Thu, 13 July 2023
Weekly Newsletter

DVN-I
Automotive Interior

NEWSLETTER #169

Editorial

Polyurethane And Plastic Sustainability In Interiors

RANGE ROVER VELAR WITH ECONYL® NYLON (JLR IMAGE)

Polyurethane (PU) is the № 2 automotive interior plastic, for it is an economical and versatile material with numerous applications—seats, acoustical insulation, and inner and surface layers of many interior parts. With increasing demand and emphasis on sustainability, recyclability, and vehicle end-of-life regulations, there are huge challenges facing the industry. New solutions are needed for recycling and incorporation of recycled content, bio-based materials, and more. That was the focus of the recent Europur/Euro-moulder annual conference which took place in Budapest, Hungary. You'll find coverage in this newsletter's in-depth article, including the panel session about polyurethane sustainability I had the honor to moderate.

Together with safety, DMS, and HMI, material sustainability is at the top of today's interior expert agenda. The DVN Interior Deep Dive, happening in San Francisco on 29-30 August, will reflect these priorities, and bring the opportunity to DVN-I members and attendees to talk, listen, learn, and expound on these. Time is running out to register, so hurry and do so **here**.

Philippe Aumont
General Editor, DVN-Interior

In Depth Interior Technology

Panel Talk: Automotive Polyurethane Sustainability

EURO-MOULDERS IMAGE

This year's Conference of Europur and Euro-Molders took place in Budapest, Hungary on 13 and 14 June. This year's conference witnessed record attendance: nearly 500 participants in person, plus about 60 more joining online. More than 120 companies participated in this big event for the global flexible polyurethane foam industry, including over 60 foam producers. There were over 40 speakers giving presentations and participating in panel discussions, addressing some of the hottest topics in the industry—sustainability, digitalization, health and safety, product stewardship, and more—and presenting an outlook into the future of flexible PU foam

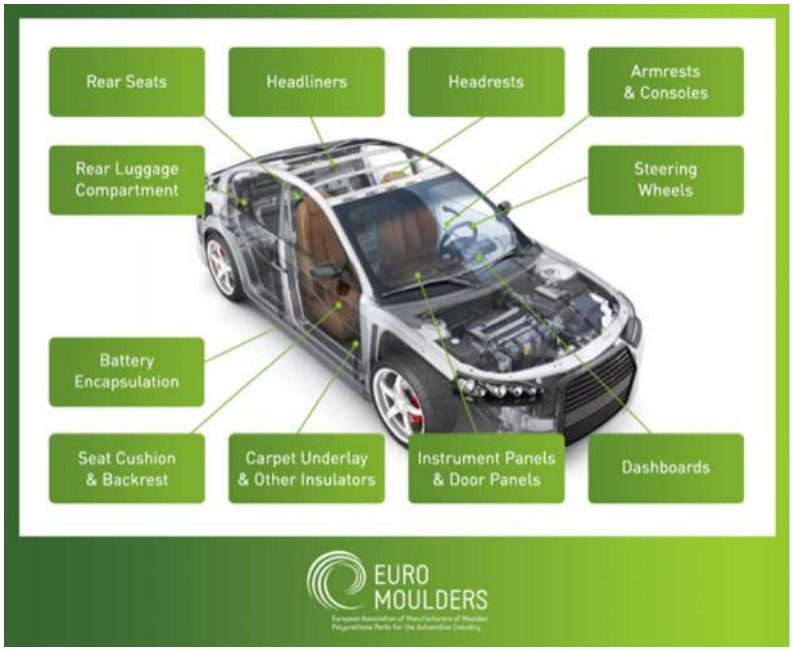
Europur is the European association of flexible polyurethane foam block manufacturers. Its members operate most flexible PU foam plants in 29 countries, and produce over 80 per cent of the flexible polyurethane foam made in the region. And over 50 organizations from the flexible PU foam supply chain are associate members, ranging from chemical raw materials suppliers and machinery manufacturers to service providers, like logistics and recycling companies.

Euro-Moulders is the European association of manufacturers of molded polyurethane parts for the automotive Industry. Its members produce most of the molded PU foam used in automotive seating as well as many other parts used in car interiors and acoustic insulation.

PU SUSTAINABILITY PANEL, L-R: P. AUMONT · A. TUBIDIS · E. QUINTANILLA · G. TROSSAERT · M. BAUMGARTNER (DVN IMAGE)

For the event's panel discussion on automotive polyurethane sustainability, DVN Interior chief Philippe Aumont was a natural fit as moderator, as PU is mostly used in car interiors. The panellists' expertise included car design (design consultant Athanassios Tubidis), raw materials (Dow's Esther Quintanilla), PU parts production (Geert Trossaert from Ascorium Industries), and industry organization (Euro-Moulders' Michel Baumgartner). The topics addressed revolved around changes in car design, electrification of vehicles, the regulatory landscape, recyclability of PU, and integration of recycled content. Panellists agreed that in order to boost sustainability of polyurethanes in vehicles, cooperation all along the value chain and with regulators is essential to bring innovative raw materials to market at an industrial scale; to ensure chemical recycling is recognized as a legitimate means to provide recycled content, and to design vehicles and their parts so as to facilitate dismantlement and recycling.

