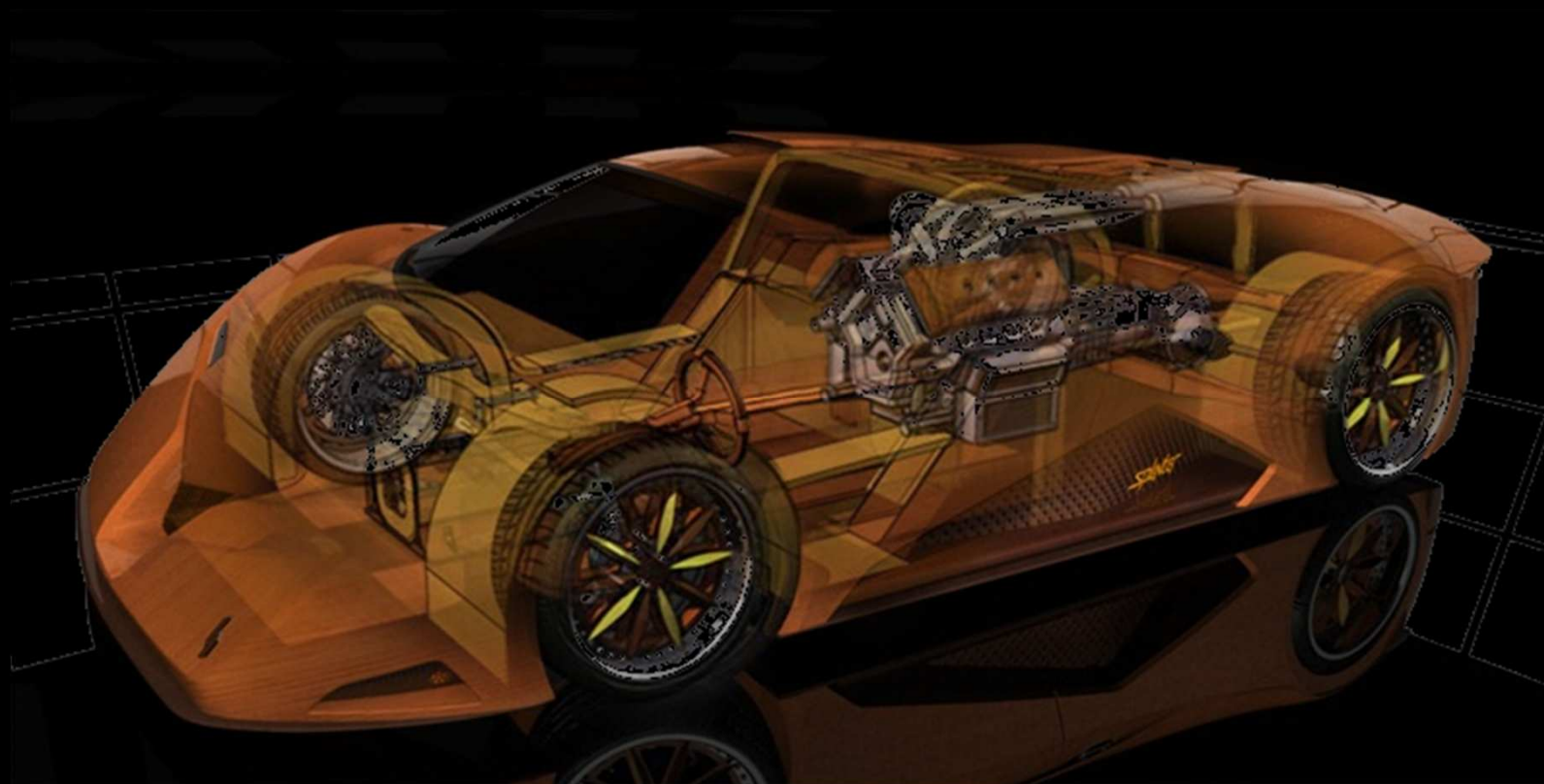


February 2012 Edition

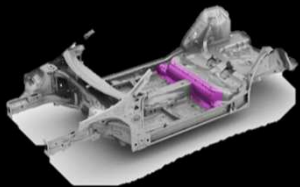
DAuto News Letter



Design engineers turn designs into reality. Without them, a great idea but nothing more than, well, a great idea.

