Thu, 1 May 2025
Weekly Newsletter

DVN Interior

NEWSLETTER #259

Editorial

Grand Interior Event At Hangzhou, 4 - 6 June!

The recent Köln DVN Interior Workshop covered a broad perspective on regional seat and cockpit evolutionary divergences and convergences in China and Europe.

Now, DVN Interior is partnering with EAC-Enmore to put on EAC 2025. It's coming up soon, on 4 - 6 June, at the Hangzhou Grand Convention Exhibition Center, southwest of Shanghai. This week's in-depth piece brings you all the information to understand the value of attending, speaking, and exhibiting at this major industry event. And that's Chinese-scale major: over 500 exhibitors, over 500 speakers, a likely 26,000 visitors, over 1,000 of whom from overseas, and 5,000 companies attending. And First-Time Free Admission (originally 2,000 RMB).

If you're interested to meet an all-sectors cross section of the Chinese automotive industry in general, and particularly people and companies in seats, cockpits, CMF, smart surface, and interior lighting, EAC is where to be. Want to attend? **Send us a query**.

See you in Hangzhou!!

Sincerely yours,

Philippe Aumont
DVN-Interior General Editor

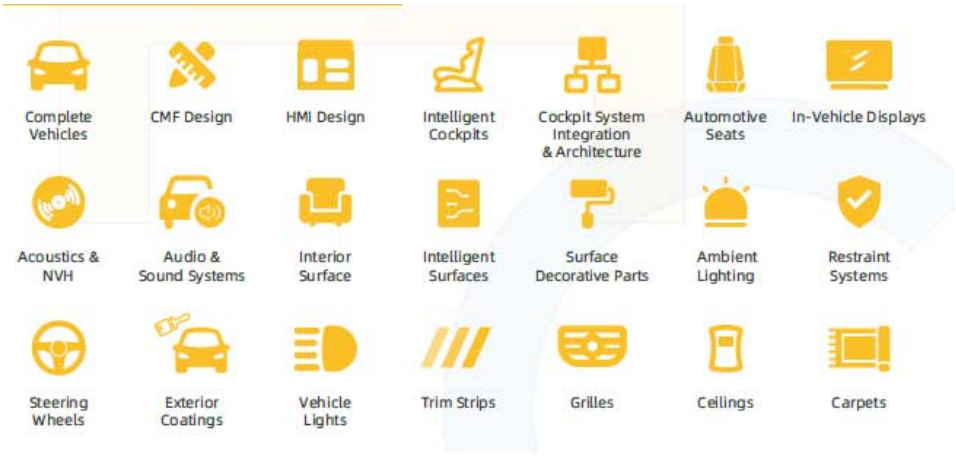
In Depth Interior Technology

EAC 2025: Interior, Exterior, Cockpit

EAC '25 will be on 4 - 6 June, at the Hangzhou Grand Convention Exhibition Center, southwest of Shanghai. This year's theme is **Driving Auto Future by Tech Innovation**.

The Interior, Exterior, and Cockpit exhibition is crafted by Enmore Automotive. They have 12 years' experience and expertise in interiors and cockpits. With more than 100 pertinent events, the exhibition will start with vehicle design language, and present a full closed-loop supply chain of automotive interior components. It will cover vehicle design, intelligent cockpit & interior trim, CMF design, smart surfaces & ambient lighting, interior surfaces, automotive seats, safety systems, NVH, automotive audio, innovative displays, and more.

Overall, the event will be at Chinese scale: over 500 exhibitors, over 500 speakers, a forecast 26,000 visitors (over 1,000 of whom from overseas), and 5,000 companies attending.



DVN Interior is supporting these events at EAC '25:

