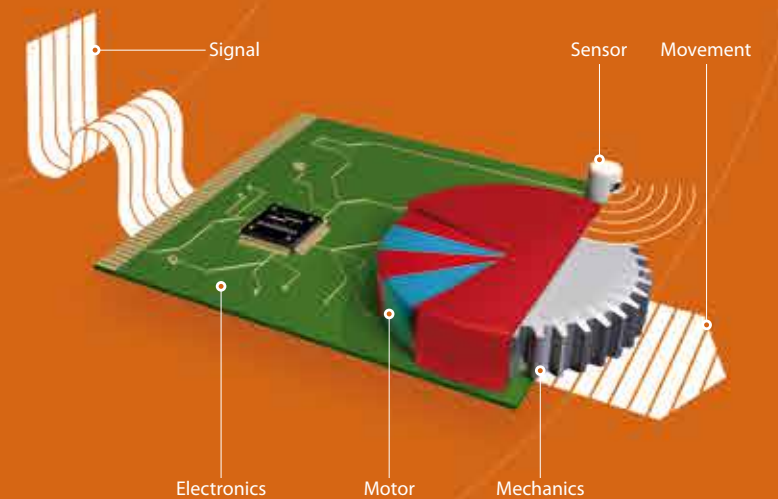
Your partner for **mechatronics**

Sonceboz's core competencies consist of design, development and production of mechatronic drive systems, and electric motors that operate in harsh automotive environments.

We are committed to reducing CO₂ and pollutant emissions, improving road safety, and enhancing driving comfort.

We offer compact, seamless and innovative motion systems. Our "from mind to motion" service is the key to our success for OEM customers and their suppliers worldwide.

Welcome in Sonceboz, an enterprise in motion!



Challenges in passenger cars

Cleaner, safer, lighter cars. These are the mega goals the automotive industry has to face in the coming decades. Stringent continental legislation, with worldwide harmonized light-duty test procedure (WLTP) regulations appearing on the horizon call for drastic CO₂ reduction, along with sustainable alternative propulsion, more efficient emission control systems and a necessary trend toward lightweight and compact technologies.

Another major challenge is the reduction of vehicle accidents and road fatalities through human-machine interfaces, or applications that assist by giving drivers the right information at the right time. As a result, there has been much focus on the electrification and motorization of aggregates inside the vehicle front-end, powertrain, driveline, or cockpit.

CO₂ reduction
Comfort Efficiency
Security

Transforming signal into motion

Our "From mind to motion" expertise centers around electromagnetic technology, and the transformation of an electrical signal into a mechanical movement, which is fully interfaced with your automotive application. By orchestrating mechanical, electronic, and software technologies into powerful mechatronic solutions, our coordinated control of this multi-field competence supports our customers' cutting edge designs. Whatever the motion system, Sonceboz mechatronic solutions guarantee dependable, consistent, and robust performance.

Competencies

Design

- Actuators / Motors
- Electronics
- Mechanics

Production

- Automated Assembly
- Plastic Injection
- Metal Components
- SMD Assembly

Quality

- ISO/TS 16949
- ISO 14001
- 0ppm policy

Technologies

Motors and Actuators

Stepper Motors	BLDC Motors	Torque Motors	Slimline Motors
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Sensors

Position,
Force,
Speed

Electronics

Sensor and
sensorless auto-
commutation

Your automotive
applications:
**compact, robust,
innovative**

One unique partner

Full mechatronics expertise

Full industrial capabilities

Comprehensive brushless technology portfolio

Stepper motors and brushless actuators are all intended for harsh severe-service environments, and with the relentless pursuit of 0ppm quality. Our broad range of motor technology, and our integrated control of production and assembly mean that we provide solutions that are effective, efficient, and cost-effective. This is how we help you to maximize your profit.

Wide array of technologies

**Compact, robust and energy
efficient motion systems**

Optimized cost of ownership

Slimline stepper

- High dynamic torque
- Low noise
- Wide product range

Smart stepper

- Embedded electronics
- Slimline design
- Watertight

Linear actuator

- Robust technology
- Easy to integrate
- Lightweight packaging

Direct drive BLDC motor

- High dynamics
- Torque density
- High accuracy

Torque motor

- Direct drive
- Fast positioning
- Rugged design

Smart BLDC

- Embedded electronics
- High torque
- Robust design



2 cm

Mechatronics for **passenger cars & light duty vehicles**



Front end

Aerodynamics

Sonceboz has been pioneering with smart actuators for active grille shutters. Movable shutters behind the radiator grille enhance vehicle aerodynamics and speed engine warm-up.