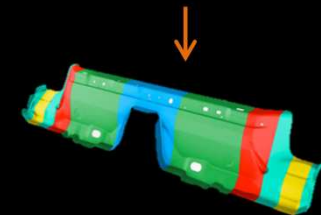
Volkswagen Modular Transverse Matrix (MQB)

Volkswagen Group has announced the introduction of a new vehicle architecture that optimizes standardization and use of technologies, extending from compact cars to large SUVs and sedans.







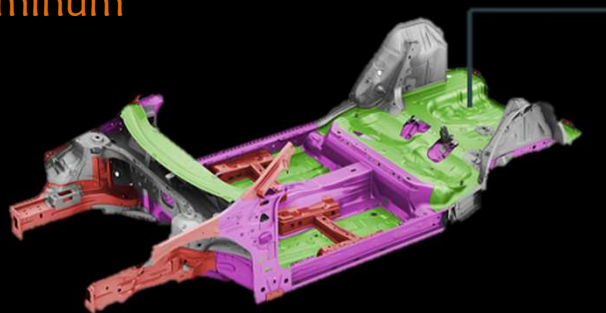
This year Volkswagen Group will be introducing the Modular Transverse Matrix – the German acronym is MQB for the Volkswagen, Audi, ŠKODA and SEAT brands. The MQB strategy optimizes the design and production of future automobiles with transverse-mounted engines by standardizing many vehicle component parameters across brands and vehicle classes, and by allowing access to luxury class technologies for high-volume models. The first new vehicles to be produced based on the MQB will be the successor to the Audi A3 and the next generation Golf.

Tailor Rolled Blank:
1 Part. 5 Thickness



Volkswagen Modular Transverse Matrix (MQB)

-  Steel
-  High- strength steel
-  Ultra High-strength steel, Hot Formed
-  Aluminum



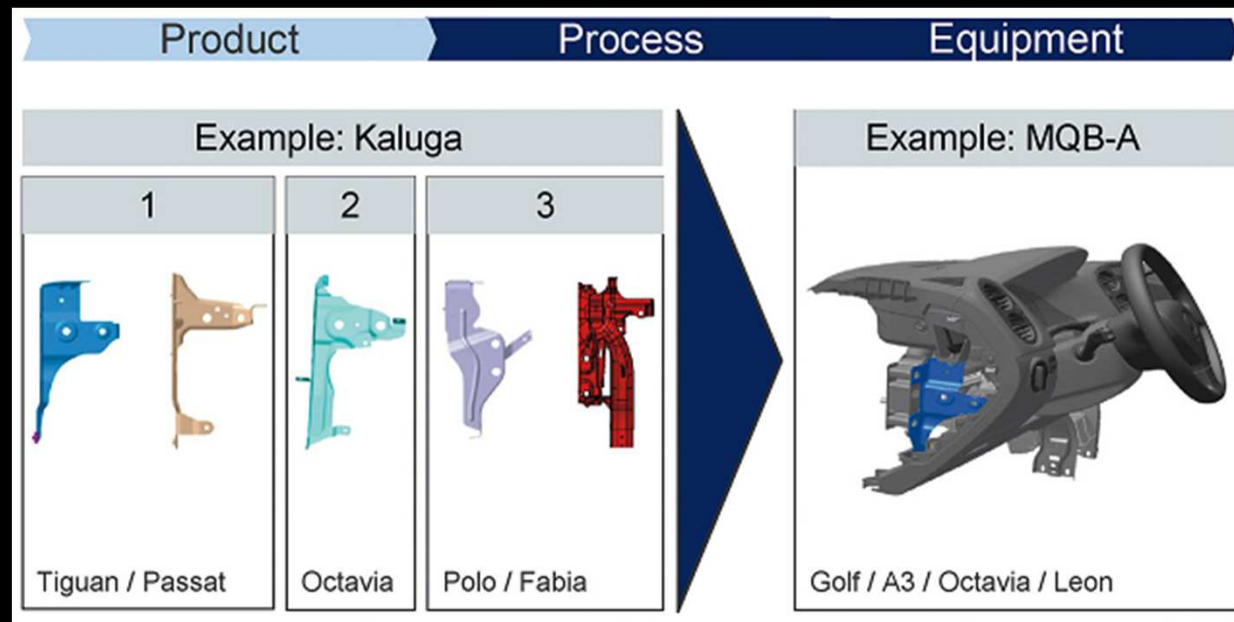
One of the prominent characteristics of the Modular Transverse Matrix is the uniform mounting position of all engines. Two systems integrated in the MQB strategy which play a key role here are the modular petrol engine system (MOB) with the new EA211 engine series (40 kW / 60 PS to 110 kW / 150 PS) – this range includes the world's first four-cylinder engine with cylinder deactivation (ACT) – and the modular diesel engine system (MDB) with the also new EA288 engine series (66 kW / 90 PS to 140 kW / 190 PS).