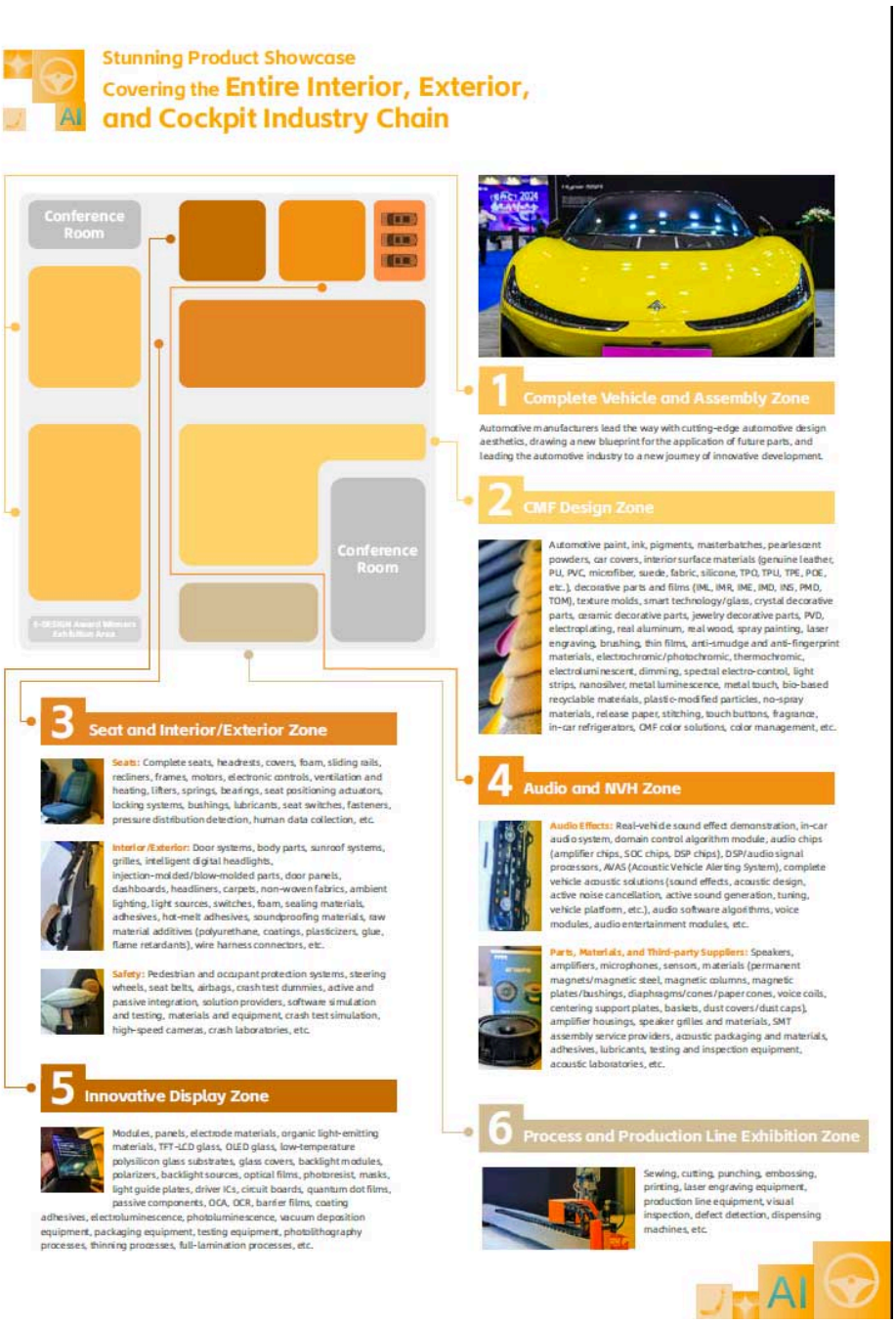
- 4th EACC Future Cockpit Conference
- Smart Interaction, Authentication, Emotional Interaction, Sensors, DMS/OMS, Drunk Driving Detection, UX, Interaction Design, Holography, etc
- 3rd Global Automotive CMF Design Conference
  - Integration with sound, light, and electronics; new and sustainable materials and process innovation
  - Sensory design, aesthetics, colors,
- 6th Automotive Smart Surface & Ambient Lighting Forum
  - Smart surfaces, intelligent touch, interactive surfaces, LEDs, optics, ambient lighting, etc
- 4th Automotive Seat Technology Innovation Forum
  - Next-gen seats, seats for AVs, space reconfiguration, seats going global, cost reduction, etc

The event will also include other events, including:

- 4th Automotive Display Technologies forum
- 6th Head-up Display (HUD) Tech forum
- 11th International Automotive Interior Surface forum
- 11th International Automotive NVH & Audio innovation forum
- 10th Automotive Safety Systems conference

The exhibition brings together every key link of the global interior, exterior, and cockpit industry chain, from technological R&D to product manufacturing, from supply chain management to market expansion.

