Thu, 27 April 2023
Weekly Newsletter

DVN-I
Automotive Interior

NEWSLETTER #158

Editorial

DVN Interior Is All Over The World: Shanghai, Milan, Köln!

DVN IMAGE

It's the biggest auto show with the highest number of different EV models ever presented, in the biggest automotive market in the world! Auto Shanghai 2023 closes today, nine days after its 18 April opening, with an unbelievable numbers of EV launches. That's a clear image of the future of the industry. It was also a good-old-days show, with strong presence of almost all automakers and an army of suppliers, including all the major global tier-1s. DVN-Interior, thanks to the support of our team in China, is publishing this week's in-depth article packed with information on how interior technologies are evolving and supporting the EV shift.

DVN also covered the Milan Design Week, the biggest annual design event in the world, hosting the largest furniture fair Salone del Mobile, and increasingly hosting automakers—ten majors presented either their design vision, or new vehicles. Lancia's comeback was the major event, with a revival of the brand embodied by a completely new vehicle. You'll find first coverage this week in Coffee Corner, with more to come in forthcoming DVN-I Newsletters.

The Köln DVN Interior Workshop just ended yesterday, so watch for detailed coverage next week.

Sincerely,

Philippe Aumont
General Editor, DVN-Interior

In Depth Interior Technology

Shanghai Motor Show 2023

VW ID.NEXT (CARNEWSCHINA.COM IMAGE)

The Shanghai Auto Show is back as a major event after being canceled during the pandemic. Our coverage is by dint of Tylon Zhu, DVN correspondent in China. As the show is larger than imaginable, maybe we've not covered it all. If interesting news comes late, we'll publish it as soon we get it.

It was really an EV show, as EVs already dominate the premium segments in China. The threat to legacy western automakers is becoming clear in the mass-market segments; among vehicles priced between USD $22,500 and $30,000, sales of ICE vehicles have plunged 20.5 per cent in the first quarter, while sales of EVs and plug-in hybrids are up by 68 per cent.

Almost all Chinese brands showed up to exhibit, even the unknown ones. BYD; Great Wall; Xpeng; Nio; HiPhi; Zeekr; MG, and many others showcased EVs. Most of them plan to export, even to Europe and the U.S. Legacy automakers aren't giving up, of course. What's good for Germany is no longer good enough for China, but VW brand chief Thomas Schaefer says his company has listened to their customers and given the ID.7 new connectivity technology tailored to Chinese tastes.

Key debuts from European automakers include the Volkswagen ID.7 full-electric sedan, which will be the top of the ID model range; the Porsche Cayenne, which gets a major facelift, and the Mercedes-Maybach EQS, an SUV aimed at China's wealthy carbuyers (and the first full EV for Maybach).

Volkswagen

VW presented, among other vehicles, the ID.7 and ID.Next

The ID.7 full-electric midsize sedan is the new top of the ID range. Positioned as a next-generation Passat, it's built on the MEB EV platform. The ID.7 will be aimed mainly at U.S. and Chinese buyers, but also will be offered in Europe. It's of similar to the Mercedes EQE.

The ID.Next is set to compete in a rapidly expanding Chinese EV market against BYD; Tesla; Geely; Nio; XPeng, and a never-ending list of less-well-known electric sedans in China.

Inside the cabin, there's an AR-HUD projecting trip details including speed; road signs, and upcoming navigation prompts at eye level on the windshield. There's a 15" touchscreen new to MEB models; it is customizable for most of the car's functions, including infotainment and cabin comfort. A pair of touch-sensitive sliding bars below the screen are used to adjust temperature and infotainment system volume. There's also a new air conditioning operating concept integrated on the top level of the infotainment system, new massage seats (AGR approved - German Campaign for Healthier Backs), with adaptive Climatronic cooling; heating, and drying, and an electronically-dimmable panoramic sunroof.

Like many other functions, the roof can be operated by natural voice commands via the new IDA voice assistant. The optional front seats are also a new development.

VW ID.NEXT (CARNEWSCHINA.COM IMAGE)

The ID.Next looks like a sister model of VW's ID.7 Vizzion.

VW ID.7 VIZZION (CARNEWSCHINA.COM IMAGE)

Porsche

The redesigned Porsche Cayenne debuts a driver-focused concept that groups key controls around the steering wheel, blending digital and analog worlds, while borrowing design cues from the brand's iconic nameplates. A Porsche spokesman said the Cayenne has been given "one of the most extensive product upgrades in the history of Porsche".

The new dashboard elements are taken from Porsche's electric Taycan, include a freestanding, curved 12.6" digital instrument cluster and revamped center console. A multifunction steering wheel, introduced in the latest-generation Porsche 911, puts driving mode controls and instrument cluster display settings within easy reach. The gear selector is moved to the right of the steering wheel, making space for a large air conditioning controller on the center console. The vertical air outlets lose their traditional louvers.

Mercedes

Mercedes unveiled the newest addition to their Maybach range, the EQS. It's Mercedes-Maybach's first full EV, a reworked version of the U.S.-built EQS large SUV. China accounted for about half of Maybach's 23,000 sales last year.

During Mercedes-Benz Media Night just before the show, Mercedes said this vehicle has been tailored specifically to the needs of Chinese customers, supported by their R&D center in Beijing, and now a new digital R&D center in Shanghai, which specializes in connectivity and automated driving. Watch for more detail in forthcoming DVN-I Newsletters.

BMW-Mini

Mini has revamped their Aceman concept to include a digital personal assistant that takes the form of a British bulldog character called Spike. The character appears on the Aceman's circular OLED touchscreen to guide users through the digital features. It will be included in future small electric Minis. The Aceman BEV small crossover will be built in China alongside a new all-electric Mini hatchback. Both models will use a platform developed jointly with Great Wall. Mini will also debut a convertible version of its current electric hatchback.

