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Weekly Newsletter

DVN-I
Automotive Interior

NEWSLETTER #191

Editorial

Interior Surfaces And Finishes At AIEE

LIGNEOS WOOD FINISH (LIGNEOS IMAGE)

AIEE, the Automotive Interiors Expo Europe, is about innovation in texture, color, touch, feel—everything a car occupant experiences and remembers. Specialty finishes are a strong theme at this expo, mostly for car interior design, finish, and decoration. Coatings, surfaces, materials, screen-printing, lighting, haptic technologies, film-insert molding, you name it; it's there.

Sustainability was a major vein at the show, with Ascorium' PU spray skins, and Covestro's door panel using 95 per cent less water than solvent-based products. Amazing new tech, too, like Grewus' haptic technology in a seat which can reproduce vibration and sound, Leggett & Platt with their comfort and massage seating products; Ligneos' wood-based surfaces, seemingly endless interior lighting solutions, and Scays' waste tea-based materials are just a few of the things we saw; in today's in-depth piece you'll have much more detail.

This week Coffee Corner, based on a recent furniture fair in Brussels, shows how our mobile and stationary living spaces are increasingly correlated. It it also feels as if the furniture industry has stolen, at least indirectly, part of our time lived inside our cars thus, an equivalent of a market segment from automotive interiors. Have a look!

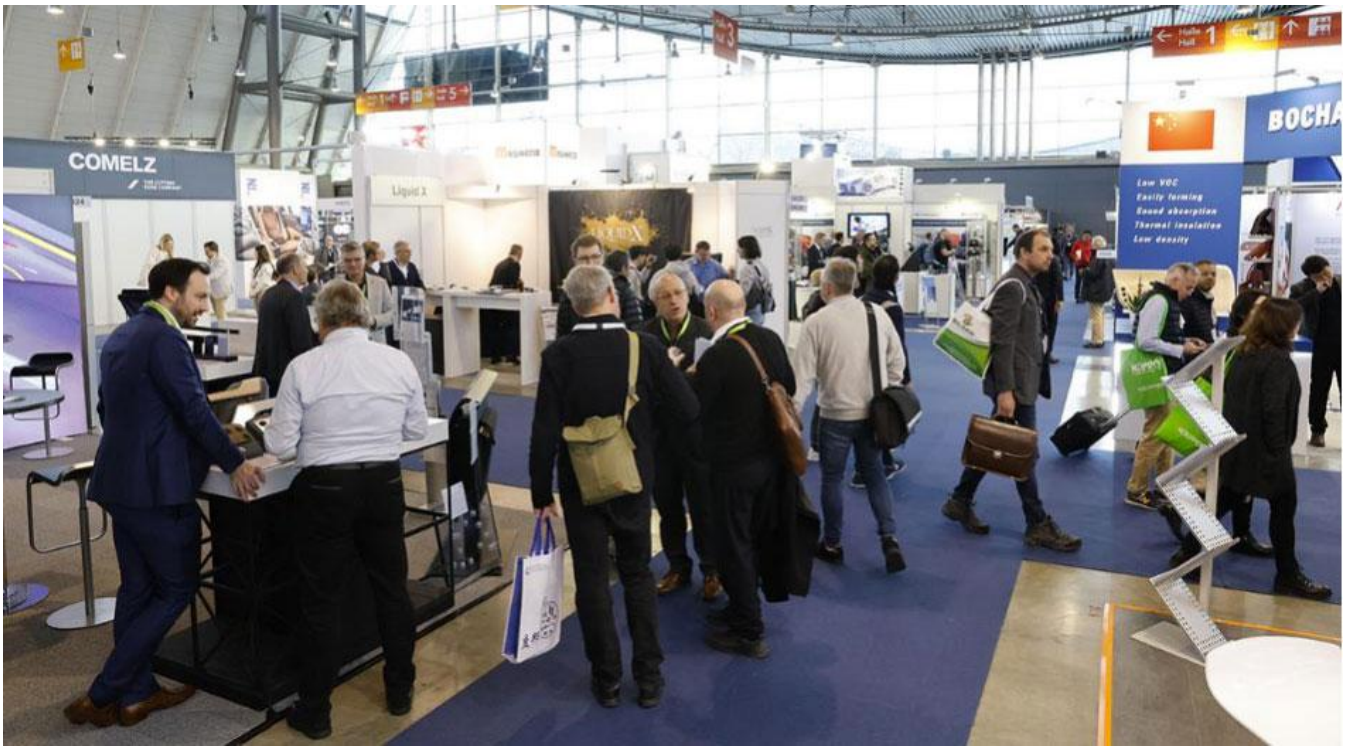
The **Köln Workshop** scheduled for 23-24 April 2024 will include a session on materials and sustainability, as well as a panel discussion about CMF (color, materials, finish) to address how to combine design and appeal with sustainability. We're closing the lecture lineup and booth layout before the year end. Don't miss it; Contact DVN Interior for more details.

Sincerely yours,

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

Auto Interior Expo Europe: Materials, Finishes, Tech



UKI MEDIA & EVENTS IMAGE

Europe's suppliers of automotive interior manufacturing systems and manufacturers of interior components were showcased the latest trends in materials, finishes and technologies, as well as sustainable solutions, from concepts and colors to the processing and surface treatment of interior parts.

UKI MEDIA & EVENTS IMAGE

The fair was held in Stuttgart, a major European manufacturing hub particularly for the automotive industry. This city has built a reputation as Germany's car capital, as it is home to Daimler (Mercedes Benz), and they and Porsche both have headquarters and manufacturing sites here.

AIEE, an annual 3-day event, is about quality, color, texture, touch, feel, and innovation. Specialty finishes are a strong theme of the expo, mostly for car interior design and finish (and decoration) including coatings, surfaces, materials, screen-printing, lighting, haptic technologies, and film insert molding.

