

DRIVING CHANGE IN THE AUTOMOTIVE WORLD

Carbody is a leader in the design and engineering of pedal, clutch and brake systems from technical plastics for automotive platforms. The dawn of the electric vehicle has given the 60-year old company added impetus, while breakthrough contracts from German powerhouses BMW and Audi have consolidated Carbody's influence in the industry. Managing Director Stéphane Charre assesses the company's performance in a discussion with Andy Probert.

a smart solutions provider,
Carbody has always stood
for safety and innovation.
Those principles are the main drivers in
its pioneering engineering approach to
products made from plastic and rubber

for automotive platforms. The Reimsheadquartered entity's core offerings include pedal systems, rubber hoses, steering column seals and insulation moulded parts to protect from fluids, noise, dust and heat.

"We not only manufacture parts, but design and test them," Managing Director Stéphane Charre said, acknowledging Carbody's growing recognition as a platform provider. Essentially, an automotive platform is a vehicle's structural underpinnings, such as components, sub-assemblies and functions.

Carbody's showcase products include complete pedal systems with clutch and brakes based on polyamide plastics. Air management components found in air extractors located in the body of a car – balancing the internal and external air pressures – are also manufactured from plastics.

Other products in Carbody's portfolio include energy-absorbing and safety bump stops for bonnet and tailgate applications, body seals and plugs, and steering column seals or grommets for cables between the body and doors.



Platform provider

Carbody's engineering competencies include material, structural analysis, seal design, acoustic and process development. Three factories in France and one in the Czech Republic provide manufacturing excellence in rubber, plastic and foam products, as well as assembly.

The company also has a presence in Turkey through three partnerships, and a subsidiary in Morocco with two partners **x**





Promote your company, or your latest products and services, with an advertisement within the digital magazines.

With a variety of sizes available to suit your budget and marketing needs, our in-house design and production team can turn your ideas into an eye catching advertisement that can be as simple as an eighth A4 page with your logo and contact information, to a detailed and visually impressive double A4 page.

Digital Media Services

Marketing Packages Design Service Web Advertising Brochures Magazine Articles Advertising News

Check out our other amazing publications!

insidemarine.com

inside-sustainability.com

insideamericamag.com

www.inside-sustainability.com















WE ARE ENGINEERING SOLUTION PROVIDERS





Carbody, a Tier 1 automotive supplier, designs, develops, validates, and manufactures sealing solutions, bump stops, and plastic pedals. Our products, made from rubber, plastic, and foam, manufactured using a variety of processes.

Positioned as a partner, Carbody provides comprehensive solutions, drawing on its expertise, creativity, and years of experience. With four European production sites, and subsidiaries in Germany, China, Morocco, and Turkey, Carbody is expanding globally to support clients in platform deployment.

www.carbody.eu

CARBODY | PROFILE







Mr Charre elaborated: "These reflect Carbody's strategic expansion of its geographic footprint to match customer expectations for platform businesses.

"As our name suggests, for a significant part of our product offering Carbody is primarily a platform provider, being more linked to automotive platforms than a specific model.

"Being a platform provider with good geographic coverage, Carbody offers scale savings as the client wants a single supplier: and for contingency reasons, they require two production locations. So, we had to expand, and we did that with the support of our partners in countries where we had no presence."

Typically, these collaborations see
Carbody handling the product design,
client relations and the production on
owned sites, while partners are responsible for managing production and quality
by complying with Carbody's standards.

Key successes

Carbody has duplicated this arrangement by opening a commercial subsidiary in Germany to tackle the German automotive OEM market, and has clinched contracts with BMW and Audi. Mr Charre said: "We have been a supplier to BMW for steering column seals for the i20 electric model for a few years now.

"The breakthrough with Audi was only achieved this summer. This is against the tough period in which the automotive industry found itself. It is a testament to our capabilities, as Germany is a hard market to break into."



One of Carbody's critical successes has been to operate independently in the automotive sector, while being part of parent group Bavaria Industries. "Our parent group is immensely supportive while granting us a lot of autonomy in our areas of expertise," Mr Charre explained. "That has enabled Carbody's rapid reaction time."

Over the past five years, Carbody has navigated the automotive industry crises of Covid, a raw materials shortage, spiralling energy costs and rising inflation. "It has been a very tough period," he said. "Nevertheless, we have shown great flexibility and reacted fast to the fluctuating demands of the marketplace."

This has included adjusting the opening hours of its factories on a weekly basis by responding to demands according to the orders received from its clients. Mr Charre reflected: "It has been destabilising, but

demand has dramatically fluctuated over the past three years. That agility is in our DNA and culture."

While Carbody is financially sound, it continues to invest and achieve the right **1**



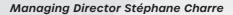
352 Inside sustainability 353

-

balance by protecting the company without undermining its future.

The company has developed a lightweight solution for its brake pedal systems, with the brake pedal not being 100% metal. This is now progressively equipping one platform from Stellantis, a constellation of 14 iconic automotive brands and two mobility arms.

"Steering column seals have become very complex over the years and are facing another challenge with the dawn of electric vehicles," Mr Charre said. "The first step of the product line was to deal with two contradictory constraints: to be fully watertight and as close to the intermediate driveshaft as possible, while not causing friction on the shaft or disrupting any sensors.





"That was a very technical compromise to find – to meet both criteria. It was a key challenge and a driver in developing this product and then to supply BMW."

The other aspect was dealing with the acoustics in an electric vehicle, according

to Mr Charre: "We had to adapt the steering column seals to deal with the noise emissions of the EV, and we became a recognised expert in that space."

The steering column seal was a 'good summary' of what Carbody represents.

"These seals are made of rubber, plastic and foam, which are our core processes,"

Mr Charre continued. "They come with strong acoustic expectations, another competency of ours. We now serve many German and French OEMs, plus Jaguar Land Rover, and we are recognised as a smart solutions provider. It is an increasingly important product for Carbody."

Reliable and agile

A French government edict asking companies to reduce energy consumption by 10% over two years has been more than met by Carbody. "We will hit 10.8 percent energy savings by the end of 2023, one year ahead of target," Mr Charre said. "That's due to a combination of things, including new equipment, moving our hydraulic injection moulding presses to electric.

"The electric injection presses consume up to 70 per cent less electricity than hydraulic presses. Our sustainability journey is progressing very well."

He reflected the company was primed to rapidly surmount the challenges it faces on a day-to-day basis, rather than worrying about the unpredictable: "OEMs know they can rely on Carbody for rapid reactions and agility. Meeting these engineering challenges has positioned Carbody at the forefront of its sector. Our culture is 'we say what we're gonna do and do what we said'.



Carbody is also where it is because of the commitment and dedication of its staff."

The company is set to continue its expansion in Europe and is considering a presence in China and North America, given OEMs' predominance to work as global automotive platforms.

He added: "Our challenges are tied with the rise of electric vehicles: the needs for heat and sound insulation are increasing, and new smart functions are required on existing solutions."

Carbody is also focused on sustainability, energy-saving and maximising recycled materials use in some of its products. "We have very high technical competencies," Mr Charre concluded. "We are driven by continuously looking at innovations and to develop our DNA as a smart solutions provider."