Each panellist started with a short introduction prime the pump for the panel discussion to follow.



Michel Baumgartner, as Europur Euro-Moulders, described the key numbers and main challenges in front of us, as PU users. It is an economical and versatile material, with many applications in automotive interiors—seats, back and surface layers of numerous interior parts, and acoustical insulation. As the automotive industry transitions to more sustainable mobility, PU is likely to be used in new applications. Battery pack thermal insulation, for example.

Plastic is less than 10 per cent of a vehicle's weight, which sounds small, but that still means 150 kg, and plastics also make up more than half the volume. ELV (end-of-life vehicle) management is therefore a key automotive industry issue. Especially as regards the interior, which is sort of the 'epicenter' of a vehicle's plastic content; there's an average of 28 kg of PU per vehicle, mostly in the interior. The European ELV (End-of-Life Vehicle) regulation is still to be defined in term of percentage of recycling content: for which materials, by what technology, and on what timeline?

Sustainability will come from actions on material precursors, where actions will have the biggest impact. That will mean new development directions, integration of recycled content, replacement of fossil fuel-based feedstock by bio-based feedstock, and increase circularity of materials.

CITROËN OLI (CITROËN IMAGE)

Design consultant Athanasios Tubidis stated as an introduction that material and sustainability is a permanent dimension that all automotive designers are considering, thus pulling the whole development logic in that direction. The Citroën Oli is a good example of what an automaker can do in collaboration with a material supplier; see previous DVN Interior coverage **here**. He said in the past, the car was an infrastructure built from the ground up, but now the last layers of technology are what matter the most. That means surfaces and materials, mostly in plastic in the car interior. The Peugeot Inception, presented at CES 2023, is a fine example; see our **DVN Report**.

Esther Quintanilla, Global Mobility Science Marketing Leader at Dow Chemicals, presented the result of the ICIS study 'Polyurethanes in Automobiles—Horizon 2030. This study based on desk research all along the value chain, from raw material producer to automakers, within the Euro-Moulders membership and beyond. The study looked at the long-term perspective of using PU in future vehicles.

PU substitution risk has been evaluated through questionnaires, and this risk is considered as medium in most of interior parts, except in seats and headrests, where it is evaluated as low.

The outlook to 2030 positions PU as the material of choice for the future of car interiors. Of course, sustainability issues must be addressed, and product design must be enhanced to facilitate recovery and recycling in an ecosystem approach with greater collaboration within the value chain for specifications, performance levels, and recycling content.

Ascorium, from a PU parts production perspective—instrument panels, door panels, glove boxes…— showed how a sustainability strategy translates into real actions, in term of less material usage, less waste, wight reduction, and lower carbon chemistry. Ascorium is working on three pillars: bio-based raw materials; recycled chemicals, and mass-balanced chemicals.

Geert Trossaert, VP R&D and Quality/HSE at Ascorium Industries introduced what Ascorium did in collaboration with Rampf on PU parts recycling. In real production of automotive parts, the use of recycled raw materials is viable. In combination with mass-balanced materials, it is a realistic intermediate solution towards sustainability. Therefore, PU remains a valid material, contributing to compliance with end-of-life directives, and facilitating progress toward carbon-neutrality.

(mass balance considers, for instance, if a company makes 100 plastic bottles using a raw material with 10 per cent renewable content, it can claim that 10 of the bottles are 100 per cent renewable under the mass-balance concept, even though in fact all 100 bottles have 10 per cent renewable content).

Panel Session

JUST AFTER THE PANEL DISCUSSION (DVN IMAGE)

The panel session was very active, and the questions came rocketing in from all sides, thanks to the interactive tool (Slido) used here. The central topic was sustainability, and questions came in around how it influences daily work. Everybody agreed it did, and looking for new materials, measure the CO_2 impact, incorporating recycled material—these are today's daily concerns.

Panellists passionately advocated for PU, starting from raw material suppliers, such as Dow, developing new products, and the appropriate communication to convince the whole value chain. Many questions came around substitution solution and how realistic they are. Example: how realistic is replacement by natural fibers? The panel considered these materials complements rather than whole replacements for better performance.

Willingness to pay in case of additional costs is also a major concern, starting from the top of the value chain (the automakers). Of course, there’s no single answer; this is just part of a complex commercial discussion.

Questions around recycling technology came up as well, like chemolysis (chemical recycling) and reuse of industrial waste with regard to vehicle end-of-life handling.

The price of recycled material versus virgin material is a concern, especially in a context of today's unstable prices.

Recycled-material content and how to measure it—mass balance, for example—and communicate it featured in several questions, reflecting that the industry is ready to invest, but in the right direction, which will be rewarded in the numbers.

The conclusion is that the whole industry must behave together to define recycling technology and content.

The President of Euro–Moulders, Eric Van Lancker, closed the conference by thanking all speakers, guests, and participants; he announced that the next Europur and Euro-Molders conference will take place in Istanbul on 11-13 June, 2024.