Nissan

Nissan's new Max-Out EV convertible concept, designed specifically for China, was first revealed in 2021 as a digital concept.

The Max-Out concept is described by Nissan as a design exploration in “being one with the car”. It embodies Nissan’s "new artistic stage and movement toward an increasingly digitized future, as expressed by its unique parabolic hologram wheels". The company says the sports car’s aerodynamic shape; ultra-low center of gravity, and e-4ORCE electric all-wheel-drive system give it highly performant handling and enhanced safety. The cabin’s ultra-wide display screen, which resembles the Max-Out’s distinctive exterior lamps, "provides the driver with a fusion of the virtual and real worlds".

The locally developed Arizon is designed by a Chinese team to meet China's diverse mobility needs, leveraging Nissan's global EV expertise, to serve as a 'multifunctional partner for China's drivers.

Built on the Renault-Nissan CMF EV platform, the Arizon also has a low center of gravity, and a pillarless open-air cabin with an expansive auto-dimming glass roof.

Nissan says the car is designed to be human-centric and features a new virtual personal assistant named Eporo, which "elevates the driving experience beyond mobility". Eporo can interact with passengers in a humanlike manner and provide accurate responses to queries about time; weather, and other data.

The Arizon also features an innovative interactive lighting system that recognizes people and automatically adapts the illumination to suit their preferences. The lighting ambiance can also be adjusted through intuitive modes including leisure; relax; sleep; and surprise, providing premium hospitality with seamless, personalized interactions.

Audi

Audi showed an all-electric vehicle lineup in a joint booth with local partners FAW and SAIC., including two concept vehicles.

The fully electric Audi A6 e-tron Avant concept precedes future generations of Audi station wagons. Built on the upcoming PPE platform, the sporty and elegant car has a range of up to 700 kilometers (435 miles) according to WLTP.

The second concept vehicle on show is the Audi Urbansphere concept we previously reported on. Developed for use in traffic-dense megacities and with input from customers in China, the electric concept offers the largest interior space of any Audi ever built. It was designed from the inside out, putting passengers' needs first. It combines premium materials, advanced technologies, and digital services to offer a luxurious and relaxing lounge-style experience for its occupants.

Audi also revealed more details about their Formula One project, as well. They're entering the race series in 2026; already they will provide engines for the Sauber team, which will become the Audi works team.

Smart

SMART #3 (DVN IMAGE)

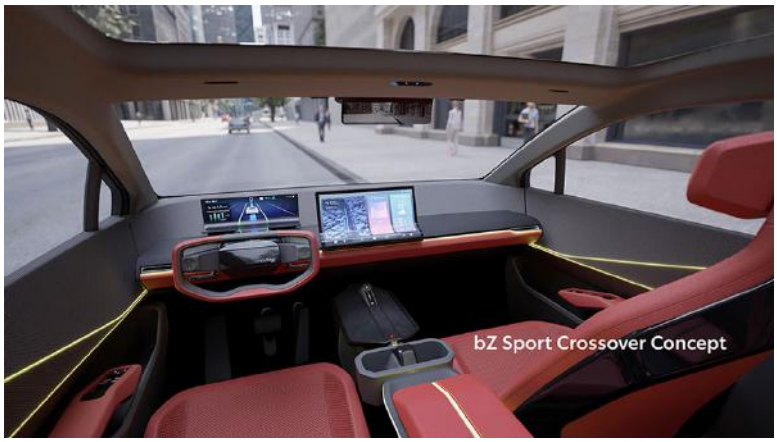
The Smart #3, a coupé-styled electric compact SUV, was first publicly shown at Shanghai. It's the brand's second all-new model after the smaller #1, as Smart relaunches as an electric-only joint venture between Mercedes and Geely. The #3 will go on sale in China by the end of this year, and will arrive in Europe in early 2024.

Toyota

Two new models debuted under the Toyota bZ family of EVs.

TOYOTA BZ FLEXSPACE CONCEPT (TOYOTA IMAGE)

The bZ FlexSpace Concept is a family-oriented SUVlike BEV with a focus on utility. It is being jointly developed by Toyota; Guangzhou Automobile (GAC); GAC Toyota; and TMEC, and is planned to be produced and sold by GAC Toyota Motor. The concept of this model is “Cozy Home,” to create a space that families can use safely, comfortably, and freely with peace of mind. Toyota says it has been designed with functions to provide a personal space for the younger customers, or Generation Z.



TOYOTA BZ SPORT CROSSOVER CONCEPT (TOYOTA IMAGE)

The bZ Sport Crossover concept is also being developed for its functions to evolve after purchase, including intelligent features such as driver assistance and automatic parking, "so that owners can continuously enjoy a most up-to-date car with all five senses".

Lexus

The new LM minivan was unveiled. It will go on sale first in Europe as an alternative to the Mercedes-Benz V-Class.

Honda

Honda's full-electric subbrand, e:N, displayed prototypes of a second batch of products for the first time. The first two locally-produced e:N models, P1 and S1, went on sale in China last year. Both are compact crossovers.

Maserati

MASERATI GRECALE FOLGORE (MASERATI IMAGE)

The Maserati Grecale Folgore electric midsize SUV was publicly shown for the first time. It sits on an adapted version of the Giorgio platform that also underpins the Alfa Romeo Stelvio. It has a high-tech, eco-friendly interior with 14-way power heated and ventilated front seats featuring Econyl upholstery. Maserati described it as a “regenerated nylon” made from waste such as fishing nets; fabric scraps, and carpets destined for landfills. These are transformed into “virgin quality nylon yarn” that features a “highly opaque surface” as well as “laser processing,” which gives it a “parametric design that expresses a natural dynamism.”