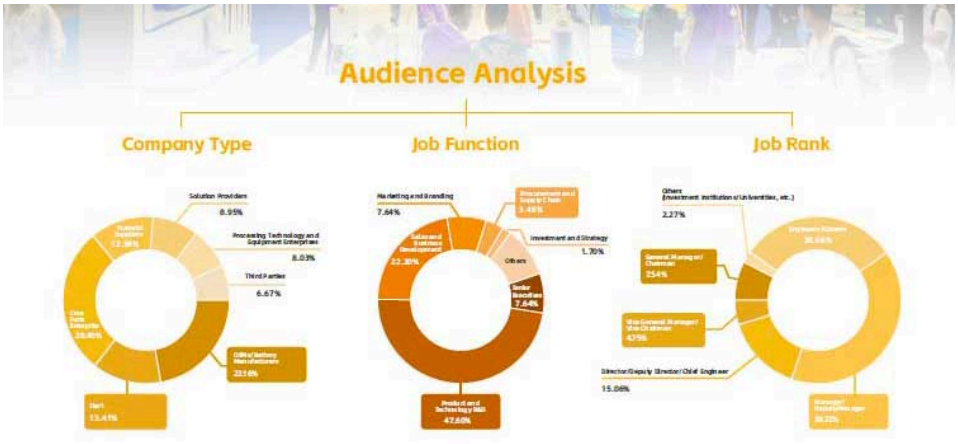
Product Showcase



The Product showcase will span six exhibition halls:

- **Complete Vehicle and Assembly Zone**: automakers showcasing new vehicles
- **CMF Design Zone**: interior surface materials, covers, decoration, fragrance, CMF color solutions, color management, and more
- **Seat and Interior/Exterior Zone**: Seats and components, structures and mechanisms, electronic controls, ventilation and heating, actuators, door and sunroof systems, injection-molded/blow-molded parts, door panels, dashboards, headliners, carpets, non-woven fabrics, ambient lighting, light sources, switches, foam… steering wheels, seat belts, airbags, active and passive integration, and more.
- **Audio and NVH Zone**: in-car audio, whole-vehicle acoustic solutions, voice modules, audio entertainment modules, components and materials…
- **Innovative Display Zone**: modules, panels, TFT-LCD glass, OLED glass, driver ICs, circuit boards, passive components, OCA, OCR, barrier films, coating, and more
- **Process and Product Line Exhibition Zone**: sewing, cutting, punching, embossing, printing, laser, production line equipment, visual inspection, defect detection, dispensing machines…!

Who's attending?



Automakers, tier-1 and -2 suppliers, and more. Almost half of participants are R&D people, with marketing and business development well-represented as well.

In years past, the roster of companies represented by participants has included the likes of Lear, Yanfeng Automotive Interiors, Forvia, Adient, Changshu Automotive Trim, Ningbo Jifeng, Jiangsu Xinquan, Adient Seating, Magna, Antolin, Toyota Boshoku, IAC, Inteva Products, Chuan Hsing Auto Parts, Minth Group, Fangsheng Lear, FAW Fangsheng, Joyson Automotive, Xuyang Group, Ningbo Shuanglin Auto Parts, Nobel Automotive Systems, Joyson Electronics, BYD, Preh Joyson, Huayu Automotive Body, Lingyun Industrial Corp., Benteler, Webasto, Gestamp, Mingfang, Brose, Taichi AS, Tiancheng Group, Hyundai Transys, Isringhausen, Bright Ruby, Daesung, Dongfeng Lear, Hongli Zhixin, Schefenacker, Tachi-S, Ruetsu Technology, Taiji, NHK Spring, Guangzhou Toyota Boshoku, Zhejiang Jujin, Autoliv, ZF Friedrichshafen, Jinzhou Jinheng Safety Systems, Continental AG, Bosch, Delphi (now Aptiv), Calsonic Kansei, Denso, Chongqing Yazaki, Visteon, Marelli, Hyundai Mobis, Desay SV Automotive, Visteon, EcarX, Panasonic, Aptiv, and the list goes on.

Why Attending?

- Global Industry Chain Integration: Connect 20,000+ R&D, engineering, manufacturing, design, supply chain, and marketing department attendees in interior, exterior and cockpit as well as intelligent driving industry.
- 500+ C-suite speakers.
- 300+ Cutting-Edge Exhibitors: Explore 20,000+ exhibits across 1,000+ categories
- First-Time Free Admission (originally 2,000 RMB).