The MQB extends from the A0 to the B segment. At the Volkswagen brand, for example, it covers the following models: Polo, Beetle, Golf, Scirocco, Jetta, Tiguan, Touran, Sharan, Passat and Volkswagen CC. In the future, all of these models could theoretically be produced on the same assembly line – despite their different wheelbases and track widths. It will be possible to produce MQB models of different brands together.



0, 4 l/100 Km
fuel savings
8 g less
CO₂/Km

Innovation – Cylinder deactivation
Innovation made by Volkswagen



In one fell swoop, the new engine series will reduce the Group's engine and gearbox variants in the MQB system by approximately 90 per cent. Without any negative effects. On the contrary, in addition to standardizing conventional internal combustion engines, the MQB also enables an identical mounting position for all current alternative drive concepts without limitations from natural gas and hybrid versions to the pure electric drive. Volkswagen has already announced the launch of the latter within the MQB in 2013 in the new Golf Blue-e-Motion. Within the Group, the MQB developed under the auspices of the Volkswagen brand is supplemented by the Modular Longitudinal System (MLB) from Audi, the Modular Standard System (MSB) with Porsche as the competence centre and finally the 'New Small Family' – the most compact vehicle model series with the Volkswagen up!, SEAT Mii and SKODA Citigo.

Mazda develops Lightweight Resin Material

Mazda in partnership with Japan Polypropylene Corporation has developed a resin material that allows a 20% weight reduction on vehicle parts such as front and rear bumpers.

Using this material, the parts manufactured are thinner than those using conventional resin, resulting in a significant reduction in the resin required to manufacture parts.

When the material is used for both front and rear bumpers, it contributes to weight reduction of approximately 20%. In the bumper production process, this reduced thickness allows for a shorter cooling period for moulding, and by using computer-aided engineering (CAE) technology, the fluidity of the resin material has also been optimized.

As a result, bumper moulding time, previously 60 seconds, has been halved to 30 seconds, leading to major reductions in the amount of energy consumed in the production process.

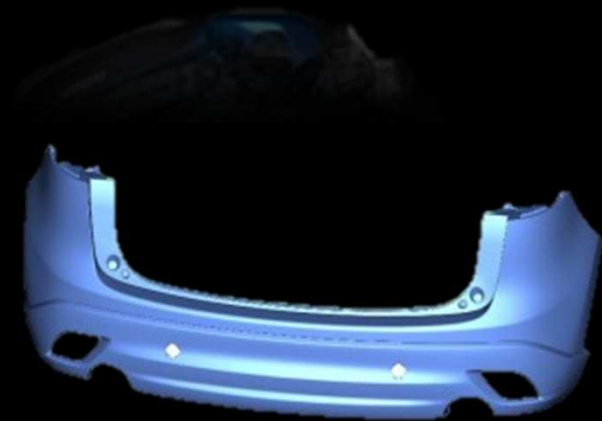


Mazda develops Lightweight Resin Material



Mazda plans to adopt the lightest bumpers in the class using this resin material in the all-new Mazda CX-5 SUV to go on sale this spring, as well as other upcoming new models.

Bumper weight has a major impact on fuel economy and driving performance. On the other hand, bumpers are also multi-functional requiring both the rigidity to absorb impact, and the moulding and painting properties suitable for excellent exterior design.



Mazda blended two components found in polypropylene and rubber, the constituents of resin, that have different properties, and succeeded in distributing them in a double-layer structure in line with the required function for the surface and the inside of the base bumper material.

As a result of this achievement, the surface has excellent paint film adhesion and the inner section retains high rigidity and impact absorption, with reduced thickness.

Edgar Heinrich appointed BMW Motorrad Head of Design



Edgar Heinrich has been appointed head of the BMW Group Motorcycle Design Studio, effective July 1st 2012. He succeeds David Robb.