Over 125 exhibitors presented their latest innovations and developments in the field of automotive interior design and HMI. The exhibition was mainly attended by tier-1 suppliers and interior design specialists from automakers.

UKI MEDIA & EVENTS IMAGE

Next, let's look at a selection of companies who presented interesting products and technologies at the show.

Abatek

Switzerland-based Abatek is an HMI supplier. They showed their crystal-clear Polyform for innovative solutions, including a closed self-healing surface. Abatek offers surface coverings for functional parts to customized rubber parts, including short-stroke buttons with customized tactile feel and sound design, with and without backlight. They make HMI components with a variety of materials and processes. Decoration examples were on display, such as seamless multifunctional applications comprising optically-guided activation and protection.

Ascorium

ASCORIUM IMAGE

Ascorium`s technology, including laser graining, allows to realize any surface texture—including seams—with optimum precision at nanometer scale. The surfaces are extremely scratch-resistant and, with no additional coatings or protective varnish required, the grain structure and colors are thoroughly stable.

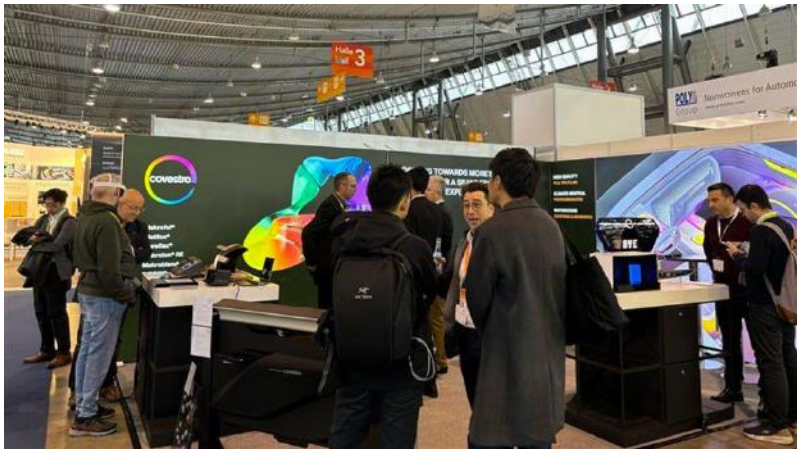
Before application, the mass-colored and highly light-stable polyurethane is in a sprayable liquid state, which cures in the mold. During the spraying process, the chemical reaction produces a three-dimensional, stable polymer network. Even under extreme thermal stress, the dimensional stability is excellent.

They emphasized sustainable use of recycled polyols, and their robot which sprays only where needed, saving time and energy; LCA confirms its value.

Clarex

Clarex showcased their Cell-Cast PMMA sheet. PMMA (polymethyl methacrylate), with outstanding optical properties, excellent uniform thickness (from 0.2mm) and surface smoothness with high transmittance and minimal optical distortion. Automotive applications include speedometers, ADAS, and HUDs. A wide variety of colors, scratch resistance, multiple non-glare textures and special formulations are available, including low water absorption and heat-resistant types.

Covestro



Covestro’s door panel exhibit demonstrates the company's INSQIN water-based polyurethane (PU) coatings, which offer translucent optical properties, good coating adhesion, and deep color effects in door panel covers. This aqueous, low-VOC solution has been developed specifically to enable lower-cost, more sustainable applications for the future requirements of car interiors.

Since no solvent has to be washed out after the INSQIN coating is applied, production takes up to 95 per cent less water compared with substances produced using solvents.
INSQIN’s lower CO_2 emissions and energy consumption can reduce the total CO_2 balance of synthetic material by up to 45 per cent, and offer a nearly odorless indoor air quality. The CO_2 balance can be further improved by using Impranil CQ DLU, which consists of approximately 35 per cent renewable carbon (by weight).

CTAG

CTAG—the Centro Tecnológico de Automoción de Galicia, Automotive Technology Centre of Galicia—showcased four different demonstrators. An advanced sound system based on resonant speakers, with benefits in terms of size, weight, and sound quality. The latest advances in radiative cooling and thermal management of IR radiation displayed in a dashboard mockup monitored by thermographic imaging. A headliner with smart functions powered through flexible printed cables demonstrating applications of electrically conductive dispersions.

Deatex

Since 1982, Italy-based Deatex Group has focused on high-performance nonwoven fabrics for markets including automotive, where they supply products for headliners, pillars, door panels, trunk shelves, seats, and car body covers.

The company's strong market position has been achieved by their very recent development of a full range of sustainable materials, a mix of natural and technological fibers with GRS, FSC, PEFC and compostability certifications.

Elematec

Tokyo-based Elematec presented 'reverse mode' functional film sheets by Kyushu Nanotec Optics, as well as innovative Fresnel screens and glass processed products.

The 'reverse mode' functional film sheet is the first of its kind worldwide. In 'power off' mode, the sheet is perfectly transparent; with 'power on', the dimming function is initiated. Unlike other similar products, it is designed for various automotive applications, such as sunroofs and side windows, due to its excellent thermal resistance properties.

Another feature from Kyushu Nanotec Optics is a black film that offers instant privacy along with a thermal barrier function. It has a unique dye-doped liquid crystal layer; the dyes move along with the LC molecules, achieving higher contrast.
The company's Fresnel screen shows images with deep contrast and brilliant colors, unaffected by light conditions such as interior lighting on/off or sunlight.

Fibertex

At Fibertex Nonwovens, based in Denmark, they create nonwovens and performance materials. They presented a fine nonwoven with a homogeneous, breathable structure, which could replace the traditional foam behind the fabrics of the headliner. It also helps reduce the thickness of the horn, and add acoustic properties thanks to the homogeneous and less air-permeable structure. Another application under study is to replace the thick non-woven at the back of the seat fabric, to reduce thickness and help the acoustics of the seat.