Expo booth sponsorship

	Size	Includes VIP tickets	Price
Custom Booth	96m²	18	¥240,000
	48m²	10	¥120,000
	36m²	8	¥90,000
	24m²	6	¥60,000
	12m²	3	¥30,000
Standard Booth	9m² (3X3m)	2	¥25,000
	6m² (3X2m)	/	¥12,000

1.A maximum of 2 standard booths can be reserved. An additional fee of RMB 3,000 per booth will apply for double-opening standard booths.
2.Exhibitor information will be featured in the conference's external promotional materials, such as the official WeChat account and event promotional grids.
3.Standard booths are designed by the sponsor and constructed uniformly by the organizer; custom booths must be designed and constructed by the sponsor.

Interior News

Opel Seats are Comfy, AGR - Certified

INTERIOR NEWS

At Opel, car seats must not only provide comfort, they must also support the occupant's back throughout the journey—especially when travelling longer distances. This is ensured by the typical Opel chassis tuning but above all by their class-leading seats such as in the new Opel Grandland, the Astra, and the Astra Sports Tourer.

The ergonomic seats are certified by the independent experts of AGR and offer perfect adjustment options for the driver and front passenger of all sizes and stature.

This combined with multi-level seat heating to massage functions and ventilation makes you enjoy the drive and get out again after hours in a relaxed manner

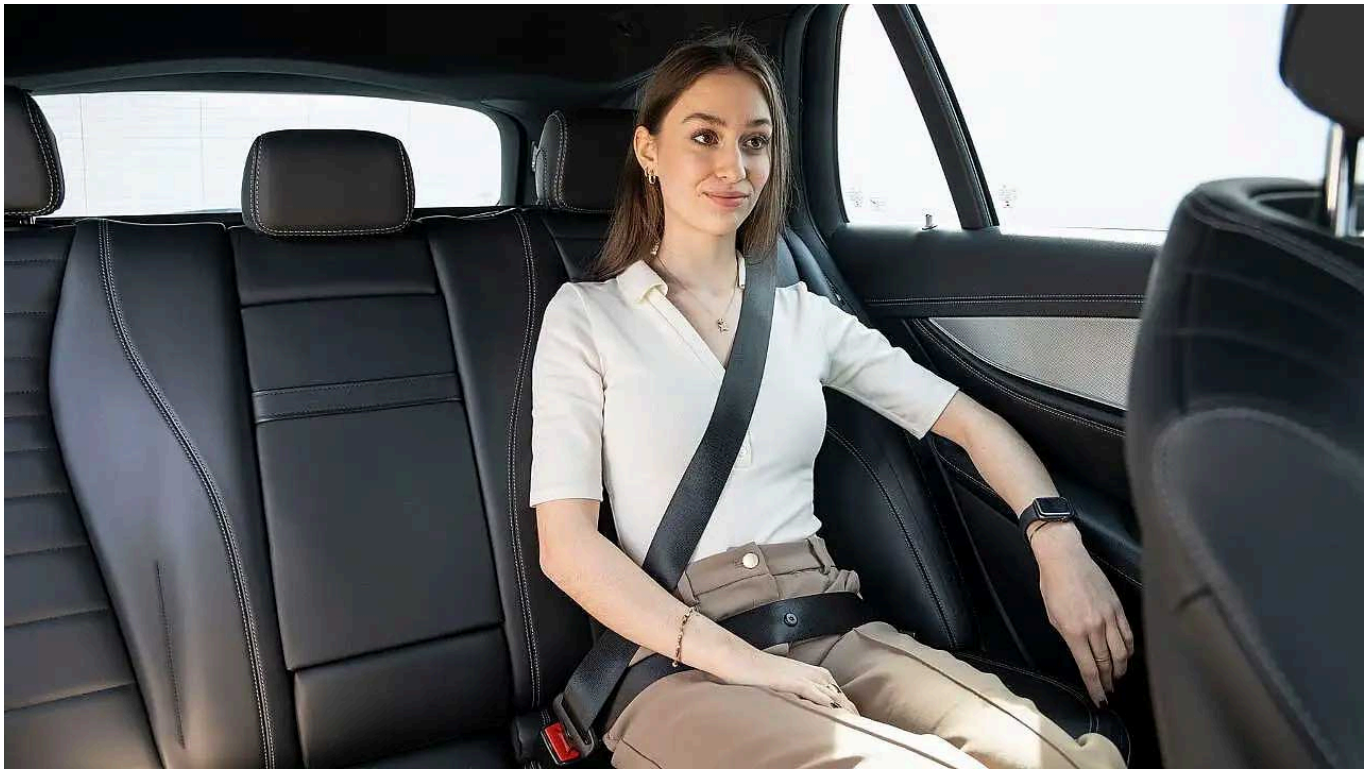
AGR — Aktion Gesunder Rücken (Healthy Back Action) — has been promoting back health since foundation in 1995. They award the AGR seal of approval to products that are particularly back friendly. They also work closely with independent experts to train specialist retailers and therapists in ergonomics and back health.