Interior News

Forvia Seat Wins Eco Award

INTERIOR NEWS

FORVIA IMAGE

At the 2023 edition of the Sustainable Industry Awards (“Trophées de l’Industrie Durable” in French – an initiative by L’Usine Nouvelle, weekly French business magazine that covers business and technology), Forvia received an eco-design trophy for their Seat for the Planet, one of their innovations in sustainability and circular economy.

The Seat for the Planet project is part of the DECORE consortium, alongside Renault, CEA (French Alternative Energies and Atomic Energy Commission), and MTB Recycling. Its objective is to design cockpits using 40 per cent recycled materials, with CO_2 impact slashed 85 per cent by 2030. The consortium is a winner of BPI France's future investments program.
Unlike conventional seats with 100 to 150 components, this seat comprises a mere ten modules. See our detailed coverage of the seat **here**.

Project Manager Marthin Frétigné says "Modules are easily detachable and recyclable. They are either single-material, made from bio-sourced or recycled materials, or from materials that are compatible for recycling". This refers to steel and plastics—PET in particular—a greater or lesser proportion of which comes from recycling.

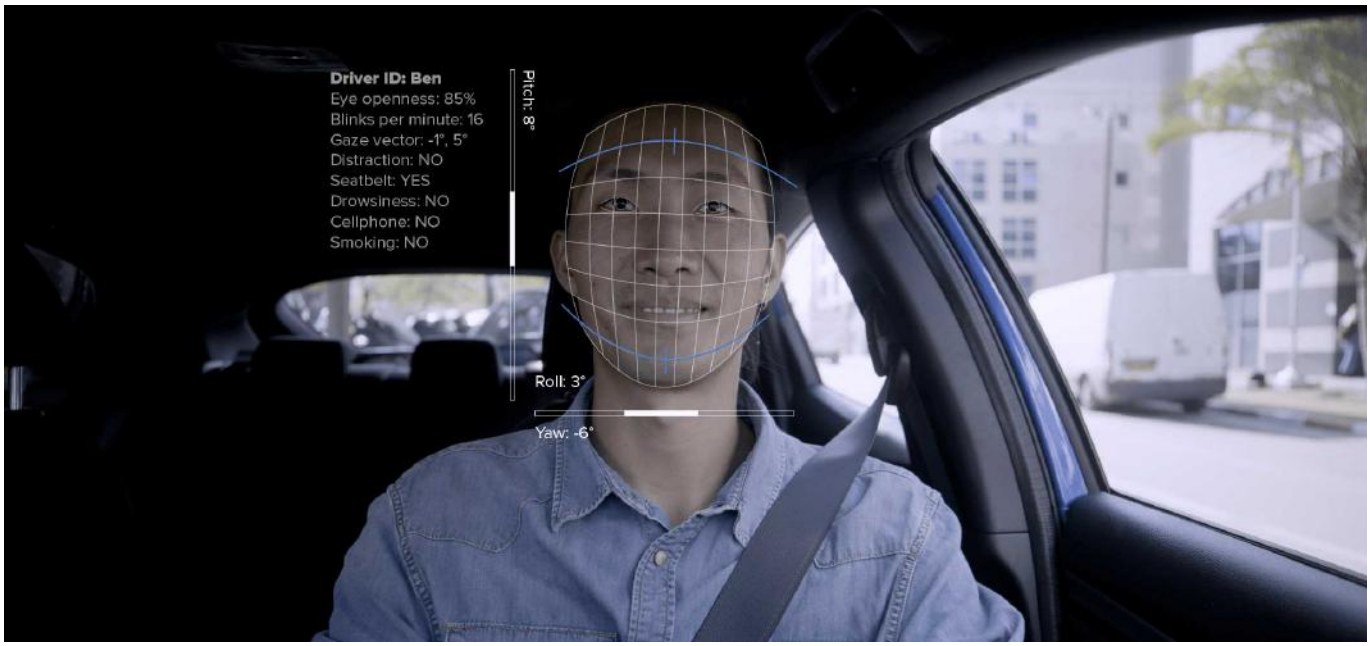
Another key challenge was to replace PU: “This material performs well but is very difficult to recycle", says Marthin, "so we had to replace it with a technical solution called Auraloop® (see **DVN coverage**). Auraloop® is a partnership between Faurecia and Indorama Ventures, one of the world leaders in PET production and recycling, incorporating high-performance PET combined with a new transformation process.

More than two years after the launch of the project, the product, which is aimed at B- and C-segment vehicles, is set to score an ELV field goal. Today only half a seat's steel is recovered, and most often recycled into materials of lesser value. The rest—foam, textiles, and so on—are incinerated, at best. Thanks to the design of the seat, ELV vehicle centers will be able to dismantle them easily and develop a circular materials economy. Three pre-developments are currently underway.

This circular economy approach is a key element of Forvia's overall 2045 net-zero roadmap.

Cipia Wins First European-Maker DMS Contract

INTERIOR NEWS



CIPIA IMAGE

Israel-based Cipia is a provider of intelligent sensing solutions that use edge-based computer vision and AI for safer and better mobility experiences. The company's product lineup includes Driver Sense (DMS), Cabin Sense (OMS), and Cipia-FS10, a complete video telematics and a driver monitoring solution for telematics service providers and fleets.