Grewus

GREWUS IMAGE

Grewus has developed a new kind of actuator for haptic feedback, called HapForce.
The smallest, the HapForce 1 is 12.5 × 12.5 × 20mm, with a low resonance frequency of 65 Hz. It is a good choice for steering wheels or small modules with little available installation space.

The HapForce 2 was designed for gaming applications, but its high-quality feedback can also be used in the automotive industry. The strongest feedback generated is 50 Hz, but the usable frequency range is much broader. Its dimensions are 16.6 × 16.6 × 27 mm.

For even heavier applications, the HapForce Ulti comes into play. It is Grewus' strongest actuator, with the lowest resonance frequency of 45 Hz and dimensions of 20.4 × 31.4 × 46mm, and is strong enough to vibrate a whole car seat.

Their expo booth had a seat with actuators to reproduce the vibration and sound of a Porsche, as well as music and massages.

Ionbond IHI Group

Ionbond, part of Japan's IHI Group, provides max-performance PVD (physical vapor deposition), CVD, and PACVD coatings for wear protection, reduced friction, and decoration to replace traditional Chrome plating technology.

Ionbond has introduced their latest black PVD color for ABS plastics, called deep-, piano-, or super-black. It can be applied to 2D and 3D parts, and has been very well received in the high-end automotive market.

Kimoto Optikon

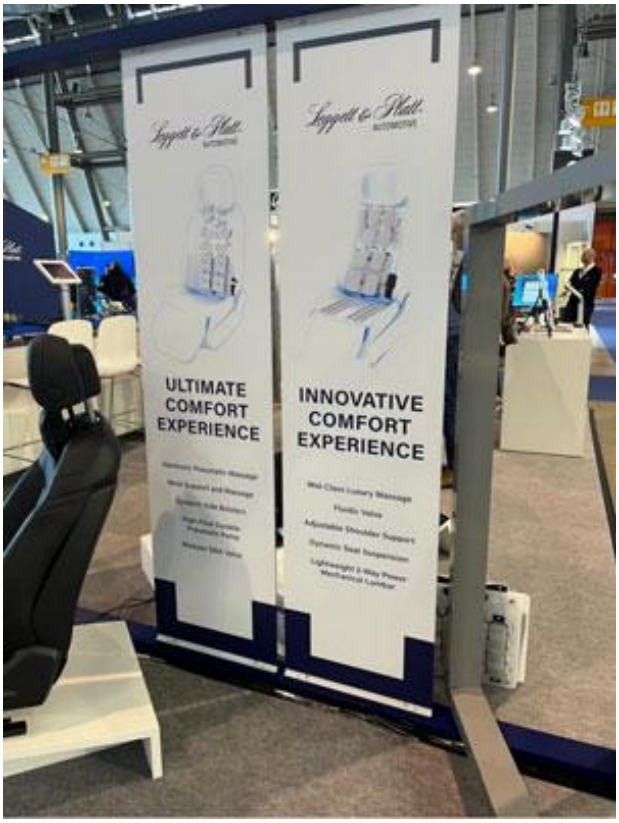
Kimoto Optikon, based in Switzerland, is part of the Japanese Kimoto Group. By chemically coating base films such as PC, PET, TAC and PI, they add functions such as chemical and scratch resistance, light distribution, and light absorption to foils. Applications include the integration of large full-color displays, optical sensors, and surface lighting into vehicle interiors. From flat surfaces to 3D formed parts, Kimoto showcased materials that are formable using IMD/FIM and IML technologies.

Kunststoff-Institut Lüdenscheid is a network, with access to over 400 partners along the entire value chain of the plastics industry.

Its new technology, DraKo, wirelessly supplies operating elements with touch control and LED lighting in a molded part with energy and connect them to higher-level systems. The electronics are placed on a film and then over-molded. The plastic thus protects the sensitive components. The user's input on the control panel is processed within the component and transmitted wirelessly. The use of film enables a high degree of flexibility in the geometry and design of the molded part. The use of high-pressure forming to shape the foils also ensures that all operating and lighting elements are reproducibly positioned in the right place. In addition,

the use of a decorative film on the front offers the possibility of a molded part with a high-quality look and feel.

Leggett & Platt Automotive



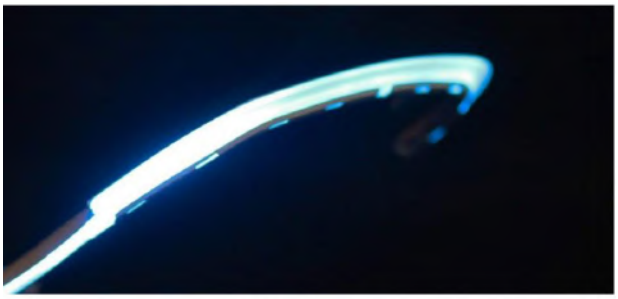
DVN IMAGE

Leggett & Platt Automotive, based in Missouri, USA, is a global supplier of automotive seating comfort and convenience systems. Their Mid-Class Luxury Massage is claimed to be a unique development in mobility comfort. As a result of the company's innovative valve design that operates with reduced electronic complexity, the product provides a luxury massage within a mid-class range of vehicles. The Mid-Class Luxury Massage requires no moving parts, which allows for a slim valve module mounted close to the bladders; this compact design simplifies the assembly process, delivering time and cost savings to customers.

Ligneos

Ligneos is a joint venture between a vehicle interior equipment maker and a supplier of wooden decorations. Founded in 2016 and located near Lake Como in Cantù, Italy, Ligneos offers laminated materials for active surfaces, backlighting, and activating functions in wood and other materials. After the sheets undergo enhancement steps, Ligneos precisely laser-cuts them to meet customer specifications. The final products exhibit exceptional adaptability, conforming to various shapes and surfaces, including small radii and sharp corners. Importantly, the process preserves the visual and tactile properties of natural materials, ensuring the result retains its authentic characteristics.