Opel already offers a variety of AGR seats with a choice of comfort or more sports-oriented contours. To enable the driver and the front passenger to adopt a comfortable and back-friendly seating position for any journey, AGR seats offer 10 adjustments for the driver and six for the co-driver. Regardless of the seat contour, the multitude of adjustable parameters – many electrically operated on the driver's seat – include sliding range, height, tilt, backrest tilt, thigh support, lumbar support and seat cushion tilt, as well as heating for the cold season.

The comfort of AGR driver's seats can be further enhanced – depending on the model variant – with ventilation. In addition, the memory function particularly comes in handy when sharing driving duties over long distances.

ZF's New Seat Belt

INTERIOR NEWS



ZF IMAGE

ZF Lifetec will launch a new rear seat belt the middle of this year. It is called the SPR 6.1, and it is designed to adapt to the occupant's stature in an accident; a mechanical decoupling system automatically limits the belt forces if they are too high for smaller or lighter people. The aim is to prevent injuries caused by belts.

Technically, the SPR 6.1 combines existing belt tensioner systems. If the car detects emergency braking, the belt is pretensioned mechanically so that the occupant is held securely in the seat. In a collision, a plastic thrust element is pressed into a special gearbox by a pyrotechnic drive to instantly take up any slack and tighten the belt, for optimal occupant protection. The special feature: If the belt is pulled too tight, the mechanical decoupling is activated depending on the stature of the passenger, to prevent the belt constricting too much. According to ZF, the new technology also offers greater variability when using additional belt tensioners, such as at the lower end of the belt, to prevent the occupant from slipping under the belt.

Lignin's Bio-Based Plastics Projects

INTERIOR NEWS

LIGNIN IMAGE

Two research projects undertaken by Lignin Industries — the Swedish developer of Renol, a bio-based thermoplastic derived from lignin — have the potential to significantly benefit the automotive industry.

Renol can be used in polypropylene (PP) and acrylonitrile butadiene styrene (ABS) for thermoforming and injection molding. It reduces the CO_2 footprint by replacing fossil-based plastics and enables nucleation for the Ku-Fizz process, which produces lightweight parts to reduce CO_2 emissions even further. As a result, Renol is a promising option for meeting the ELV Directive.

The first project, called Bioform, aimed to develop vacuum-formable materials to replace fossil-based plastics with bio-based alternatives. This was achieved by incorporating a high bio-based content into ABS. According to Lignin Industries, results show that the bio-materials developed represent a major breakthrough for the automotive sector, offering a sustainable alternative to traditional fossil-based materials.

The project successfully replaced up to 44 per cent of plastic content with bio-based fillers, resulting in a 40-per-cent reduction in carbon footprint. The bio-based materials demonstrated enhanced fire retardancy, improved mechanical performance and notable environmental benefits, making them highly suitable for various automotive applications, including interior trims, exterior parts, dashboards, door panels and roof boxes. Additionally, lignin-based plastics showed good processability for extrusion and vacuum forming.

Project two focuses on Ku-Fizz, an economical microcellular injection molding technology originated by Volkswagen Group, which produces lightweight automotive parts.

During the Ku-Fizz process, a nucleating agent is needed to form the microcellular structure by providing a surface for the gas to attach to and grow from. Traditionally, glass fibers have been used for this purpose. However, the stiffness and lack of flexibility of glass-fiber-filled plastics make them unsuitable for some applications. To address this, Lignin Industries developed lightweight injection-molded products using Renol as a foaming activator and CO_2 reducer.