Cipia holds 33 design wins for over 12 platforms across eight makers, starting in the US and China. They announced last week a first design win for a European automaker, for a DMS to be installed in a car model with SOP during 2024.

Starting in July 2026, all new cars registered in the European Union will be required to include a distraction and drowsiness monitoring system, and during this present phase-in period, European automakers are beginning to design those systems into their new models.

Cipia CEO Yehuda Holtzman says the company is "experiencing a year of accelerated growth, with 60 per cent increase in the number of OEM wins across the globe. In the first half of 2023, we have won a new American EV OEM, a Chinese OEM and now, our first European OEM, bringing Cipia to a total of eight carmakers worldwide. We will continue to deliver word-class, robust in-cabin computer vision solutions to our customers, to keep drivers, passengers, and all road users comfortable and safe".

The Driver Sense DMS runs on an OmniVision SoC, with the IR sensor expected to be located on the vehicle’s A-pillar. Cipia’s technology uses computer vision and AI to monitor a driver’s state in real time, by tracking head pose, direction of gaze, driver position and actions to determine if the driver is focused on the road, distracted or drowsy, holding a phone while driving and more.

Antolin's GENIUS Project To Monitor Occupants

INTERIOR NEWS

Antolin is leading an innovation project aiming to improve the user experience during the journey. With collaboration by a renowned team of Spanish experts in neurology, psychology, cognitive knowledge, the study of emotions and computer systems, the company will research the development of intelligent systems capable of determining cognitive and emotional states, as well as the mood, comfort, and health of users by correlating them with biometric parameters through real-time sensing.

The GENIUS project will monitor the vehicle cabin through a suite of sensors which, connected to intelligent systems, will analyze and interpret the cognitive and emotional state of the user. Depending on the state identified, the aim is to improve the passenger's on-board experience based on external stimuli such as lighting, sound, or aromas, automatically adjusting the cabin interior to their specific needs.

Antolin will work together with the Technological Institute of Castilla y León, the Textile Industry Research Association, Infinitia Research, the Biomedical Engineering Group, and the ICAI School of Engineering. In addition, given the need to define cognitive models and emotional states, Antolin has formed a multidisciplinary team of medical professionals specializing in psychology, neurology, emotion recognition, and natural language processing. The entities that make up this medical team are Hospital Universitario de Burgos, UNED, PSICOSALUD, Universidad de Oviedo, and Hospital Universitario La Paz.

The project has been granted by the Centre for Technological Development and Innovation, E.P.E. (CDTI), called "Correlation of biometric data with cognitive and emotional states in in-vehicle scenarios and investigation of corrective stimuli and advanced control functions: GENIUS-Case I". It includes a simulator for research and analysis of critical parameters and monitoring systems to test the correlation study between stimuli, cognitive states and biomedical and physiological data.

Nio, ScreenHits in In-Car Entertainment Pact

INTERIOR NEWS

NIO IMAGE

Nio has signed a major automotive partnership with ScreenHits TV, provider of in-car entertainment content. ScreenHits TV is a hub of television streaming, based in London, England.

Last year, Nio announced that their new flagship EV, the ET7, features a 12.8" flexible AMOLED center display and 10.2" HDR miniLED-backlit digital instrument cluster from Chinese OLED display company BOE.

ScreenHits CEO Rose Hulse says, "We continue to push innovation in creating a new distribution platform for in-car viewing. ScreenHits TV is a young, vibrant, and innovative company that speaks to all generations and focuses on design and personalization. Nio couldn't be a better partner, one who puts their User's interests first and who has been creating exceptional electric vehicles that are sustainable and beautifully designed".

ScreenHits TV helps users instantly find the right film and TV content from the leading streamers they subscribe to, enabling a customized TV guide experience by creating a selected streaming TV guide across all of their existing streaming platforms and leading content providers. The Smart TV app also enables customers to better manage their growing subscriptions.

The app is currently available in 56 markets and in 30 languages, with more than 1,000 premium streaming catalogues and fast channels available in market on Android Smart TVs, and Android and iOS mobile and tablet apps.

Range Rover Evoque Puts Accent on Technology

INTERIOR NEWS

JLR IMAGES IN THIS ARTICLE

Range Rover is refreshing the Evoque for the ’24 model year, saying the small luxury CUV has been enhanced with the latest technologies and premium material choices.

There's a new 11.4” curved-glass touchscreen and regular OTA software updates that reduce the need to visit a dealer.

Tactile material options include non-leather Ultrafabrics™ and Kvadrat™ textile seats to provide a new dimension of modern luxury, with polyurethane textile inserts featuring a distinctive new perforation. Inspired by bespoke tailoring, the wool blends are 58 per cent lighter than leather and provide a contemporary appearance and tactility.

The touchscreen offers full digital control over key vehicle functions, powered by the latest Pivi Pro infotainment system with built-in Amazon Alexa connectivity. Now situated higher and closer to the driver, the

touchscreen also opens more storage space and features standard wireless device charging.