Luxor Lighting



Luxor Lighting, based in Angouleme, France, is a supplier for the major European automakers.Their portfolio includes:

- Light guide: designed for atmospheric lighting inside a vehicle, this system enables lighting of a specific zone without dazzling the driver. It can be designed in different shapes and colors to adapt to various parts of the vehicle (door, gear lever, dashboard…).
- Specialty lamps which can be positioned all over inside the vehicle, such as the boot or the glove box. They enable lighting a limited zone when the respective door is opened. Initially designed with light bulbs, they are soon to be manufactured with LEDs.

Located between the front seats of the vehicle, this console allows users to store objects out of sight in a lit area.

Marvel Vinyls

Marvel Vinyls' expo booth highlighed CapLight. With 0.4 to 0.9 mm dimensions, the product is PVC with PU coating. It lets light pass through while having an opaque, solid-colored appearance; touch pass-through for touch applications; a variety of colors and textures possible; possibility to be molded or hand wrapped. It meets a variety of customer specifications, including fogging, abrasion, VOC and FR.

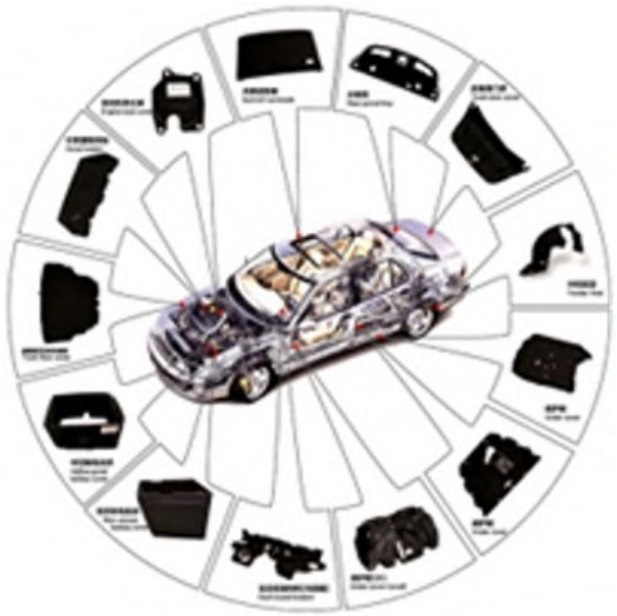
Mebant

Mebant, based in Turkiye, is a foam converter supplying mainly the automotive, and others. The company's product range includes sound, dust and vibration insulators, heat barriers, water sealants and impact absorbers. Its main processes include die-cutting, PU injection molding, EPP molding, thermos-press, thermocompression, thermoforming, ultrasonic and heat welding, and assembly.

San Fang Chemical

San Fang Chemical, based in Taiwan, is one of the largest artificial (TPE) leather manufacturers. Their newest product, ENCRO, is designed for automotive interiors, particularly seat covers. It is made of thermoplastic elastomer and recycled ingredients that have low carbon emissions and non-toxic production. ENCRO offers excellent performance in heat press, stitching, and perforation.

Sanken



Sanken creates innovative interior and exterior parts and materials. The company is researching and developing acoustic materials for new-energy vehicles (BEV) and the carbon neutrality requirements that will be faced in the near future.

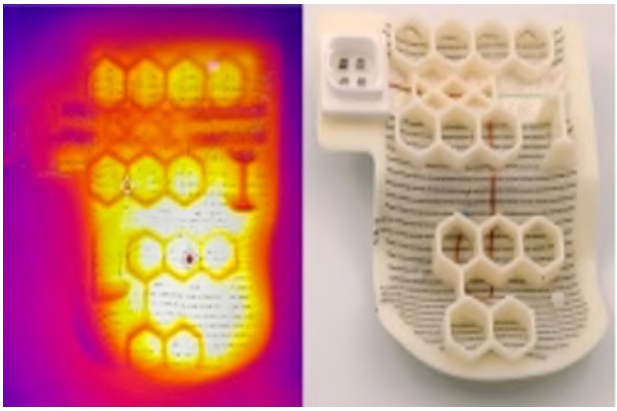
Scays Group

Scays Group, based in Sindelfingen, Germany, showed off thir Wastea: a fully sustainable, vegan, plant- and bio-based new-generation material made from industrial tea waste.

Where once tea waste faced destruction, it now finds a new purpose as Wastea, a suitable automotive material that can be integrated into every sector and product where leather, PU and PVC have traditionally been used. Wastea has passed the hardest tests in the automotive industry, such as lightfastness, UV and abrasion tests.

Scays also showed their latest NGM (new-generation materials) made from rose, lavender, coffee, lemon, lime, pomegranate, hazelnut and peanuts—a wider solution for the sustainable automotive interior market.

Sefar



Swiss-based Sefar makes precision fabrics from monofilaments for the screen printing and filtration markets. Sefar's PowerHeat heating fabric is seamlessly incorporated into the injection molding process, becoming an integral part of the final product. Its inherent translucence makes it the perfect choice for backlighting interior components. Moreover, PowerHeat enables the integration of temperature sensors and power plugs in the same manufacturing step. This single-operation process enhances efficiency and reduces production time.

Yuan Heng Tai (YHT)

YHT, from Taiwan, makes printing high-definition water transfer films for interior decoration. At AIEE, they introduced their new product, IMD Films. YHT's IMD film offers more than just a pattern; after injection molding, the surface offers realistic texture with a hardness of 2H. This harmonious blend of design, texture and durability creates top-tier decorative elements for the automotive industry.