The project found that using Renol as a PP nucleating agent led to several breakthroughs. It achieved a 10-per-cent weight reduction compared with unfilled injection-molded PP, along with a 30-per-cent reduction in cycle time compared with traditional injection molding. Additionally, it reduced the clamping force by 70%, allowing for the use of a smaller injection molding machine. Unlike glass fibers – commonly used in the Ku-Fizz process but prone to deterioration after the first cycle – Renol can be reprocessed repeatedly without losing its properties. Moreover, Renol provides isotropic properties, making it easier to achieve flat surfaces, which is essential for widespread industry adoption.

Hesai In-Cabin Lidar in Cadillac Vistiq

INTERIOR NEWS

GM IMAGES

Hesai's long-range, AT-series lidar has been selected by SAIC-GM for application in the new electric Cadillac Vistiq SUV. The vehicle was unveiled at the Shanghai Auto Show, and boasts the industry's first in-cabin (behind the windshield) lidar deployment..

Co-developed by Hesai and GM, the system has the AT lidar within the cabin, enabling precise environmental sensing even in challenging conditions such as rain, snow, or dust, while preserving the vehicle's sleek exterior design. The in-cabin placement also reduces the risk of damage to high-value components during minor collisions, offering both functional and aesthetic advantages. The Vistiq is part of Cadillac's recently unveiled electric SUV family, and introduces GM's newest L^2 full-scenario auto-drive system, powered in part by Hesai's cutting-edge lidar.

IN-CABIN LIDAR FROM HESAI (GM IMAGE)

Hesai cofounder and CEO David Li calls the selection "a significant leap forward in both automotive design and autonomous sensing capability. We look forward to further collaborations with SAIC-GM and to accelerating the future of smart, safe electric vehicles".

Denza Z9GT: Luxury, Technical Sophistication from BYD

INTERIOR NEWS

BYD IMAGES

Denza's first model for Europe is a shooting brake over five meters long. With the Z9GT, the focus is on luxury, performance, and steering and chassis technology.

The target is a capacity of 500,000 cars per year. A promotional tagline: "in Europe for Europe".

Wolfgang Egger, late of Audi, is responsible for the design. He's been with BYD for nine years, focusing on on 'understated athleticism' and 'timeless elegance' for the 5.18-meter-long Z9GT. "A shooting-brake rear end is naturally better suited to this than a classic saloon," says Egger. "At the same time, it has a practical advantage in terms of trunk space and variability." He describes the Z9GT as a "gentleman's car".

Although the test vehicles were still pre-series models, the Z9GT already showed how to accommodate passengers in this vehicle class in style. The lounge-like interior impresses with first-class materials, precise workmanship and lavish equipment. For example, the box between the front seats can be cooled down to minus six degrees and can be opened on both sides.

The cockpit has a tidy and purist look, dominated by a large (17.3”) central display, flanked by two smaller screens. One is behind the steering wheel, and the other is for the front passenger.

The car can perform a 360° right turn with the left front wheel braked, or vice versa. The rear wheels turn in the opposite direction. The rubber-eating show interlude is designed to drive the car diagonally forwards into a parking space parallel to the road and then turn in with the rear. However, the biggest advantage of the new steering technology is probably the extremely small turning circle, which repeatedly caused astonished faces during the test drive. A car over five meters long turns on a road width of just 9.24 meters—on par with the smallest car.

BYD boss Stella Li has announced that a new model will be launched on the market every six months. The Z9GT will be followed by the D9 van in 2026. Two SUVs and a sports car are also in the pipeline.

Geely to Consolidate Digital Cockpit R&D

INTERIOR NEWS

GALAXY E8 (GEELY IMAGE)

Geely Group is reportedly consolidating three existing units, employing nearly 2,000 engineers to develop digital cockpit systems, into a single unified team.

It's the carmaker's latest move to streamline their workforce and improve efficiency. Geely will integrate digital cockpit teams and investments from the Zeekr, Lynk & Co and Geely brands, which have until now developed cockpit systems independently. In the past few months, they have moved to integrate their smart-driving R&D teams.

It was not immediately known how many employees might lose their jobs as part of the consolidation, which aims to reduce both costs and redundancies. "Geely is optimizing internal resources to enhance synergies in technology and R&D across our brands, with no plans for redundancies", Geely said in a statement to Reuters.

Smart cockpit systems are a key selling point for Chinese automakers looking to woo consumers in the hypercompetitive domestic market as they enhance the driving experience with features such as voice recognition and navigation maps.