Pivi Pro supports smartphone connectivity with wireless Apple CarPlay. Wireless Android Auto is also supported, while wireless device charging from a new storage area in the center console provides immediate fast charging. The ’24 Evoque is also Wi-Fi enabled with a data plan.

Pivi Pro also provides full access to a range of online apps, including Spotify and Deezer, integrated within the infotainment system. Also embedded in Pivi Pro is Amazon Alexa, which allows control of various settings and features using natural voice commands.

Climate, seating, and audio volume controls are always visible via new sidebars, featuring multi-functional sliding controls. These virtual buttons provide immediate access to frequently used items, including individual temperature controls for the front occupants, cameras, navigation, and audio volume.

A panoramic roof bathes the cabin in natural light. New detailing includes chrome on the steering wheel, center console trim and air vents. Chrome complements new trim finishes, which include Technical Light Anodized or Dark Anodized Aluminum.

Cabin Air Purification Plus is available for the first time on the Evoque as part of the optional Comfort Pack. The technology helps combat pathogens and significantly reduces odors, bacteria, and allergens, while the Air Quality Index app allows monitoring of outside air quality both at occupants’ current location and their destination.

Ioniq 6 is Hyundai's New Showcase

INTERIOR NEWS

HYUNDAI IMAGES IN THIS ARTICLE

In our **Milano Design week report**, we pointed to the new Ioniq 6 as a manifesto of Hyundai's future mobility: zero-emission and lots of sustainable materials for both the interior and exterior of the car to uphold environmental responsibility.

More material information is now available. Hyundai is using paint pigment made from used tires for trim, and bamboo charcoal-pigment paint for the body. In the interior, ecologically-treated leather and recycled PET fabric are used, depending on the equipment level. The dashboard is made from a bio-rubber blend, the bio-paint for the door panels is derived from vegetable oils, and the carpet is made from recycled fishing nets.

As with the Ioniq 5, there is a great deal of space inside the Ioniq 6, especially for rear occupants. Two 12.3" displays provide all the necessary information conveniently. There are buttons for the most important vehicle functions, so not everything has been loaded onto the touchscreen or voice control.

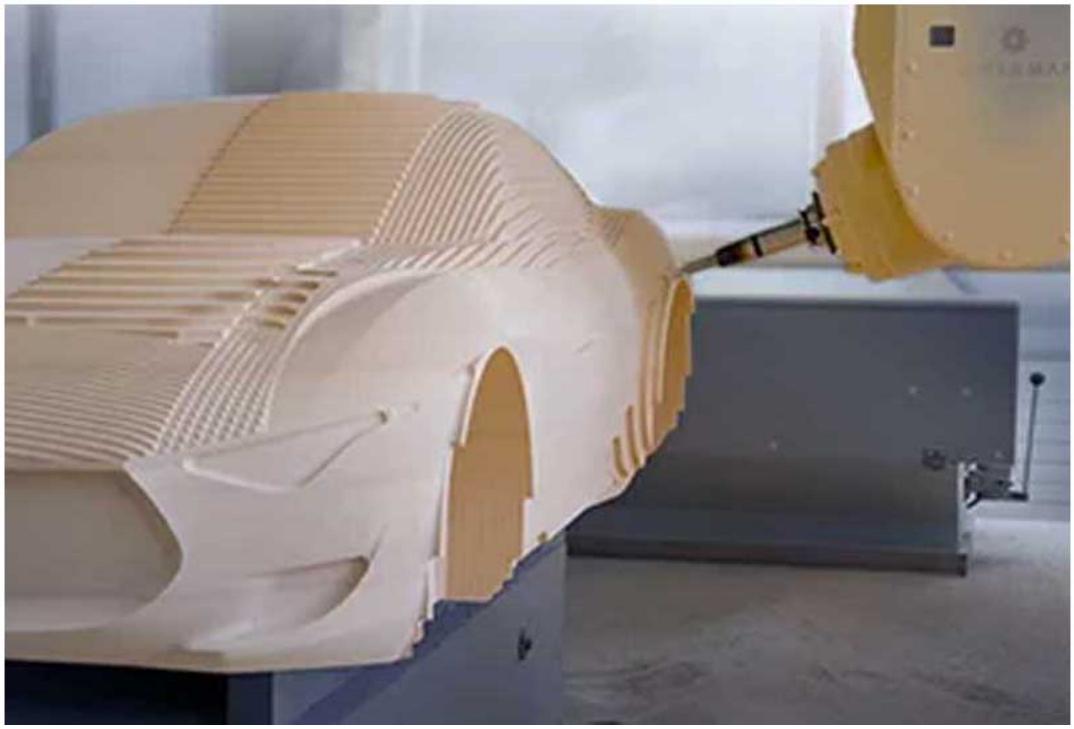
The window controls have moved to the center console, and it is said this is for design reasons; the interior designers did not want the doors to have any distracting elements. The armrests extend across the entire width and can be illuminated from behind if desired. So, the buttonless interior door trim also makes sense.