About Edgar Heinrich

After completing his university degree in design, Edgar Heinrich started his career as a motorcycle designer with BMW back in 1986. Within the BMW Group's BMW Motorrad Design Studio he was Head of Vehicle Design Motorcycles under the overall direction of David Robb from 2007 to 2009. In July 2009 his career took him to India. As Vice President Product Design with the Indian vehicle manufacturer Bajaj Auto LTD he currently heads up the styling and model studio, responsible for brand definition and brand strategies for two-wheel and four-wheel design. During his time with BMW Motorrad, Edgar Heinrich was responsible for such vehicles as the first 4-valve boxer models R 1100 RS and RT, the K 1200 S and R, the HP Megamoto and the victorious Paris-Dakar racing machines. The successful R 1150 GS and R 1200 GS were also created on his drawing board. Under his direction, the motorcycle design team created the S 1000 RR, the F 800 / 650 series, the G 450 X and also the BMW Custom Concept study. Heinrich was even involved at the start of the design development of the 6-cylinder touring bikes and the new maxi-scooters.

Edgar Heinrich appointed BMW Motorrad Head of Design



Edgar Heinrich (53) has commented: “I am very pleased to be returning to BMW Motorrad and having the great opportunity to be involved in shaping the two-wheel future of the BMW Group with an outstanding team.”

“Edgar Heinrich is an excellent motorcycle designer and passionate motorcyclist who has already made key contributions to BMW Motorrad design in the course of his many years of experience.”



Nissan Invitation Concept

Nissan has revealed the first details of the Invitation Concept, that previews the upcoming B-segment compact hatchback, set to go on sale in 2013.



The near-production concept will be unveiled at the upcoming Geneva International Motor Show and is expected to be launched in 2013.



The Invitation will further expand Nissan's portfolio in the B-segment, joining the Micra city car and the Juke crossover.



The exterior has a one-box-like layout, with a very short front end and an arched, dynamic roofline, which ends with a hint of a spoiler, underlined by the window graphics which rises upwards in the rear section.



Nissan Invitation Concept



The interior is essential and features a modern and original light-grey / dark blue color scheme, with the orange stripes on the seats visually recalls the exterior body color.



The side of the car is dominated by a distinctive character line, known internally as the 'Squash Line', which contributes to the overall dynamism. At the rear the large wheel-arches emphasize the car's stance, while the carbon fiber diffuser – which matches the texture of the wheels – and the rhomboid-shaped exhausts express a sporty character.

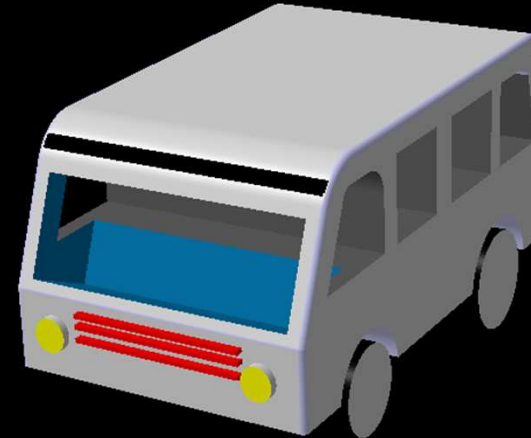
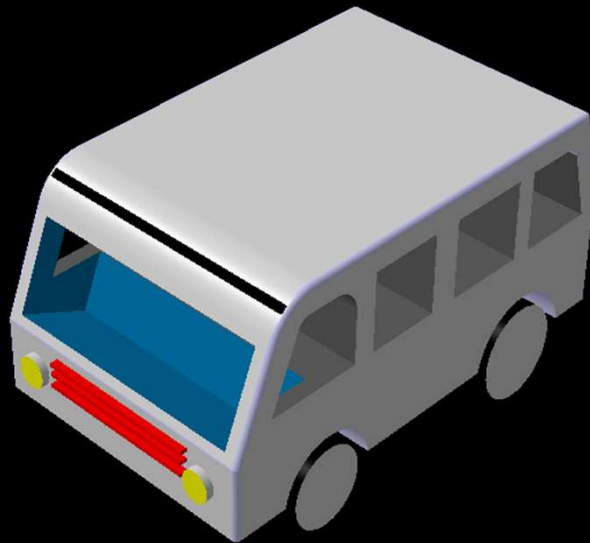


The surfaces of the dashboard and the door panels have treatment similar to the exterior, with smooth curved lines and sharp creases spanning along their length.

