

DuPont Global Centers of Excellence for Advanced Engineering

dEVELOP with DuPont From concept to commercialization



Accelerating solutions to market



The ability to accelerate solutions is more important than ever in the fast-paced and ever-evolving automotive industry. The changing landscape is driven by increasing urbanization, reducing emissions and demand for more advanced vehicles that don't compromise on safety or performance.

DuPont has global Centers of Excellence (COE), along with other technical and R&D centers, that provide advanced engineering expertise to help increase your confidence in working together to develop adhesive technology solutions quickly that support mobility today and tomorrow.

Not all materials are created equal



The key differentiator between specifying a material and specifying a solution is advanced engineering. At DuPont, our capabilities set us apart. Experts at our COEs, technical and R&D centers concentrate on specific challenges that can be addressed by disciplines that allow for:

- Accelerated assessment of important factors like reliability, performance, cost optimization, time-to-market, and consumer appeal (safety, comfort, durability)
- Fast application development to help validate individual new concepts or refine existing ones in concise timeframes

We have pilot-scale capabilities and use the same methodologies as OEMs and Tiers including:

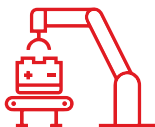
- Ideation enhanced by VR, AR, 3D printing and prototyping
- Application testing (electrical, safety, thermal, mechanical, rheological)
- Analytical lab (tomography, thermal conductivity, electrical properties, elemental analysis, chemical separations, thermal and thermomechanical characterization)
- Advanced simulation tools for design and correlation analysis (CAE/CAD)
- Scale-up pilot plant capability – including optimization of process efficiencies that make our solutions high-volume manufacturing capable using industry standard equipment

To further support demand in all regions, there is interaction between our COEs and other DuPont technical and R&D centers worldwide.

Key areas of focus

DuPont adhesive technologies have been market leaders for glass, structural, and multi-substrate bonding of vehicle components and structures for decades. Our experts are ready to use our know-how to meet your biggest challenges because at DuPont, we believe that collaboration creates the strongest bonds.

Battery Assembly



Ask us how we can help you build a better battery. Gain battery case structural integrity, durability, ease of cell-to-cell, cell-to-pack and other bonding configurations, and sealing options that allow for ease of serviceability.

Battery Thermal Management



Work with us to help ensure safe operation while achieving faster charging, longer range, improved hot and cold weather performance, increased reliability, durability and longer service life.

Body Assembly



Use our capabilities to create bonding solutions that improve vehicle structural integrity, durability, crashworthiness, lightweighting, NVH performance and body assembly efficiencies.

Wide Range of Expertise

DuPont COEs, along with other technical and R&D centers, are uniquely equipped to apply engineering principles to adhesive technology material science to help you develop application solutions that perform.

Advanced material testing

- Advanced mechanical characterization specifically suited for engineering analysis
- High-rate testing
- Fracture mechanics
- Fatigue and durability

Advanced CAE

- Material model parameter identification and correlation
- Development of advance simulation codes

Component design and rapid prototyping

- 3D printing to prepare parts and mockups to demonstrate adhesive application and benefits
- CNC router to prepare samples and prototypes

System level engineering

- Full vehicle system level analysis
- Battery assembly and thermal management engineering
- Aftermarket windshield repair drive-away optimization

Ask us how our COEs and other technical and R&D centers can support you. Wherever you are, we invite you to **dEVELOP** with DuPont.

dupont.com/mobility



DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. © 2024 DuPont.

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

Form No. 001-20104-HMC0724