Standard features include a rearview camera, heated front seats, two different charging cables, and the power-opening tailgate. A 230-volt outlet (on European models; presumably 117-volt for North America) under the rear seat is also standard, so drivers of the base model can also use the car's bidirectional charging capability. The Ioniq 6 comes with the "Dynamiq" package including a heat pump, an active blind spot assistant, a rear cross-traffic alert system, an exit warning system, and an electrically adjustable driver's seat and wireless charging for the smartphone.

The Design Lounge

PU Reinvented

THE DESIGN LOUNGE



CAR BODY BEING MILLED OUT OF A PU BLOCK (JACOBSON CHEMICALS IMAGE)

No matter how many times blown, washed and dried, I can still find in my design studio workshop clothes, polyurethane-dust along tight, stich-lines or small pockets…a great reminder of PU (polyurethane) being present before even the car was conceived. Arriving in a raw form as a big block of specific density on the studio floor, ready to be sculpted and to give form to my initial sketches all the way to, months later, the final version of a future automobile. All along my professional career, PU is what gave body to my thoughts and ideas. It is almost as if that block contained all possible design solutions and the designer was engaged to chip out, until the best one is revealed. It is very possible that a similar block of PU foam, soon to land in a car design studio somewhere in the world, would 'contain' an idea that will forever change automobiles and our lifestyles.

In 1916, the Dodge brothers used steel for the entire body of their 30-34 Phaethon, making it durable, strong and, very heavy. Many American automakers until the 1950s used wood in an attempt to make cars lighter. Wood was also used as a spaceframe on which sheet metal would be fixed to take its final form and place on a car body. As focused on reducing weight, which came along with traditional construction methods, automakers invested in alternative and versatile materials.

Today, due to their advantageous properties, compared to counterpart materials, Polyurethanes can be found virtually everywhere. Being possibly the most important class of polymers, their low density and thermal conductivity combined with intriguing mechanical properties, make them excellent thermal and sound insulators, as well as structural and comfort materials. Their extraordinary versatility arises by small modifications of the formulation used. For example, increasing the polyol functionality without changing the

molecular weight leads to a slight increase in foam hardness and a small reduction in the tensile strength, tear strength, and elongation. To the opposite, increasing the equivalent weight of the polyol while maintaining the functionality, it increases the tensile strength and elongation. Molding, slab-stock and spraying are the most popular ways of producing PUs. Worldwide consumption is projected to USD $79bn by 2027 (predominantly foams).

One bed mattress equals, approximately, the quantity of PU used in an entire car. This is the foam placed between exterior and interior panels, around the engine, the mufflers and the batteries, protecting against noise, high temperature, shock and vibrations. Seat cushions and bolsters, armrests and headrests, cushioned dashboard parts, headliners and pillar covers are the most recognizable PU applications in the passenger compartment.

PU has changed and still changing the way cars are made and along with that, the way car production affects the environment. Lighter cars use less energy and reduce their carbon footprint. As polyurethane parts need to be transported to assembly plants, they too, create less pollution than heavier parts. Then, at the end of a vehicle's life, disassembled and transported again…Once more, one bed mattress equals, approximately, the quantity of PU used in an entire car and its recycling is much easier. This direct comparison separates Pu industry in two distinct categories (automotive and not) driving them further apart for the days to come, since recyclability acquires a completely different meaning in each one of the two sectors. With important existing PU resources already in the market, the end of life of a product may well be where everything starts for a new sustainable industrial era. The thing is, that while bed mattresses are directly recycled, automobile parts have to be disassembled making the existing PU resource very difficult to 'extract'. It might be that cars now have to be conceived accordingly just so we can better exploit this significant resource. According to most OEMs, design is deeply engaged at all stages, designing the circular process along with the product, reinventing the automobile through a different logic and new looks. PU was already part of the design process, now will be one of its main objectives.

Mercedes S-Class Gets Square Steering Wheel

THE DESIGN LOUNGE

MERCEDES-BENZ IMAGE

For decades, carmakers have been trying (and failing) to improve on the round steering wheel. Maybe this time will be different: the next generation of the S-Class luxury sedan, which Mercedes-Benz likes to promote as the best automobile in the world, reportedly will almost certainly have a flattened steering wheel that is as compact as possible.