From a decoration standpoint, the seats are joined by embossed accents on the dashboard as well as “carbon copper 3D touch” trim on the center console and door panels.

Lincoln

Lincoln unveiled a new version of the Nautilus premium midsize SUV, with styling that will closely follow that of the China-only Zephyr sedan. Watch for details soon in your DVN-Interior Newsletter.

Lotus Nyo

Polestar

Polestar debuted the 4, a coupé-styled midsize crossover. It's also Polestar's fastest production model, described as a “four-door elevated GT” by CEO Thomas Ingenlath.

POLESTAR IMAGES

Inside, Polestar's design is gradually evolving away from Volvo. There are more recycled and low-carbon materials throughout the cabin, and Polestar is doing full lifecycle assessments on components with a full report to be published in 2024.

Built on the premium Sustainable Experience Architecture (SEA) developed by Geely, the Polestar 4 has a large body: 4,839 × 2,139 × 1,544 mm, with a 2,999-mm wheelbase. The resulting generous interior proportions are especially evident in the rear, where occupants are cocooned with reclining seats. Adjustable ambient lighting adds an extra dimension to the interior; inspired by the solar system, it allows the driver to customize the driving environment.

A full-length glass roof is available with optional electrochromic functionality, allowing for opaque or transparent execution depending on the mood. With the rear window eliminated, the glass roof stretches behind the rear occupants' heads, creating a unique interior ambience. A secondary media and climate control screen is mounted between the front seats to enable control by rear occupants.

A mono-material approach, first presented in the Polestar electric roadster concept in 2022, is applied to interior materials, where all layers of certain components are produced from the same base material. This allows them to be recycled more effectively and efficiently by eliminating the need for incompatible materials to be separated before recycling. We'll have more coverage of this interesting development in forthcoming DVN-I Newsletters.

The tailored knit upholstery is a new technique for the automotive industry. First shown in the Precept concept car, the textile is made from 100 per cent recycled polyester. The material and the design were created by Polestar designers, together with the Swedish School of Textiles (Borås Textilhögskolan) and further developed with suppliers. It is made to fit, which means no offcuts and reduced overall waste.

The car has a DMS camera, which only relays data and does not record video, to monitor the driver's eyes and head movements to help avoid incidents related to fatigue or incapacitation. Together with hands-on detection in the steering wheel, the DMS helps to keep the driver actively engaged in driving, as required.

The Polestar 4 will be produced in Hangzhou Bay, China, starting in November 2023.

BYD

BYD, most popular EV seller in China, showed their YangWang U9 all-electric supercar and U8 electric SUV. The U9 uses a new suspension system to lift up the corner to avoid damaging the brake rotors in case of tire or wheel failure. The automaker is also unveiled their Seagull electric city hatchback and a new model from their Denza premium brand. The Dynasty B-Class electric SUV also made its global debut.

Nio

Chinese premium electric brand Nio unveiled the new version of their entry-level ES6, a small SUV that will be renamed the EC6 in Europe following a legal challenge from Audi because of potential confusion with Audi's sporty S line (which includes an S6 model). Nio also demonstrated their third-generation battery swap station, which promises quicker battery exchanges.

HiPhi

Human Horizons Technology's HiPhi brand revealed the Y, their third model, designed and engineered with global markets in mind. Currently, HiPhi sells the X SUV and Z sedan in China. Human Horizons was established in Shanghai in 2017 by Ding Lei and Phil Murtaugh, two former senior executives at SAIC-GM.

HIPHI Y (HUMAN HORIZONS IMAGE)

The HiPhi Y measures 4,938 × 1,958 × 1,658 mm (L × W × H), with a 2,950-mm wheelbase. It is designed with a subtle design language that is less aggressive and more ordinary than other HiPhi models, namely, the HiPhi X and the HiPhi Z, which is not unpredictable since the HiPhi Y is expected by the industry to feature a relatively lower price.

Instead of a traditional door handle, the new SUV is equipped with touch buttons and the rear doors still use the segmented open style, with the upper and bottom parts opening separately. However, the lower part of the doors opens in the traditional way instead of the suicide style on the HiPhi X.

Xpeng

Chinese premium electric brand Xpeng showed their G6 coupé-styled midsize SUV. The car will compete against the Tesla Model Y and Nio ES6/EC6. It is expected to launch in European markets with high EV sales.

Geely

Geely Auto Group showed off 21 new energy vehicle (NEV) models, including the Galaxy L7 SUV; the Galaxy Light prototype, as well as four battery electric models under various group brands.

GEELY GALAXY L7 (DVN IMAGE)

The Galaxy L7 is the first plug-in hybrid electric vehicle (PHEV) model in the Geely Galaxy range. Riding on the e-CMA platform, it is a compact SUV that measures 4,700mm long; 1,905mm wide, and 1,685mm tall, with a wheelbase of 2,785mm.

LYNK & CO NEXT DAY CONCEPT (DVN IMAGE)

The Lynk & Co booth housed the 08 SUV, and the Next Day concept. The 07 is the first mass-produced model to adopt Lynk & Co's new-generation design language and Flyme Auto, the intelligent cockpit infotainment system co-developed by Lynk & Co and smartphone maker Meizu.

GALAXY LIGHT PROTOTYPE (DVN IMAGES)

ZEEKR X (DVN IMAGES)

Geely's premium electric vehicle brand Zeekr showed the 001; the 009; the X, and the M-Vision concept. The X is a compact SUV that just went on sale. It uses the same SEA (Sustainable Electric Architecture) platform as the Smart #1 as well as future electric cars from Volvo and Lynk & Co. Zeekr promises a range of up to 560 km (348 miles) between charges based on the Chinese testing cycle.