Technology Presentation Stage Program

Day-1 speakers includes representatives from McLaren, Diego Epifanio, sales director at Tabu, Textile Research Institute Thuringia-Vogtland (TITV Greiz), MacDermid Alpha Electronics Solutions, PolyIC, Flabeg Automotive Glass Group, Scays Group and TouchNetix. Topics included:

- Material challenges for next-generation automotive smart surface
- Flax fiber in car interiors - a lightweight and sustainable solution
- Sensitive and high contrast – FOBA´s next generation UV-laser
- Lighting and sensors solutions for new generation car
- McLaren interior design philosophy
- Evolution of display cover glass

And day-2 speakers include Xavier Troquet, head of sales at Twikit Nv; representatives from Actronika, Grewus, CTAG, Kunststoff-Institut Lüdenscheid, Hochschule Reutlingen, and ACSYS Lasertechnik. Topics included:

- The touch of excellence: haptic advancements in automotive UX
- The edge of plastronics
- Cr6-free plastic plating: eco-friendly, state-of the-art plating

- DraKo - wireless contacting of overmolded electronics
- New functional solutions to create a living space in the automotive interior
- Breaking boundaries in automotive design: LFR for seamless laser ablation

Third-day speakers included David Bonillo Martínez, business development manager at ISR Specular Vision; and representatives from JSP, Atotech Deutschland, and Saralon. Topics included:

- Sustainable EPP solutions to meet the Green Deal
- 3D-printed electronics seamless intelligence at hand
- Carbon footprint and sustainability of plating on plastics
- Aesthetic quality control for luxury and smart surfaces in car interiors

Interior News

Mobis Quantum Dot Car Display

INTERIOR NEWS

HYUNDAI MOBIS IMAGE

Hyundai Mobis has developed the world's first quantum dot display for automobiles with local dimming technology, offering a lower-cost alternative to OLED displays commonly found in luxury vehicles.

The new display has a 27-inch curved screen with a slim profile of 14.5 mm, which can be reduced to 10 mm.

By integrating quantum dot color technology with local dimming capabilities, Mobis says they enhance color quality, contrast ratio and glare reduction, rivaling OLED performance at a lower cost.

Local dimming, commonly found in quantum dot light-emitting diode TVs, allows dynamic backlight control in segmented zones to increase contrast and achieve truer blacks in each area of an image. This is especially important for automotive displays, where minimizing glare and maintaining clear visibility are essential for driver safety.

Quantum dots—QLEDs—are known for their brightness and affordability. OLEDs, for their part, are known for their high contrast ratio, slim design, and energy efficiency.

Although QLEDs offer several advantages, they have fallen short of OLEDs in offering wide viewing angles and achieving perfect black tones due to reliance on a layer of quantum dots for illumination, unlike an OLED's capacity to light each pixel independently.

Automotive displays that can achieve perfect black tones not only improve visibility but also allows for a more aesthetically pleasing integration with the car's interior.

Smart Eye Powers Volvo 'Driver Understanding System'

INTERIOR NEWS

SMARTEYE IMAGE

Sweden-based Smart Eye makes Human Insight AI: a technology said to 'understand', support, and predict human behavior in complex environments, like driving a vehicle. Smart Eye provides DMS and interior sensing solutions intended to improve road safety and the mobility experience.

They recently announced that their premium DMS software is included in the new Volvo EX90, as a key component in the Volvo EX90 Driver Understanding System (DUS), which will provide a deeper understanding of the state of the driver to help further enhance traffic safety.

DUS combines the industry's first dual camera with a capacitive steering wheel. Powered by Smart Eye's advanced AI algorithms that analyze driver eye, face, head, and body movements, the system enables a deeper understanding of what's happening with people inside of a vehicle, and in particular when a driver, for some reason, is not entirely concentrated on the driving task. This will allow the Volvo EX90 to warn and act when necessary but also, and just as important, to stay out of the way when the driver does not need assistance.

"We're proud to work with Volvo Cars to deliver advanced road safety technology," said Martin Krantz, CEO and Founder of Smart Eye. "As two Swedish companies committed to stellar safety and impeccable design, this collaboration signifies great progress in an initiative that's been prioritized in Sweden – and globally – for decades: to reduce road fatalities and save lives. The suite of advanced technologies that form the Volvo EX90's driver understanding system ensure the best performance and accuracy, further enhancing safety."

"Smart Eye's leading DMS software is a key component in our Driver Understanding System, where once more, Volvo Cars' state-of-the-art research will further help drivers avoid collisions," said Åsa Haglund, Head of Volvo Cars Safety Center. "For decades, Smart Eye has proven its strength in delivering outstanding measurement technology for driver behavior studies. Bringing that competence to bear directly in our products is a natural next step and tightly aligns with Volvo Cars' commitment to continued innovation for everyone's safety."

Biomyc Mycelium Composite in Kia EV3 Concept

INTERIOR NEWS

Bulgaria-based Biomyc is a design and innovation company designing products and packaging from innovative eco materials and renewables. Experts in working with mycelium composite—a sustainable material made of mushrooms—they constantly explore ways to enhance mycelium composite procured by licensed material producers and design multi-component premium eco-products for luxury and sustainable brands.

Biomyc collaborated with Kia to design and integrate mycelium composite panel into the new EV3 concept car. This partnership is a major step forward in Biomyc's design and R&D for maximum impact.

Marília Biill, Head of CMF Design at Kia Worldwide, says, “Mycelium, which comes from mushroom roots, combines excellent strength with an extremely soft surface. Developing grown materials, a process referred to as bio fabrication, is a major goal for Kia. The use of Mycelium is still at a very early stage, and, as part of Kia’s Sustainability Strategy, we are working with partners to accelerate development of the material".

