PRESS RELEASE
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Valeo unveils innovations for cleaner and safer mobility on the Automotive Engineering Exposition 2021 Online

At the first edition of the Automotive Engineering Exposition 2021 Online from May 26 to July 30, Valeo is unveiling innovations in response to today's major mobility challenges: Autonomous driving and Electrification.

For autonomous driving, Valeo has developed an accurate localization and 3D High Definition mapping update solution called Valeo Drive4U™ Locate. Without accurate Localization, the automated driving system may have troubles such as overshooting a left or right turn, stop beyond the traffic stop line and miss pedestrian crossing. Valeo Drive4U™ Locate offers centimeter-level localization accuracy (within 12 cm) in urban environments using only a standard GNSS and Valeo SCALA® LiDAR.

On February 25, 2021, Valeo and Dynamic Map Platform (hereunder DMP) announced the partnership to develop high precision localization and map update technologies in aim of jointly providing services. DMP develops high precision 3D High Definition (HD) maps and point cloud maps to realize ADAS and autonomous driving with required safety and comfort. Valeo develops sensors and systems for ADAS and autonomous driving system including a high precision localization and mapping system.

Valeo also unveils Near Field LiDAR, which detects the full shape of objects and obstacles, especially in blind spots and at close range. Ideal for low-speed maneuvering, Near Field LiDAR creates a 3D near-field cocoon to complement camera and radar detection. While the Valeo SCALA is a mechanical LiDAR, scans the environment with rotating mirrors distributing the pulsed light, the Near Field LiDAR uses Flashing light to capture a scene in total. By doing so, it
delivers a high resolution image-like picture of the surroundings. The Near Field LiDAR has a wide field of view by capturing 78°vertical and 110°horizontal, as close as 5 cm and as far as 30 m. Thanks to the compact format, it is easy to integrate all around the vehicle.

At a time when mobility is taking on new forms and new vehicles are appearing, such as droids and other small delivery robots, Valeo is rolling out its ready-to-use technologies that can be integrated into the new driverless vehicles. The **Valeo Mobility Kit** consists of sensors, electronic control units and algorithms. This is how driverless logistics solutions, benefiting from Valeo’s “Plug & Play” perception systems (operational as soon as they are installed), can take shape. With these solutions, new businesses that are based on proven technologies with automotive quality and reliability can be created, and at affordable costs thanks to large-scale production. Users can select 4 kinds of sensors (Ultrasonic sensors, Fisheye cameras, Valeo SCALA Laser Scanner and Near Field LiDARs).

For the Electrification, Valeo developed **48V four-wheel drive electric light truck demo car** jointly with Gunma University CRANTS. Thanks to the Valeo 48V system, the 4WD EV performs an excellent acceleration and runs from starting at an affordable price. The 48V 4WD EV is equipped with two 15kW Valeo 48V electric motors (eDrive), one on the front and the other on the rear axle, and one DC / DC converter. The 48V system can realize 4WD EV with excellent acceleration performance and four-wheel drive capability at a reasonable price, answering perfectly the requests of a clean, robust and reliable EV light truck. In addition, the Valeo 48v EV eDrive system will also fit the new small new mobility vehicle category appearing in the near future in Japan.

For Safer Mobility, Valeo brings to the Aftermarket its latest O.E. innovation: **Valeo AquaBlade(TM) Retrofit Kit**. AquaBlade(TM) is a revolutionary wiper system that cleans the window directly through a number of small holes built along the entire length of the wiper blade, instead of spraying the washer fluid onto the wide area of the windshield. This ensures safety by not obstructing the driver's view while cleaning the windshield. With Valeo AquaBlade(TM) Retrofit kit, you can easily upgrade to AquaBlade(TM) while leveraging your existing washer system. No additional washer tank or pump are required and you can replace any existing blade type with AquaBlade(TM) blades. The working time is about 30 minutes and it can be easily installed. The AquaBlade(TM) retrofit kit has already been put to practical use in Europe and is being prepared for sale in Japan through car dealers.
Valeo is also presenting its **Air Quality products** which offer drivers and passengers a healthy cabin.

**Wasabi d’air** diffuses the synthetic antibacterial component of wasabi into the air conditioner and suppresses the action of the generated microorganisms. This makes it possible to reduce the number of bacteria that cause odors to 1/100 (in-house survey). In addition, "Wasabi d’air" can be easily attached to most vehicles by simply clipping it to the air conditioner filter. By winning the 1st place in the air freshener/deodorant category of the "Minkara Parts of the Year Annual Award" for the third consecutive year since 2017, Wasabi d’air have been inducted into the Hall of Fame.

Valeo also presents **Cabin Air Filter Polyphenol**. By adhering natural polyphenols to the surface of the cabin air filter, not only high dust collection performance but also the antioxidant action of tannin polyphenols suppresses allergen substances such as mites, cedar pollen, dogs and cats. It also has the function of suppressing influenza virus, feline calicivirus, and mold.