ZEEKR M VISION (DVN IMAGES)

Livan Auto, a joint venture between Geely Auto and Lifan Technology, exhibited models including the 7 and 9 SUVs.

SAIC – MG


理想

Interior News

Mercedes-Maybach's first BEV Debuts in China

INTERIOR NEWS

MERCEDES-BENZ IMAGES IN THIS ARTICLE

Mercedes-Maybach chose the Shanghai Auto Show to unveil the brand's first BEV, a full-size SUV claiming sportscar performance yet a sub-640 km range.

Cabin features include the MBUX Hyperscreen with "zero layer" and Mercedes-Maybach specific start-up animations on all three displays. The numerous exclusive features include an animated display of the instrument cluster in "Maybach" mode. The pointers in the two tubes are designed like a silk scarf that moves as if in the wind according to the speed and driving style. The digits change their size and are dynamically faded in or out.

The surrounds for the round instruments are in rose gold, a tradition of the brand. An alternative display form to the tubes is the sporty "Pure EV" style. A three-dimensional performance bar conveys the respective driving status (driving; accelerating, charging).

The central display in this basic setting is dominated by the navigation. The 'staff' driver can carry out 80 per cent of the most common interactions directly, without changing the application. The system reacts to different situations and is personalized with behavior-learned suggestions and forward-looking offers.

The rear passengers experience the same extensive range of infotainment and comfort features with two 11.6” displays on the front seatbacks. Content can be shared quickly and easily on the various displays. It is also possible to select and modify the navigation destinations from the rear seats. The standard equipment also includes the MBUX rear tablet, which can also be used outside the vehicle, and the MBUX Interior Assist. With the help of cameras, it can recognize the operating requests of the passengers from body and hand movements and carry out the corresponding functions, for example switching on the reading lights.

For an even more sophisticated look, Maybach Manufaktur Nappa leather is available as an option in crystal white/silver grey pearl. The leather in all interior colors comes from sustainable processing. Natural woods are available as decorative parts: brown open-pore birch and walnut wood, as well as piano lacquer black flowing lines.

Forvia Innovations for the Chinese Market

INTERIOR NEWS

Forvia CEO Patrick Koller spoke of his company's excitement at showing off their innovative solutions and sharing Forvia's vision of the enhanced mobility experience: "As the world's largest automotive market, China is key for Forvia, it is a growing region and a dynamic adopter of new technologies to enhance people's lives. Drawing on our 30 years in China and a significant innovation and manufacturing presence, we look forward to supporting Global and Chinese OEMs to meet the evolving needs of consumers in China and overseas markets".

Zero-emission technology including hydrogen solutions; solid-state high-definition headlamps, and interior innovations were presented.

The Zero-Gravity Captain Chair, a rear passenger seating solution, was developed to meet the local demands for comfort and relaxation. It features technology designed to identify and alleviate physical pain.

Modular seat architecture offers a new approach to automotive seating, and is designed to allow a broad range of styling and functions to adapt throughout the lifetime of a vehicle. With production concentrated in regional hubs, to be as close to the customer as possible, as well as the use of recyclable, bio-sourced materials, the new line offers up to 55 per cent lower CO_2 emissions.

Other Forvia interior innovations on show included 3D-sculpted mono-material panels connected seat covers and sensors, phygital cockpit vision, and the growing Materi'act sustainable materials portfolio. High-dynamic-range (HDR) green displays build on a first-to-market perceptual display platform technology by enabling automatic

image enhancement; energy savings, and lifetime upgrading on any type of display hardware making it an ideal solution for electric vehicle manufacturers.

Reactive dimming, which made its debut at the 2023 CES, is a combination of gaze monitoring with smart dimming applied on eMirrors to reduce cognitive load; driver distraction, and fatigue.

There were cabin centerpiece “Lumières” demonstrating highly versatile “Third Place” cockpit design. It offered an innovative and customized mobility experience between front and rear seats that creates an at-home environment through reconfigurable seating, adaptive lighting, and individualized sound headrests. The cabin centerpiece achieves 45-per-cent CO_2 emissions reductions through lightweight architectures.

Digital mobility experience and connected services highlighting digital continuity from home to car with Forvia’s market-leading Aptoide App Store, game and news center, and the possibility to upgrade vehicles OTA with a wide set of Forvia services.

Antolin: Integrated, Intelligent Solutions

INTERIOR NEWS

ANTOLIN IMAGES IN THIS ARTICLE

Under the slogan “Leading the New Sustainable Mobility from Inside”, Antolin presents their integrated and intelligent solutions. CEO Ramon Sotomayor said, "Introducing the GOA Transformation Plan, Antolin has embarked on a new phase with the goal of leading the transformation of mobility. Not only will we evolve the business portfolio with a larger footprint in the markets of the future, but we will actively collaborate with our customers to move towards smarter and more sustainable interior spaces".

The debut of ITACA combines Antolin's lighting and HMI; electronics; backlit headliner; attractive deco parts, and a purifying console to create a comfortable space that highlights the limitless possibilities of future mobility. The keyless access systems use biometrics to get to the interior of the vehicle.

The car also merges the seamless integration of DMS and OMS with communicative lighting and different alerts to make the journey safer for driver and passengers. Surprising features like the “dancing light”, make the ride more enjoyable.

Antolin received a CES 2023 Innovation Award for their Access System, which is a combined software and hardware solution seamlessly integrated into a trim on the driver's door. The system includes several authentication methods for car access: biometrics (facial and voice recognition or fingerprint), PIN code or NFC.