Fisker's New Small Pear

INTERIOR NEWS

FISKER IMAGES

Fisker wants to add further models alongside their Ocean. Hence, the Pear, a smaller car slated to launch in 2025.

It is a five-door hatchback around four and a half meters long, with a choice of five or six seats. Fisker describes the future model as a crossover. The electric car will have 'transparent' A-pillars. Displays integrated on the inside of the pillars show the driver the viewing area that is actually concealed by the A-pillars.

Another special feature of the Pear is a tailgate that can be lowered in two stages. In the first stage, the rear window can disappear into the lower section of the rear door. In the second stage, this part, painted in the vehicle color, sinks into the substructure of the vehicle together with the rear windows.

The storage space under the hood can be pulled out like a drawer for easy access to storage and cargo space. It will be offered with an insulated option to keep food hot or cold. The cabin itself is designed to be extremely durable, with no fragile moving parts.

A glass roof fitted with solar cells can also be ordered. The seats in the interior can be folded down. Occupants can then watch movies on the sunbathing area via an optional 17-inch rotating screen for entertainment in 'lounge mode'. The five-seat vehicle will have an option to seat six people, with a large two-seat bench replacing the single front passenger seat and center console.

The interior will feature recycled and bio-based materials to help make the Pear a leader in sustainability in its segment. The Pear will also be the basis of Fisker's aim to create a carbon-neutral vehicle by 2027.

BCS-AIS, Ultra Sens Partner for Steering Wheel Touch Systems

INTERIOR NEWS

BCS IMAGE

BCS-AIS (Body Control Systems–Automotive Interface Solutions) a designer, developer and producer of intricate switch and switch modules for automakers, has agreed a collaboration with UltraSense Systems, known for their innovative HMI controller ICs. This strategic partnership aims to introduce advanced solid-surface touch systems with multi-mode sensing capabilities into steering wheels.

The UltraSense TouchPoint Q's QuadForce architecture uses a MEMS piezoelectric process and integrates four microscopic strain sensors into each TouchPoint controller. They tolerate low and high temperatures and mechanical and ageing stresses better than other force-sensing technologies, and offer calibratable force thresholds customized for specific uses.

Production is scheduled to commence before the end of 2023.

Geely Design Puts 'People First'

INTERIOR NEWS

Geely Design firmly adheres to the principle of 'people first', and uses design wisely to satisfy high-perception users with the most diverse demands.

To explore the upper limit of driving safety in the era of intelligent large screens, Geely Design has conducted repeated research on various driving scenarios, considering sensory experience and driving safety. Striving for the high 'focus rate' of driving/road information area and 'access rate' of blind operation area, Geely Design optimizes the large screen design solution from four dimensions: screen height, vertical depth, adaptation angle, and response speed. Prioritizing safety as the utmost importance, Geely Design challenges imperfections a thousand times, breaking through numerous difficulties in industry technology and mass production processes, truly bringing users a more convenient and safer intelligent interactive experience.

Geely Auto Group Vice President Chen Zheng says, "Only by persistently fighting against entropy increase in the design process, without compromising or giving up, can the value of a car not be diminished".

The Design Lounge

Lounge and Car Interiors

THE DESIGN LOUNGE

COFFEE CORNER
DVN
Interior

By Athanassios Tubidis

‘The future is furniture’ was the title of this year’s edition of Brussels furniture fair (Nov23), with furniture misspelled with an ‘a’ as in nature (furnature), indeed, employing sustainable materials and practices as one of the major global trends across industry sectors. Nevertheless, the stunning rise of the furniture industry within the last three years indicates that anything furniture is much more than just a trend, seen not anymore as an object (ie chair, couch, table) but rather as the resulting environment and living space, a proper world-making. On the flip-side automotive interiors, that are gradually becoming less automotive and more interiors, evolve on the idea of inhabiting motion thus ‘design lounge’ becomes an appropriate term for describing the future trends of car interiors and new itinerant or not habitats.



The global furniture market is expected to grow from US $652bn in 2023 to $855bn by 2028. The pandemic drove around 58 per cent of the world's population to adhere to the stay-at-home policy for an extended period, motivating customers to optimize their interiors in response to the increased time spent at home.

With the most advanced automotive tech keyboards, joysticks, controllers, ergonomic pads, bolsters, armrests in our houses, we realize that domestic comfort invaded automotive interiors, like flat screens of all sizes and resolutions, lounge chairs, ambience mood lighting, sound-systems, and infinite choice of color and trim applications. With the increase of home office in the post-pandemic world, we enter a new niche, both static and itinerant. It is not just about pointing out similarities or one industry influencing another, but a new lifestyle as a whole. Our living ‘car & home interior’ spaces are evermore correlated. But it also feels as if the furniture industry has stolen, at least indirectly, part of our time lived inside our cars thus, an equivalent of a market segment from automotive interiors.



Making best use of space is a well-known car interior design practice. The furniture market is projected to grow further also due to increased urbanization, the rise of residential and commercial buildings, and the demand for multi-functional furniture that maximize space use. In addition, the prevalence of computer related lifestyle is fueling a desire for better-designed furniture and inevitably, automotive R&D practices are benchmarked for their long-acquired knowledge in ergonomics but also overall design quality and execution. Furthermore, the ubiquity of portable smart devices has resulted in cheaper internet costs and an exponential increase of online buyers worldwide while, several businesses offer designing-your-own-interior services using online designer software. Finally, this growth results from easier access to financing for consumer durables and increased awareness of international furniture products. The impressive growth of the global furniture market is evidence to consumers' rising demand for quality designs that serve both form and function.


HHHHlfard and soft, veneered, and upholstered surfaces proposed in a vast spectrum of color harmonies, were omnipresent at the show floor, and we could easily see future interior design trends pronounced through four dominant sectors.