Alongside their in-house teams, Geely also buys technology for smart cockpit systems from Ecarx and smartphone maker Meizu, both backed by Geely founder Li Shufu. Geely and its affiliated brands contribute 70 per cent of Ecarx's revenue, its CEO has said.

The Chinese automaker, which aims to sell more than 5 million vehicles annually by 2027, has been restructuring their numerous brands into two units — Geely Auto and Zeekr Group — targeting the mass market and premium segments respectively.

Geely has accelerated the adoption of smart driving technologies on their vehicle brands over the past two months, after consolidating several engineering teams employing thousands of people and partnering with artificial intelligence company Qianli Technology.

Zeekr said in March it would start deliveries in the second half of this year of their first EV model equipped to allow drivers to take their hands off the steering wheel.

The Design Lounge

HMI: Screen or Projection?

THE DESIGN LOUNGE

BMW IMAGE

Touch-sensitive screen? Or interactive projection? Automakers are pursuing different concepts for displaying digital content in the car.

BMW uses both! They do not want to follow the trend of increasing display surfaces in the cockpit. Projections on the windshield will play a major role in the manufacturer's upcoming vehicles. A projection provides the essential information for the driver and front passenger. This shifts all displays in the car upwards and thus more into the driver's field of vision. The objects in the windshield are given a 3D effect and are no longer only visible from the driver's seat. All occupants can see the projections on the head-up display.

The Panoramic Vision from BMW includes a projection surface in the lower area of the windshield. This surface has a black background so that content is clearly visible in all lighting conditions. The entire width from the left to right A-pillar is used for this purpose. A total of nine areas are available for information. Three elements behind the steering wheel inform the driver about their current speed, permitted speed, remaining range, time to destination and activated assistants. The remaining six areas can be freely assigned. You can choose from the "MyLife", "MyCar" and "MyJourney" sections. These can be music tracks, weather forecast, direction or the visualization of the voice assistant. A round head with large eyes then appears on the projection screen. The selected content is dragged upwards from the central screen to the desired position using your finger.

For the first time, the voice assistant is visualized on the Panoramic-Vision surface. The occupants see the feedback on the implementation of the voice commands in Panoramic Vision, the head-up display or on the screen.

Even the "New Class" from BMW will not be completely screenless. The concept cars have a touch-sensitive screen (17.9”), which moves closer to the steering wheel. The sides are tilted 72.5° towards the driver, giving the impression of a parallelogram.

Mercedes-Benz has achieved a width of 141 cm (55.5") with their MBUX Hyperscreen. Visually, it looks like one screen surface, but it comprises three OLED screens. The slightly-curved OLED screen delivers 5K resolution whose content is easy to see even in bright sunlight. This is ensured by a contrast ratio of two million to one. Driving information is displayed in the driver's area, while the front passenger can select the content. In car mode, they are based on the time of day and location of the vehicle.

Hyundai Mobis presented a holographic projection at this year's CES in Las Vegas. A 100-micrometer-thin film from Zeiss is applied to the screen to create a spatial effect for the viewer. The exhibit at the trade fair also showed the use of the lower area of the windshield. Information for the driver as well as the selection of media and other digital content is projected across the entire width.

News Mobility

Tier IV's Interior-Optimized AD Robotaxi

NEWS MOBILITY

TIER IV IMAGES

Tier IV, which provides open-source software for autonomous driving, has unveiled their latest prototype, a robotaxi designed to operate without a steering wheel or pedals.

Tier IV is sharing the design of the autonomous driving system – including vehicle specifications and software architecture – making it easier for companies in the automotive industry to enter the robotaxi market. Part of efforts to encourage a Japan-led standard for robotaxis, this prototype is meant to strengthen the nation's position in the global robotaxi sector.

Geared toward integrating robotaxi services into Japan's transportation network, the initiative follows Tier IV's selection in August 2024 for a Ministry of Economy, Trade and Industry project aimed at promoting digital transformation in the mobility sector.

Using an existing electric vehicle platform, the prototype features an exterior and interior optimized for robotaxi applications, with a sensor configuration fine-tuned for Autoware, open-source software for autonomous driving. Tier IV has also developed a conversational AI agent powered by a large language model, enabling intuitive voice interactions for tasks such as destination selection to enhance the ride experience.

In addition to this prototype, Tier IV is running a robotaxi trial in Tokyo and collaborating with a taxi operator on a data collection project to enhance autonomous driving AI.