Smart Sliding Floor Console: The floor console is combined with movable and adjustable components that allow it to conveniently serve all passengers in the front and rear of the vehicle, enabling a more flexible interior layout. Its HMI, Hidden-Til-Lit solutions, and air purifying system, among other devices, provide convenient interior operation for the passengers.

Innovative Upper Trim: Antolin redefined the overhead console, relocating the capacitive switches along the smart perimeter frame to ensure effortless operation for passengers in any position. In addition, Antolin has adjusted the communication lighting to meet broader visual comfort aspirations.

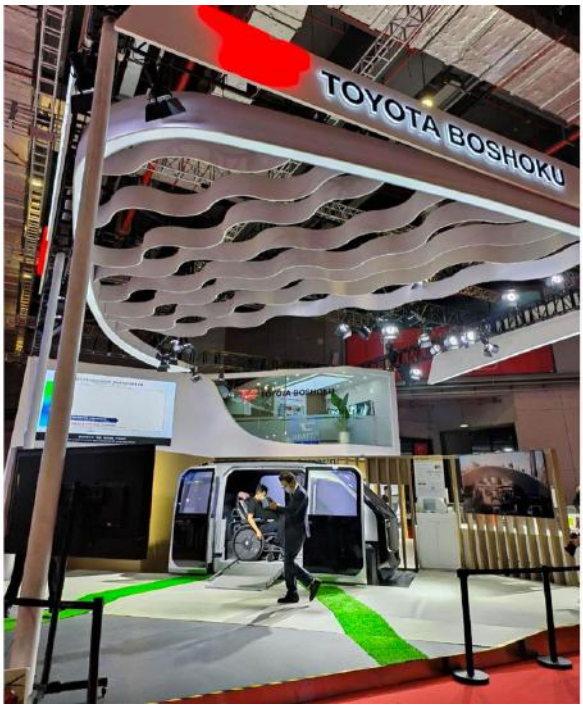
Breakthrough Communicative and Dynamic Lighting: A new 3D surface unveiled at the auto show combines lighting and touch elements transformed into a fully functional HMI System. In addition, Antolin's dynamic interior lighting for German vehicles, such as Volkswagen’s ID. Buzz, and ambient lighting components developed for the new HiPhi Z Vehicle.

The commitment to sustainable development has been a constant since Antolin was founded. The company is committed to becoming a pioneer in sustainability and a benchmark for stakeholders in the automotive interior industry.

Many of Antolin's interiors use raw materials with recycled content, such as a car headliner substrate made from urban waste, post-consumer plastic waste and end-of-life tires. The target is to use 40 per cent sustainable plastic raw material by 2030 in accord with automaker specifications. While focusing on recycled materials, Antolin also proposes the use of organic vegetal content, such as plant-based coatings instead of animal and synthetic leather; mycelium-based foams, and natural fibers in the upper area of instrument panels, to name a few examples.

Toyota Boshoku Exhibits “Diversatility”

INTERIOR NEWS



DVN IMAGES IN THIS ARTICLE

Toyota Boshoku presented a booth in the 20th International Automobile Industry Exhibition. This year marks Toyota Boshoku’s eighth showing at the exhibition. Under the concept “Our Sustainability Challenge: 100 Years in the Past and 100 Years in the Future,” TB showed car interior space assuming the automated driving of the future and products/technologies developed from the standpoint of safety, environment, and comfort.

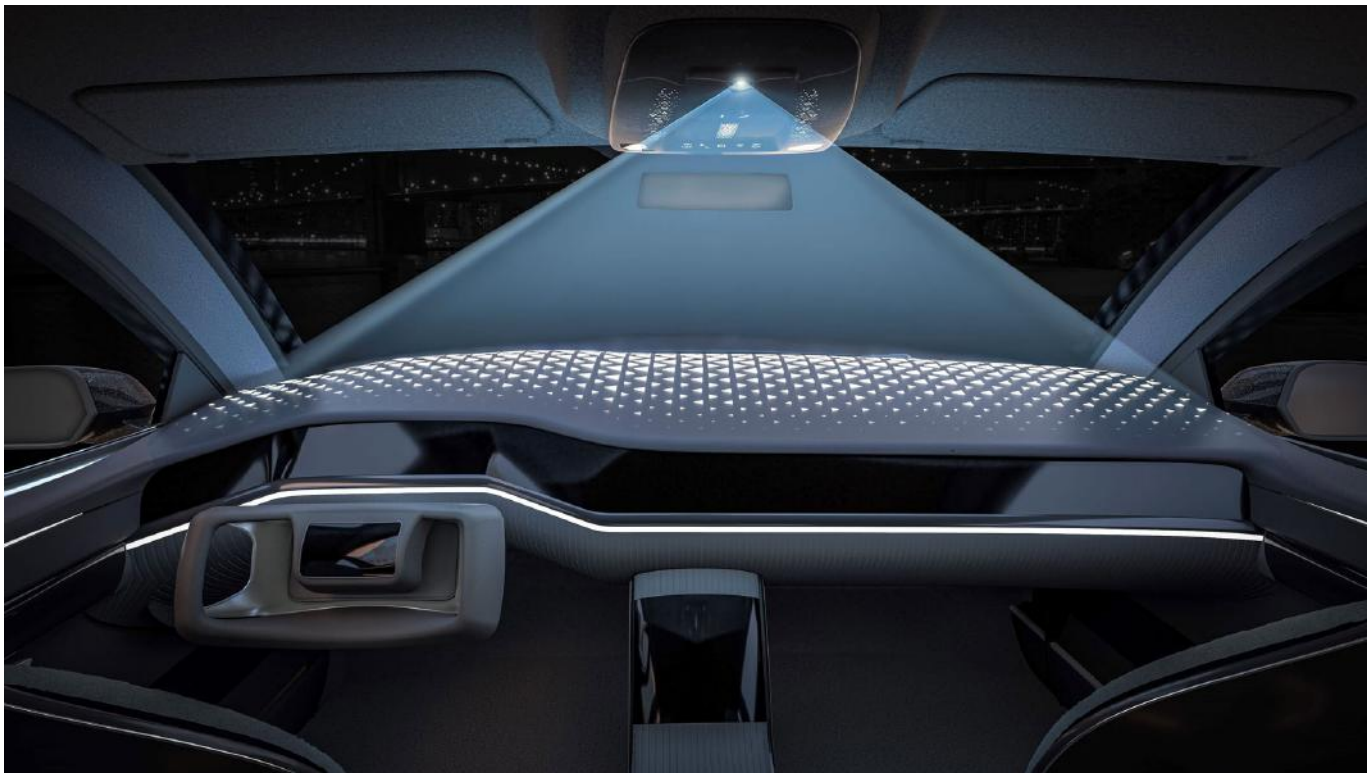
A vehicle interior space for ride-hailing mobility with Level 4 automated driving based on the concept of “Diversatility”—a portmanteau of *diversity* and *versatility*. Diverse passenger needs and usage scenarios are met through versatile space layout and interior modules that can be easily interchanged. The vehicle is equipped with six advanced systems that can be optimally controlled according to each passenger ‘s conditions and needs, to provide always clean and comfortable moving interior, an entertaining user experience for passengers including wheelchair users.