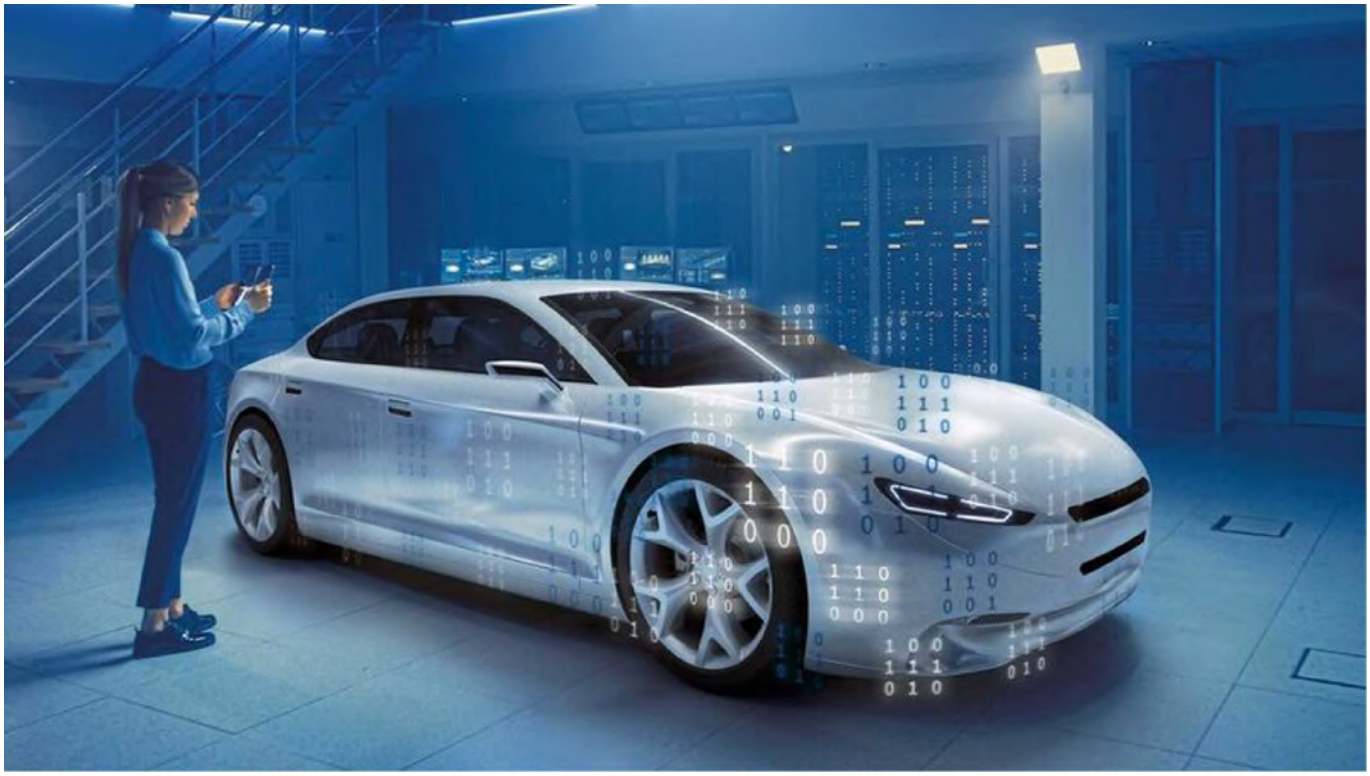
The oblong shape saves space and allows an unobstructed view of the road and the driver's display, according to a Mercedes developer. The new S-Class is expected to be launched on the market at the end of 2027, by which time some of the vehicles may already be fully autonomous, warranting a steering wheel which can easily be retracted into the dashboard.

The effort to win acceptance for this not-wheel could be an uphill slog; other recent attempts have met with broad rejection (see previous DVN coverage **here**). People disdain edgier steering wheel designs; they find them unwieldy, especially when maneuvering. Mercedes wants to solve the problem by cutting the mechanical link between the steering wheel and the wheels. That is: no steering column. Thanks to steer-by-wire technology, the steering angle of cars can be variably adjusted to different traffic situations via software. At low speeds, there is no need for tires to overreach when turning or parking. At high speeds, on the other hand, the wheels barely tilt at all to ensure smooth lane changes. ZF Friedrichshafen currently promises their customers steering wheel angles of a maximum of 180 degrees.

News Mobility

Is Samsung Working on Self-Driving Car?

NEWS MOBILITY



BOSCH IMAGE

Samsung is said to be moving closer to a sophisticated self-driving system that is nearly as good as L^4 autonomy. Reportedly, the SAIT (Samsung Advanced Institute of Technology) successfully conducted a driverless test from Suwon to Gangneung in South Korea. Samsung's research and development team developed a self-driving algorithm that was able to drive nearly 200 km without driver intervention.

The latest report claims that Samsung has installed their self-driving algorithm along with a lidar on a commercial car (the model was not specified). The installation successfully passed the test as the system was able to detect emergency vehicles, automatically change lanes, and drive on ramps to detect two connected roads with different elevation differences.

If Samsung is indeed developing or close to completing an L^4 self-driving system, it would be a major step forward for the autonomous driving market as well as for subsidiaries like Harman, which would undoubtedly integrate this advanced system into their Digital Cockpit and/or Ready Care platforms.

Mobility Book Streaming, Legible and LiveOne

NEWS MOBILITY

An exclusive joint strategic partnership has been formed between book infotainment and media company Legible and technology platform LiveOne. The two companies will provide what they're calling the first ever in-car streaming service to the automotive industry in the North American region.

The partnership will allow customers to stream and access Legible's audiobook and e-book content while in their own vehicle. Furthermore, Legible's technology will enable the integration of audiobooks and e-books directly into a vehicle's infotainment system.

Legible benefits from having contracts with Hachette, Simon & Schuster, Macmillan and HarperCollins and Ingram's CoreSource, among others. The company has a library of over 2 million titles.