General News

Chery Platform for Exlantix + Premium Euro Brand

GENERAL NEWS

STERRA - EXLANTIX ES (GEELY IMAGES)

Chery says two premium European brands are vying to use their new electric vehicle (EV) platform, and it's signing a deal with one of them. "Two premium European marques want to use our platform, and a deal will be signed with one of them, a more premium brand than us," said Chery chairman Yin Tongyue in remarks reported by AN Europe.

He confirmed the deal will be signed during his trip to Europe, which began last week. He also confirmed Chery is also in talks with two other brands over possible team-ups. Geely's latest premium EVs are from their premium Exeed brand, marketed under the Sterra sub-brand in China, and set to be called Exlantix models in Europe.

STERRA - EXLANTIX ET

STERRA - EXLANTIX ES

The Chery chairman didn't confirm who any of these brands are; his company already has a joint venture with JLR, and builds vehicles like the Jaguar E-Pace and Land Rover Discovery Sport in China.

As the chairman was talking at an event promoting a new electric SUV, Chery is expected to loan that model's E0X electric vehicle platform. The ES sedan and ET SUV are sized similarly to the Tesla Model S and Model X, and offer dual-motor all-wheel drive powertrains, air suspension, and 800V electrical systems.

In addition to partnering with European brands, Chery is also looking to start building vehicles in Europe – specifically, at a plant in Barcelona, Spain which Nissan shut down in 2021.

In related news, VW announced last year they will jointly design two EVs with Xpeng, and will likely use an Xpeng platform. Audi has confirmed a partnership with MG and SAIC Motor, with reports suggesting they'll use an EV platform from the premium IM Motors brand.

Stellantis has invested €1.5bn in Chinese carmaker Leapmotor, and will have a 51-per-cent stake in a new joint venture firm that will be responsible for the company's global export and distribution network plus manufacturing operations outside of China.

Foxcon, Already A Complete Automotive Story!

GENERAL NEWS

MODEL B IN 2022 (FOXCON IMAGE)

Foxconn entered the automotive industry in 2020, unveiled concept vehicles in 2021, and began production of their Model C, also known as the Luxgen n7, in 2023. Since then, around 12,000 vehicles have been delivered, and Foxtron, the semiconductor manufacturer's automotive brand, is considering expanding internationally. A deal with Mitsubishi and the prospect of partnerships with Nissan and possibly Honda would be key to this expansion.

Foxconn acquired the Lordstown production facility in Ohio to build vehicles for other automakers, but had a rough launch. In addition to failed production runs with Lordstown Motors, Foxconn was also tapped for US manufacturing of Fisker's second BEV model, the Pear. And that saga ended.

Last, Foxconn was assembling all-electric tractors in Ohio for Monarch, but that was over two years ago. With the way this industry moves, two years without any news is enough to get lost in the EV ether. The Foxconn name has re-emerged in recent months as the world's largest electronics manufacturer has been tied to Nissan, Honda, and Mitsubishi (possibly all three) as a potential partner to help build software-defined vehicles.

As reported by Auto News Europe, they have plans about Foxconn's global EV expansion, which includes two models in the US, following a 9 April press conference in which Jun Seki touted the Taiwanese company's potential as a BEV contract manufacturer.

FOXTRON MODEL D, WHICH SHOULD COME TO THE US IN 2027 (PININFARINA IMAGE)

During the presentation, Seki outlined Foxconn's plans for six electric models and buses, proclaiming that the company has the necessary toolbox to design and assemble a full range of EVs. Per Seki, those models will initially be built in Taiwan and shipped worldwide, but Foxconn has the capacity for localized production in different regions, including the US.

Of those six Foxconn models donning the company's "Foxtron" badge, two are expected to come to America: The Model D multi-purpose vehicle, designed by Pininfarina, and the Foxtron Model C crossover, which has been in production for the Taiwanese market since late 2023 as the Luxgen N7.

Foxconn's Model C will hit the US first by late 2025, with the Model D expected to reach the US sometime in 2027. While these models will initially be built overseas and shipped over, Foxconn's top execs shared both models are expected to eventually be built in the US, presumably at the Lordstown facility, although this has not been confirmed.

Foxconn also has plans for several non-US BEVs, including a Model B compact crossover, Model E sedan, Model A compact van, a Model T large bus, and Model U minibus.