This kind of seat, featured on Toyota bZ3, was developed in China based on the concept of a family lounge. Its flat design reminds us of a sofa, and it is spacious enough for three people to sit on together. Sitting comfort is achieved for anyone, anywhere. Behold, the reimagined bench seat!

LEXUS LS DOOR TRIM

Plastic Omnium: Customizing Interior Lighting

INTERIOR NEWS



PO IMAGE

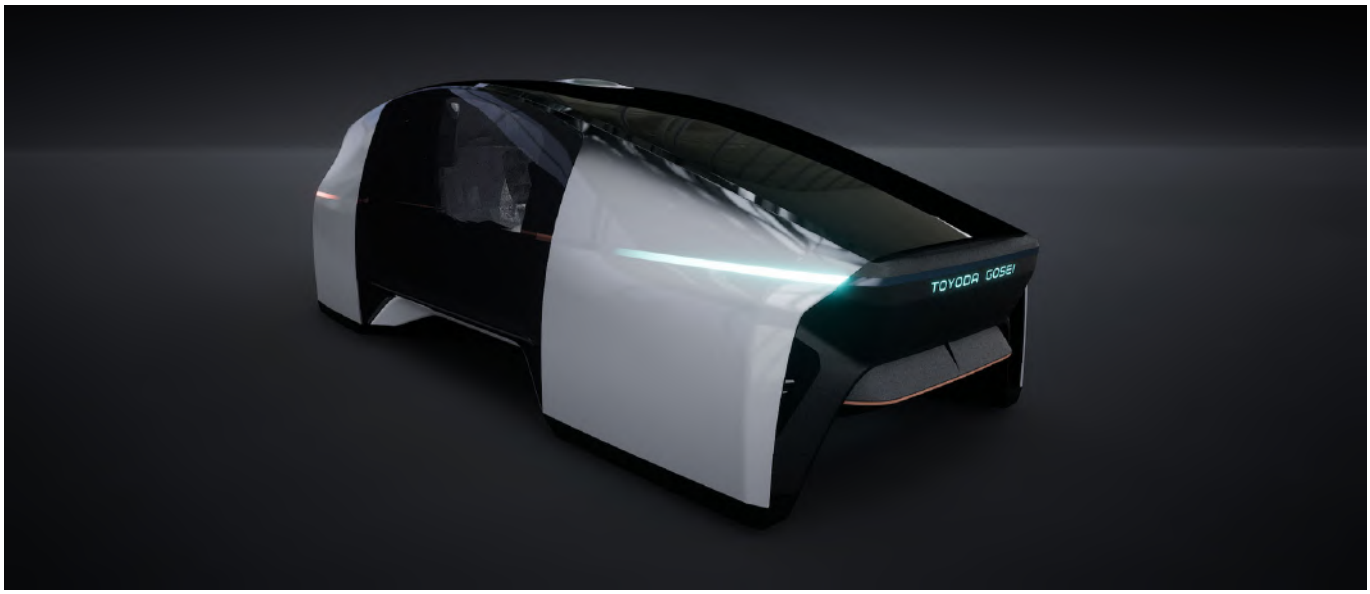
Modern lighting concepts have long been an integral part of a perceived high-quality and appealing ambience. Lighting allows to enhance comfort and well-being and create a feeling of safety. On a functional level, well designed illumination makes it easier for drivers to locate and utilize vehicle functions, particularly at dusk or nighttime.

Plastic Omnium Lighting developed an overhead light console that combines advanced interior lighting functions with an elegant design. The solution is based on the combined expertise of the project partners in smart lighting, plastic processing and injection molding and included, amongst others, a symbol projector.

PO also presented front ends; hydrogen technology, and much more. Dynamic welcome light projection welcomes the driver and all car passengers with animated patterns projected onto the ground as they approach the vehicle. The module that won a CES award 2023 can be installed in the side sill as well as around the entire vehicle. It's based on a microlens array (MLA), a lens system which projects four different graphics independently out of a single unit, thus enabling partial or full surround projection of images or patterns including warning symbols.