"We are excited to partner with Legible as pioneers in bringing millions of audiobooks and e-books to people right in their cars," said LiveOne Chair and CEO Rob Ellin. "Adding curated literature in our mobile subscription content will round out our already compelling selection of music and podcasts."

And Legible founder and CEO Kaleeg Hainsworth says his company is "thrilled to have the opportunity to bring a wide variety of audiobook and e-book content to North American car users. The automotive infotainment market is virtually untapped and Legible's extensive collection of titles will provide endless hours of entertainment during daily commutes or long road trips with the family".

General News

Tunisian Automaker Gets In JV With Chery

GENERAL NEWS

WALLYSCAR IMAGES

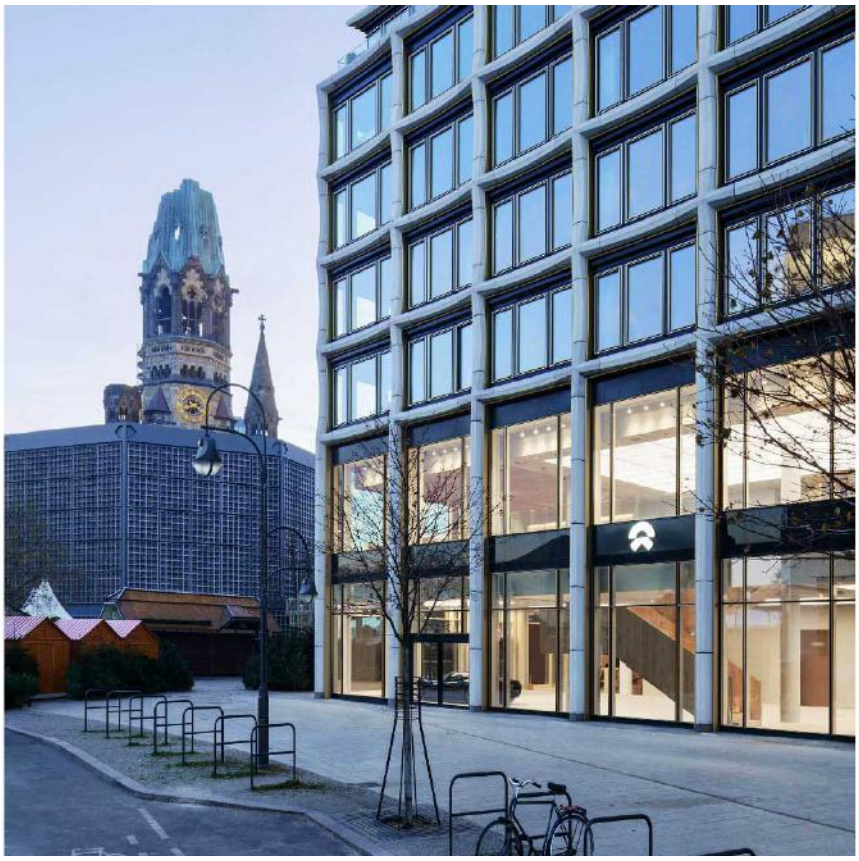
Wallyscar is a Tunisian car manufacturer, founded in 2006 and based in Ben Arous. Production is 600 units per year. The brand was named after the Wallis and Futuna island in the Pacific Ocean.

The company sells in a few countries, including France, Spain, Qatar and Morocco. Wallyscar cooperates with Stellantis, using a PSA petrol engine. The company was founded by Zied Guiga, and focus on the idea of vehicles as recyclable and making no noise. Parts suppliers include Citroën, Peugeot, VDO, and UTAC.

The first vehicle to be assembled in Tunisia is the Wolf SUV. The cockpit features an entertainment-only 10.2” screen, while the driver's gauges are digital. The SUV presents itself as a real rolling mini-living room with seven comfortable seats. The rear seats can be folded down to improve and enlarge the luggage compartment. The finish is refined, luxurious and durable, using recycled polyamide, polyester and semi-aniline leather.

Berlin Nio Innovation Center to Become More Eurocentric

GENERAL NEWS



NIO IMAGE

On 4 July the Nio Berlin Innovation Center was inaugurated, marking a milestone in the company's international expansion. It aims to enhance the intelligent experience for European users through localized R&D, thus signaling Nio's commitment to tailor their products and services to the specific needs of the European market.

The Nio Berlin Innovation Center houses R&D teams focusing on digital systems, intelligent cockpits, and autonomous driving. Notably, Nio's European energy infrastructure team will also establish an R&D base within the center, with a particular focus on grid services, and the management and operation of battery swap stations in Europe.

Berlin is a major technological hub, a talent hotspot, and a city where startups flourish in Europe, is a strategic choice for Nio. By establishing the Innovation Center here, Nio aims to attract more professional talents from Europe, further strengthening R&D capabilities in intelligent cockpits, autonomous driving, and energy solutions. This, in turn, will continuously enhance the intelligent car-using experience for European users.

This newly inaugurated Innovation Center in Berlin is Nio's fourth R&D institution in Europe; previously-established facilities include one in Oxford, England; a global design center in Munich, Germany, and then, in 2022, a European R&D center for electrified products in Budapest, Hungary.