From a technical standpoint, Nissan is aiming at an ultra-low CO₂ emission target of under 100g/km for the entry-level model. The Invitation will also be equipped with some advanced safety features, including the Around View Monitor (AVM) technology – seen for the first time on a B-segment car – and the Safety Shield Technologies, which interacts with the driving environment keeping the driver aware of what is happening around the car.

Student's Corner

News from DAuto Family



This contrive has been prepared and envisioned by Randhir Kumar one of the DAuto CAD School student during the period of Software Training on CATIA V5.

News from DAuto Family

Industrial Visit :

Grab the opportunity to get reserve your seat for Industrial Visit, that too free of cost.

Those who have chosen BE for making their career or those who are planning for, may contact.

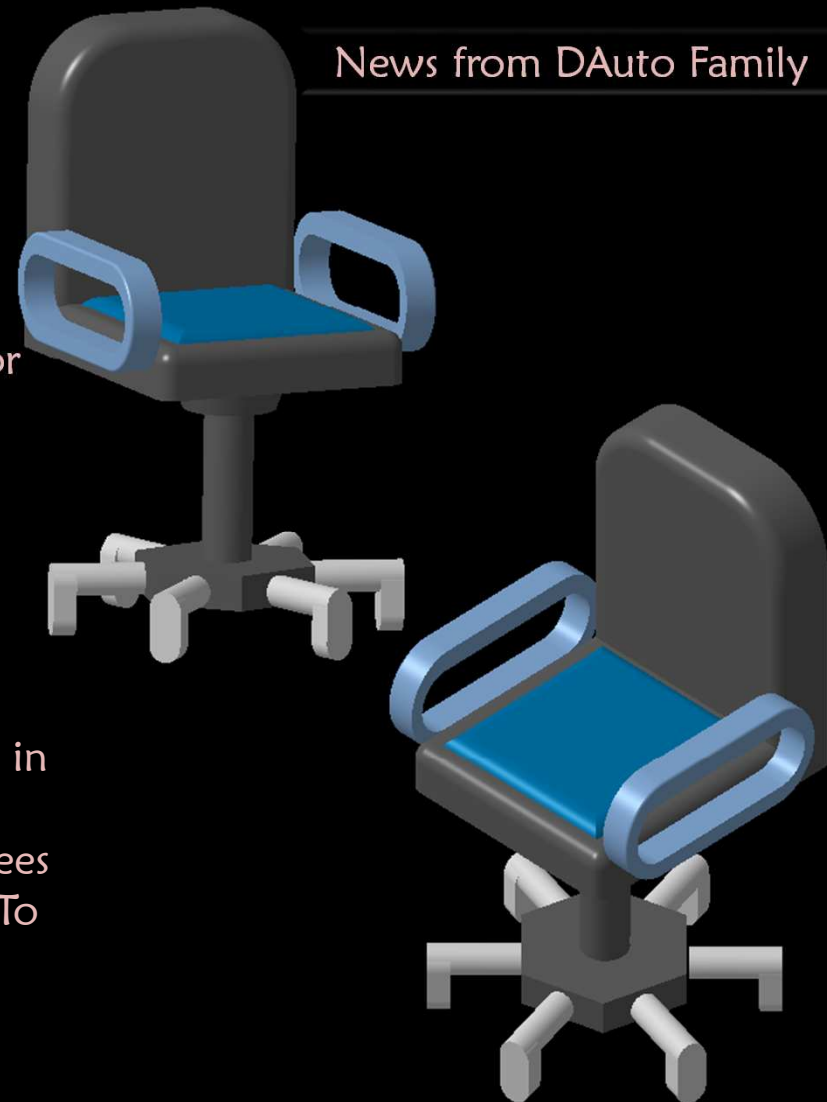
Also special visits for professional is available to get acquaintance.

Special Class on Design & Development:

Mr. Vikas Pandey who is having a decade experience in the Field of Research, Design & Development of Automotive, will be available to facilitate the attendees regarding opportunities in the same field at DAuto. To attend the Class you can enroll yourself via below furnished details.

9752006008/ 9981500100

E-mail us at: training@dauto.co.in



Chairs Designed on CATIA V5

Thank You !!
www.dauto.co.in