Toyoda Gosei's Interior and Exterior Technologies

INTERIOR NEWS



TOYODA GOSEI IMAGE

China is the world’s largest automotive market and a key market for Toyoda Gosei, which seeks to develop high-value products and increas sales there. At Auto Shanghai 2023, Toyoda Gosei, one of the Toyota Group suppliers, displayed stylish interior and exterior parts and airbags for battery electric vehicles. They also presented their rubber and plastic parts using biomaterials and recycled materials that will help in the move toward carbon neutrality.

This concept highlights advanced function and design suited to BEVs: these interior and exterior technologies include transparency to millimeter-wave radar, which supports advanced driver support systems, and luminescence that imparts an ultramodern feel with with LED light.

Grammer Innovations in Headrests, Ducts, Seats

INTERIOR NEWS

GRAMMER IMAGE

Grammer showed their comprehensive portfolio of center consoles; headrests; armrests, and other components for customers in China. Highlights include new solutions for electric air vents and sustainable headrests concepts that improve the CO_2 footprint.

What influences the CO_2 balance of a product the most? Grammer experts have analyzed and evaluated this question, using the example of headrests, with a surprising result: It is neither resource consumption nor logistics that represent the most important lever within the CO_2 footprint, it is the materials used. Grammer showed three headrests in Shanghai with their individual CO_2 footprints enumerated: a standard solution; an evolution using eco-steel and recyclable materials, and finally a 'radical' solution made exclusively of bio- or nature-derived materials. This solution slashes CO_2 by 80 per cent compared with standard headrests.

Another innovation in Grammer’s interior components range meets the future trend of minimalist design with closed; clean, and seamless surfaces: Their new product line of electric air ducts was on display for the first time. They're electronically controlled and provide direct or indirect air flow. Passengers regulate temperature and ventilation in the car exclusively via the air conditioning system, and leave the rest to the e-air vents.

A small selection of the current commercial-vehicle seat portfolio was also shown Shanghai. In China, Grammer will now use their expertise for car seats for the first time. In close cooperation with its partner Ningbo Jifeng, Grammer China will jointly offer complete passenger car seating systems.

Marelli Concept" “Co-Create What’s Next”

INTERIOR NEWS

MARELLI IMAGE

Marelli demonstrated their latest innovations at Auto Shanghai 2023. They are offering an interactive and engaging experience, themed around the concept “Co-Create What’s Next”, aimed at cooperatively developing the future of mobility with customers and technology partners.

Customers visiting Marelli’s booth had the opportunity to define their brand’s personality by configuring their own vehicle, choosing from a curated selection of lighting, sensing, electronics, and interior options featured in Marelli’s Digital Design Studio. Marelli also presented products that drive vehicle personality and performance, with a focus on the Chinese market.

Marelli also premiered its In-Cabin Advanced Technology Showcase, a physical representation of a vehicle interior that highlighted Marelli’s latest innovations in computational hardware, software, exciting user interfaces, and infrastructure. As choices in terms of materials become increasingly important for the cabin of the future, Marelli offered visitors a tactile “touch & feel” experience with its material collection, displaying sustainable, eco-friendly, and translucent backlit materials that influence vehicle personality. Meanwhile, near-field ground projection allows for welcome; safety, and communication messages to be displayed on the ground surrounding the vehicle.

The Design Lounge

Icons

By Athanassios Tubidis

THE DESIGN LOUNGE

LANCIA PU+RA HPE IN MILANO (DVN IMAGE)

The 80's was this decade between the ideologies of the '70s and the globalization of the '90s. The decade without dominant style. The decade where everything was possible. And, the last decade in the history of mankind were creation started from a pencil and a piece of paper.

AD markers, chalk and prismacolor pencils on Velum paper would be the media. What gave the character though of the unique stretched lines was the distinctive individual posture of each designer. Standing up as far as possible from a 4-ft-wide piece of paper, turning moves into forms, comparing oneself physically and directly to the aesthetic result. The making of mobility, car-body design, was totally improvised on every single line since the very early stages of the birth of a vehicle, all the way to production, all the way to our streets.

Studying design at that time*, or rather struggling to define the style of the era, was a constant endeavor, that eventually on the long run, became the design process itself. In a parallel effort, Memphis postmodernism emerged by the mere context of one city that since, became synonymous with design: Milano.

We couldn't possibly make a list of all the icons that still inspire us, that even today's teenagers discover and revive but, let's focus on one such icon: Lancia.

Juha Kankkunen and Miki Biasion were doing it just right every single time with no assistance! Literally winning world rally championships with just their right foot and left hand and…tons of emotions straight in to our living rooms that not even a tv screen could filter. No AI here. A lot of physicality, skill and motivation but also infinite passion and strong convictions.

They were doing the exact same thing designers did earlier on during development process. Instead of a pencil they were using steering and throttle inventing original trajectories on every single circuit in their Lancia Deltas— the rally equivalent of Rubik's cube or Sony's Walkman.

Delta is not the only letter of the Lancia alphabet, there was Betta, Gamma, Ypsilon (Y10), but also Flaminia, Aurelia, Fulvia, Montecarlo, 037, Stratos (was there ever a prettier rally car?). All of them linked through the same cognitive process of conceiving, developing, and driving. These were the last instinctive creations with no digital protocol.

Fast forward to Milano Design week today, Lancia is present and Pu+Ra prototype gives a glimpse of the future. The attempt to unify Lancia design codes into one single item is no small order. The legacy is so intense that only one of its elements would be enough today to create an entire new brand.

Each one of Lancia's unique personalities did not derive by a ratio, a predesigned formula, a statistic certainty or an addition of individual parts and beautiful details, but much rather by the vibrant surrounding context that inspired such proportion and balance. Yet, always modern at every single time!

It might be that this is exactly what Lancia is, once dissociated by the singularity of its iconic cars. Always modern.

Athanassios Tubidis studied design in Milano in the mid 1980s.