Wood Precious. Wood seemed to blend well with sleek glass surfaces for a stylish transition from warm and traditional to contemporary and hi-tech screen technology, with entire backlit glass cabinet doors converting into TVs or touch pads. From robust oak bookshelves to smooth acacia coffee tables, wooden furniture expressed both innovation and time-earned elegance.



Bespoke. If homes are an extension of one's persona, luxury furniture is its definitive voice. Extraordinary designs, premium materials, and superior comfort Exceptional and authenticity stands for the growing customer desire for bespoke, high-quality pieces.



Work culture. As companies strive to create friendly and productive work environments, the current global work culture trends are predicated on the office furniture market that paves the way for ergonomics and style to go hand-in-hand.





Online. As previously mentioned, the online furniture market is the one that shaped the very anatomy of modern-day furniture retailing, with its endless variety offers fueling the exponential growth.


Wandering into the inspiring world of CMF trends, the resurgence of bold, comforting colors like burnt orange and avocado, enhanced many interior designs, along with a renewed affection for textures and daring prints. A growing preference for organic shapes and curvy furniture, aiming to a softer, homely dimension of inner spaces, was equally prominent.



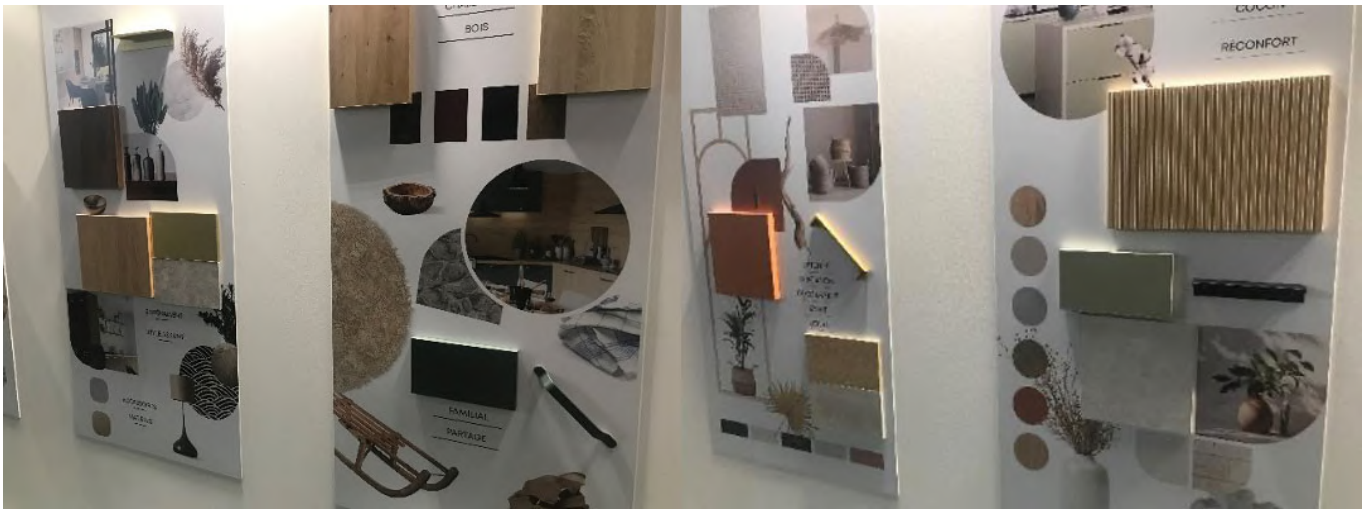









Whether vibrant, bold colors, reclaimed wood, or comfort-focused seating, are all trends that guide home interior and lifestyle choices, and have the power to transform, not just interior spaces but the living experience within.



Besides just numbers these forecasts give the flair of evolving consumer tastes, technological advancements, and a buoyant market that’s firmly invested in offering the best of design and functionality. The furniture industry's future lies in its versatility – a remarkable ability to adapt to our novel indoors lifestyles on a synchronized dialog and exchange with automotive design trends, while retaining its inherent charm.

News Mobility

Hyundai Builds First Robotaxis

NEWS MOBILITY

HYUNDAI IMAGE

After a test phase lasting over a year, the Ioniq 5 Robotaxi has been certified by Hyundai according to US standards. Hyundai has started building the Ioniq 5 Robotaxi at their newly established Innovation Center in Singapore. The driverless production model was developed by the joint venture Motional and will be used in the USA from next year.

Hyundai says the L^4 vehicle meets US safety standards; prototypes were tested for over a year in Singapore and America.

Hyundai in Singapore uses automation technology with real-time monitoring and data evaluation for better and more flexible production. Testing facilities and a calibration center are available for the production of autonomous vehicles.

At the Autonomous Vehicle Integration Center, diagnostic, software development, calibration and validation tasks are carried out to ensure the full functionality of autonomous vehicles.

The first vehicles produced in Singapore have already been taken to Motional's US plant. There they undergo further testing and safety processes.

Meanwhile, in California, Cruise is still banned from driving any further pre-series vehicles of the Robotaxi Origin. Production of the vehicle, which was jointly designed by General Motors and Honda, has been suspended as a result.

General News

BYD, MG in 2024 Geneva Auto Show

GENERAL NEWS

BYD Tang (BYD image)

MG HS (MG image)

The Geneva Motor Show 2024 will run from 27 February to 3 March, with press day on 26 February. Two top Chinese brands—BYD and MG—could help to make up for the loss of some top automakers such as VW, Stellantis, and BMW.

BYD and MG would join Renault Group at the exhibition, which has not been held since 2019 after the 2020 show was abruptly cancelled at the start of the COVID-19 pandemic. Attempts to revive the show in the past three years failed because of lack of interest from automakers.