Thermal management

The switch from a static loop to a dynamic management of temperatures focuses on limiting energy loss and improving overall efficiency. That requires control systems with dependable mechatronic drives to accurately regulate flows.

Adaptive lighting

Modern adaptive front lighting systems provide an optimal illumination of the road without glare of the other road users. By directing the light beam at the right place, these systems actively contribute to reducing vehicle accidents and road fatalities at night.



Engine & Exhaust

Air intake

Electric actuators are used in control applications that optimize combustion dynamically in response to changing engine speeds and loads, and control the variable valve train or feed pre-compressed air into the intake.

Exhaust

On the line that conveys burnt gases from the engine to the exhaust pipe, mechatronic drives operate in low- or high-pressure EGR systems, in turbocharging, or in muffler valves.



Interior

Instrumentation

Designing appealing instrument clusters is a challenging exercise, as they represent the main HMI in vehicles. Providing the driver with reliable information and state-of-the-art visibility require cost effective, seamless, and thin electric actuators.

Driver assistance

To assist drivers in a multitude of situations and to secure the driving process, advanced driver assistance systems such as the force feedback pedal or parking camera require compact, accurate, and dynamic electric motors.



Chassis & Steering

Transmission

Electrically-actuated clutches, gear selectors, or variable pumps facilitate the smooth, efficient transfer of torque with the optimal ratio for the load conditions at any given moment.

Validated application-specific motion systems
Quick time-to-market solutions
Track record in harsh environments

Full engineering & production capabilities

As each problem is unique, so is every Sonceboz solution! Flexible, specialized, and dedicated Sonceboz engineering teams play a fundamental role in the win-win partnerships we form with our customers. Using performance simulation and validation systems, high quality process instruments, and seamless production equipment we are able to reduce your development time, ensure a high level of quality, and in this way, guarantee customer satisfaction.



Automatic assembly lines
SMD electronics assembly
Injection molding
Coil winding
Metal working
Testing and Simulation

Flexible engineering team

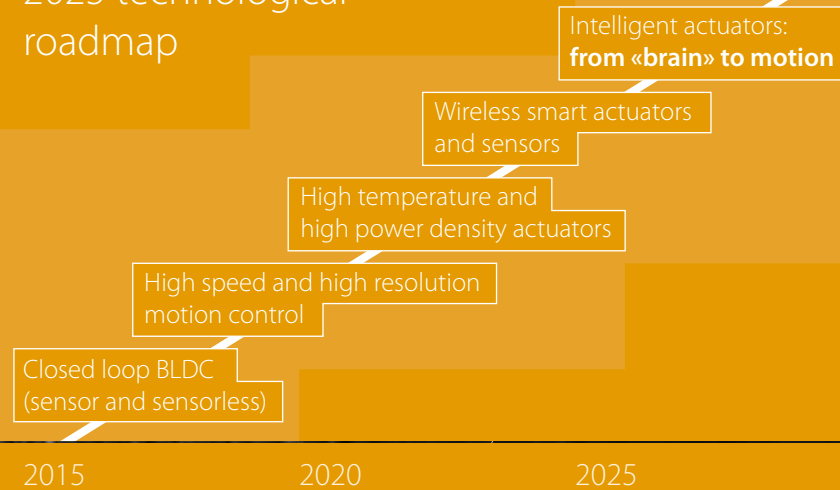
**Quality ensured in the whole
product value chain**

Fully-automated assembly lines

Ready for **the future?**

In close partnership with you; with our subsidiary MMT - Moving Magnet Technologies, a research lab in electromagnetism; and with strategic partners, we actively develop brushless DC solutions for drive and positioning. We manage our innovation process and the technological lifecycle by constantly anticipating tomorrow's trends, and by syndicating new and emerging technologies. Intensive research is pursued to always bring you state-of-the-art solutions.

2025 technological roadmap



Advanced technologies
always at your disposal

Partnership with a technological leader

High market differentiation
of your solution

A partner on your side

As a family-owned company since 1936, we strive to share our passion for mechatronics, with a clear vision that you strongly benefit. Our steady growth of more than 10% per annum is trusted by all the major world-wide OEMs. Our 1000 employees are committed each day to serving our partners. Certified for ISO/TS 16949, ISO 9001 and ISO 14001, our reliable locations and flexible industrial processes allow us to deliver more than 60 million motors yearly.



Innovative technologies
from a country of nature and precision

A close partnership
with a sustainable company

Award-winning quality and service

Worldwide delivery and support

They trust us:



Contact us!



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