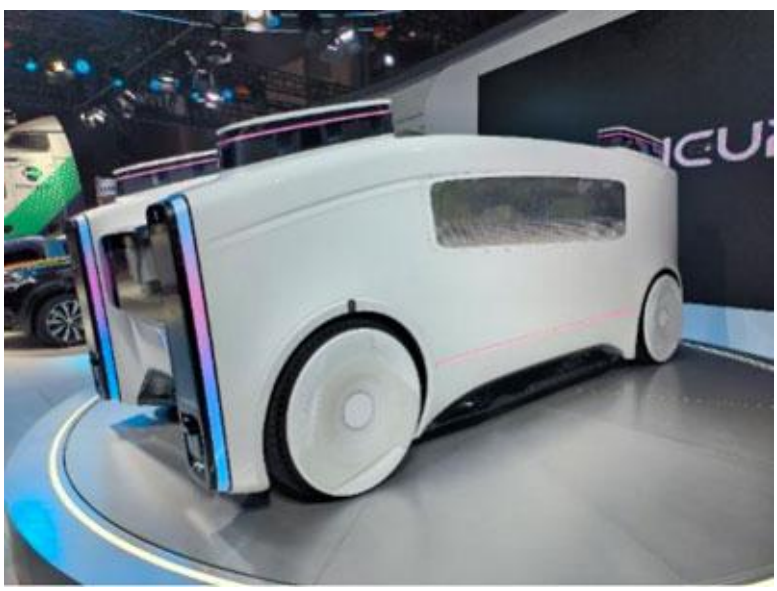
News Mobility

Didi Robotaxi Concept Has Interior Just for Passengers

NEWS MOBILITY

DIDI NEURON (DVN IMAGE)

Didi unveiled a concept for a self-driving people mover, called the Didi Neuron, that would look right at home on the set of a dystopian science fiction movie.



Didi, which currently operates in 16 markets and has over 550 million users, has announced they will work with new-energy vehicle manufacturers in China on vehicle platform selection; interior, and intelligent driving system development as they gear up to introduce, within the next two years, their first mass-produced electric robotaxi.

The concept car has no traditional driving controls or driver's seat. Instead: a large compartment just for passengers. It even features a robotic arm in the trunk that could be used to pick up luggage; retrieve items in the cabin, and even wake passengers up.

The company also released a new mass-produced three-domain fusion computing platform called Orca. This new platform takes up 74 per cent less interior space than before; has 61 per cent fewer core components, and the number of wire harnesses has been reduced by 33 per cent.

"We hope they can enter Didi's network and provide services by 2025," Didi Autonomous Driving chief operating officer Meng Xing told Reuters. "We hope they will be domestically produced. We hope the supply chain is controllable, and even 90 per cent of the key components inside can be domestically produced".

Valeo's All-Weather Mobility Droid

NEWS MOBILITY

DVN IMAGE

Valeo presented their latest technologies to respond to the trends in the Chinese market: electrification, driving assistance systems, lighting everywhere and interior experience reinvention.

Among many other innovations, Valeo presented for the first time the new eDeliver4U, an autonomous and electric delivery droid equipped with Valeo's innovations, entirely developed in China.

The droid is based on an electrified chassis integrating Valeo's 48V solutions for light mobility. It is also equipped with Valeo's latest mass-produced ADAS sensors and software stack to enable automated mobility. The Valeo lighting technologies enhance safety and ensure communication with other road users. The sensor cleaning systems enable the droid to operate in all-weather conditions and various road environments and an ADAS cooling system ensures stable driving even in high-temperature weather conditions.

General News

Ferrari, Samsung Deal for OLED Displays

GENERAL NEWS

SAMSUNG'S NEW DIGITAL COCKPIT AT CES 2023 (SAMSUNG IMAGES IN THIS ARTICLE)

Samsung Display will develop a display solution for use within Ferrari's next-generation models.

Under the agreement, Samsung Display will work on the development of an automotive display solution that uses OLED technology to support Ferrari's digital transformation.

At CES 2023, Samsung Display showed their New Digital Cockpit, which has a 34" slim bezel display and bendable technology. The lightweight, slim structure and the thin bezel of OLED panels give automakers a great deal of design freedom. Furthermore, the solution delivers true black and high-contrast capabilities, and the low power consumption of the OLED system also enhances vehicle efficiency and sustainability.

"In the luxury sector, elevating the client's experience is key," said Ferrari's Vigna. "Through this strategic partnership with Samsung Display for the development of bespoke OLED technology display solutions, we will make a significant step forwards in the digital environment of our next-generation models."

VW Builds E-Car Development in China

GENERAL NEWS

VW CHINA CHIEF RALF BRANDSTÄTTER (DPA IMAGE)

Volkswagen wants to bring electric cars to market faster in China with a new development center. The center for development, innovation and purchasing in Hefei will cost around €1bn.

The goal is to reduce development time in China by about 30 per cent and to better meet customer tastes. To achieve this, local suppliers are to be involved in development at an early stage. Headed by China engineering chief Marcus Hafkemeyer, the facility—which will employ more than 2,000 people—is scheduled to start up in early 2024. “It will also contribute to greater efficiency and profitability for the automaker as an important step in its strategy to manufacture in China for China,” VW China CEO Ralf Brandstätter said.

Europe's biggest carmaker is under growing pressure in its most important market, China, as customers switch from cars with internal combustion engines to electric vehicles at an accelerating pace, but VW has yet to play a major role in the segment of the future. According to recent data, the VW brand lost market leadership to Chinese rival BYD for the first time in the first quarter. VW wants to counter this with ten new e-car models by 2026. Even before that, VW Group CEO Oliver Blume had emphasized that he wanted to accelerate the decision-making and development processes in China.