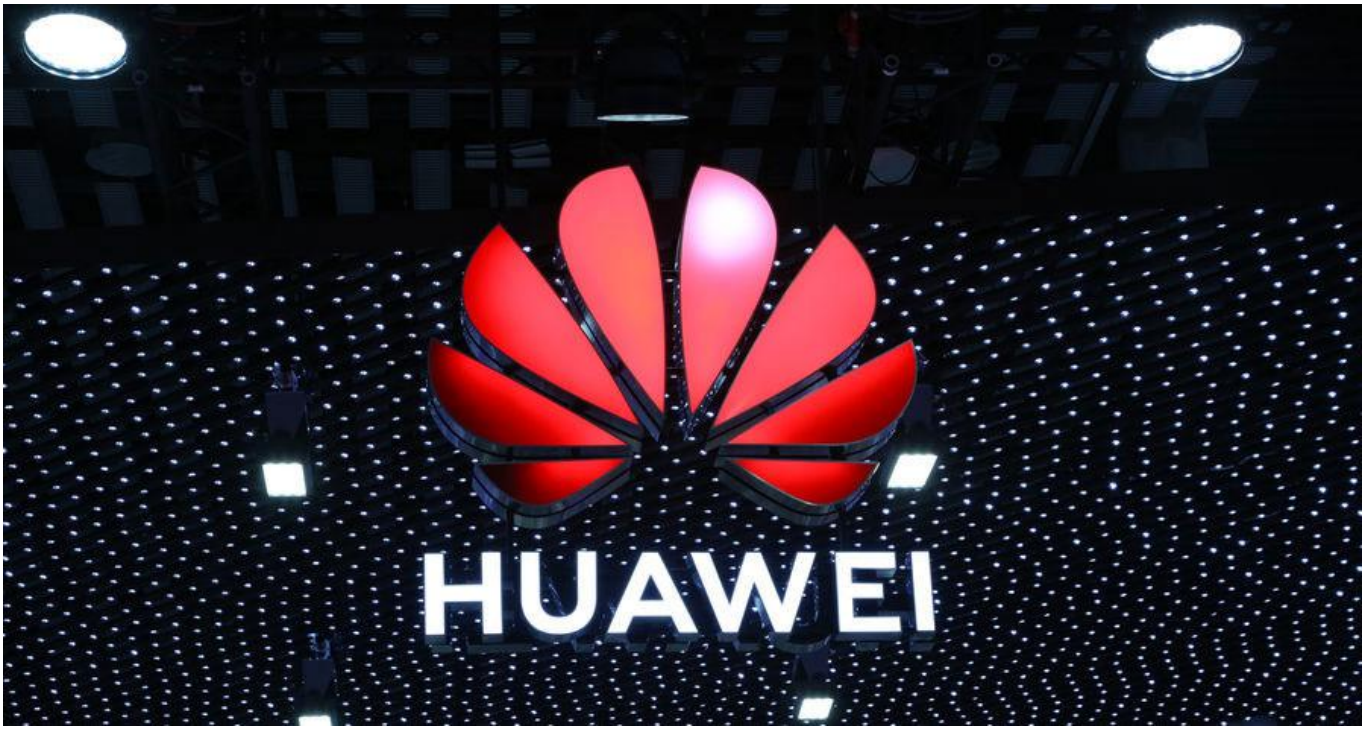
BYD confirmed to Automotive News Europe they will be at the 2024 show. In China, BYD—close to overtaking Tesla as the top seller of BEVs—aims to raise their EV sales in Europe to 800,000 units by 2030, taking a 10 per cent market share. Their European sales were just 6,777 units through October.

MG Motor, the top-selling Chinese brand in Europe, also is said to have plans to take part in the show, though they have not officially confirmed it. MG, owned by SAIC, had European sales of 170,552 units in the first 10 months of 2023.

At the 2019 show, Chinese companies' presence was minimal. Since then, the country's automakers have been launching EVs in Europe with longer ranges and advanced software features, pressing European and Asian competitors amid the region's expensive and profit-eating electrification transition.

Huawei in Joint Venture with Changan

GENERAL NEWS



HUAWEI IMAGE

Chinese tech group Huawei and Chinese state-owned automaker Changan are founding a new joint venture for assistance systems, smart cockpits and other digital automotive products.

Huawei will contribute most of their automotive business to the new joint venture, 40 per cent of which will be owned by Changan. According to a press release issued by Huawei, the new company will be active in the "research and development, production, sales and service of intelligent automotive systems and component solutions"—a new competitor to the likes of Bosch and Continental.

Huawei is transferring their Intelligent Automotive Solutions business unit, founded four years ago, to the new joint venture. IAS, also known in the industry as Huawei's 'smart car' business unit, develops and builds systems for autonomous driving, assistance systems, smart cockpits and platforms for connected driving as well as predictive maintenance technology, among other things.

According to last year's annual report, Huawei has so far invested C¥20bn (around €2.7bn) in their smart car unit. The R&D team has several thousand employees. The head of Huawei's auto parts business, Yu Chengdong, once revealed that his company invests around C¥10bn (€1.3bn) annually in the research and development of automotive technology. The Chinese trade journal Paicaijing reports that more than 70 per cent of this is to be spent on autonomous driving.

The state-owned car manufacturer Changan is clearly hoping to benefit from the new joint venture in its own way. It is itself still in the midst of the transformation towards electromobility and connected cars, and can urgently use the digital expertise of Huawei's automotive division.

Huawei and Changan have already jointly developed and launched an electric car, the Avatr. However, sales figures such as those of the Avatr are still very small compared to the Chinese market leader BYD. Therefore, both partners have invited other Chinese automakers to participate in their new joint venture. They want to build an 'open platform' for electric and intelligent driving in China, under the leadership of the 'locomotive' Huawei, said Yu Chengdong, head of the automotive parts division at Huawei.