

Press release – Wednesday 13th 2023

ARMOR GROUP announces a new Factory 4.0 focused on battery performance

A NEW INDUSTRIAL SITE SPECIALIZING IN BATTERY COMPONENTS

Armor Battery Films, a division of ARMOR GROUP, unveils a new industrial site at La Chevrolière, near Nantes (Pays de la Loire), dedicated to the production of coated current collectors. These are key components designed to enhance safety, performance and battery shelf life. This large-scale project has a dual objective: to acquire new R&D resources and to increase current production capacity fivefold, to 150 million m² of coating per year, equivalent to 40 GWh. Such capacity would be sufficient to produce the equivalent energy from the 50 kWh batteries of 800,000 electric vehicles - i.e. the current EV fleet in France¹. This investment of €35m in the new plant is divided into two main areas: one dedicated to the 8,000m² building and the other to the equipment. The new facility, which is designed to operate 24/7d as an innovation centre, has a workshop for formulating inks, three coating and die-cutting workshops as well as a large storage warehouse. More specifically, the entire 1st floor is dedicated to R&D activities, with three laboratories, including an anhydrous room. These areas are used to develop formulations, assembly and testing for batteries (buttons and pouches). Initially, the new site will house two production lines, but the building has been designed to accommodate a third, a project already planned for 2026/2028. These new production lines are capable of producing twice as quickly as the current line, and of handling widths up to 50% wider, with continuous and intermittent patterns. Around 10% of this investment was made possible by support from the French government via the "Innovative solutions and technologies for batteries" initiative, part of France's 2030 investment plan. Currently employing around 40 people, Armor Battery Films plans to employ a total of 180 people by 2030.

Christophe Derennes, Operations Director for ARMOR GROUP, says : *"This new site represents the largest single investment ever made by ARMOR GROUP since it was founded in 1922! The machines installed at the new site feature highly specialized technology, capable of coating both sides of the substrate at the same time and then drying it immediately. This will enable us to coat wider widths, intermittently if necessary, and to perform in-line cutting, which has not been the case until now. This is a major innovation."*

BUILDING A STRATEGIC COMPONENT FOR "BATTERY EUROPE"

Emmanuel Macron, President of France, 11 May 2023². : *"The industry has a role to play in structuring the economy and nationally (...) Now the battle will be to get back upstream to secure production elements, upstream of the battery."*

En' Safe[®] current collectors, developed by Armor Battery Films since 2015, offer numerous advantages: they are designed to increase battery life by 20%, charge them twice as fast, and enhance their safety (corrosion, overheating, etc.), thus contributing to the development of more efficient energy storage systems. Armor Battery Films' customers are mainly European and North American. These are battery manufacturers for eBuses, electric vehicles, data centers and networked energy storage.

Hubert de Boisredon, CEO of ARMOR GROUP, adds : *"The battery industry is essential to Europe's competitiveness and energy resilience. There are currently 20 mega-factories in operation. It is estimated that by 2025, battery production will cover at least 70% of European needs, and 90% by 2030. The electric vehicle boom will make Europe the world's second-largest market behind China by 2030, with 135 million vehicles on the road, compared with less than 17 million in 2021... The growth of this market is enormous. In addition, car batteries account for 30 to 40% of a vehicle's value. This shows just how essential European sovereignty in battery production is."*

¹ Source : Avere-France ; <https://www.avere-france.org/publication/barometre-les-vehicules-electriques-et-hybrides-rechargeables-bouclent-un-tres-bon-premier-semestre-2023/>

² Source : <https://www.vie-publique.fr/discours/289382-emmanuel-macron-11052023politique-industrielle#:~:text=Il%20y%20a%20eu%20une,ont%20pas%20des%20bons%20emplois>

Press contact :

Gratiane Sametin (Hodos)
gsametin@hodos.paris // +33 7 85 92 60 78

Convinced that collaboration is at the heart of innovation in the battery market, as demonstrated by its partnerships with Blue Solutions (Lithium Metal Polymer and solid batteries), NextTech (Lithium-Sulfur) and NATRON (Sodium-ion), Armor Battery Films is actively contributing to the development of the European battery industry. As an active member of the Upcell Alliance, which brings together European players in the battery value chain, the company generally prefers to work with a predominantly European panel of suppliers and partners, such as ARKEMA, which generates many synergies. And finally, the company is also a member of the Batteries European Partnership Association (BEPA), a leading association for the development of new battery technologies.

De Boisredon concludes : “ARMOR GROUP is committed to this perspective of European industrial and energy sovereignty in an entrepreneurial spirit, both to capture market growth and to contribute to the re-industrialization of France. This new plant will supply strategic components for “Battery Europe”. Together with all our teams, we are happy and proud to be working for European energy sovereignty.”



Photo credit: Armor Battery Films

About Armor Battery Films

At a time when energy storage is a priority issue, Armor Battery Films designs, manufactures and markets current collectors under the En' Safe® brand that are coated to protect against corrosion, improve adhesion and reduce internal electrical resistance. The aim is to increase the safety, performance, life and cycle number of lithium-ion and super-capacity batteries. Armor Battery Films puts its industrial expertise at the service of its international customers, supported by a multidisciplinary team of around fifty employees. Armor Battery Films is an ARMOR GROUP company, a responsible player committed to innovation for the benefit of the society. The Group is global leader in designing and producing thermal transfer ribbons for printing variable traceability data on labels and flexible packaging (ARMOR-IIMAK). ARMOR GROUP is established worldwide and totals around 2,500 employees spread over some twenty countries across four continents. The Group recorded revenue of €447M in 2022. It invests €50M every year in industrial equipment and R&D. www.armor-group.com

A propos de France 2030

Présenté le 12 octobre 2021 par le Président de la République **France 2030** :



- ✓ **Traduit une double ambition** : transformer durablement des secteurs clés de notre économie (énergie, automobile, santé, aéronautique ou encore espace) par l'innovation technologique et industrielle, et positionner la France non pas seulement en acteur, mais bien en leader du monde de demain. De la recherche fondamentale, à l'émergence d'une idée jusqu'à la production d'un produit ou service nouveau, France 2030 soutient tout le cycle de vie de l'innovation jusqu'à son industrialisation.
- ✓ **Est inédit par son ampleur** : 54 Md€ seront investis pour que nos entreprises, nos universités, nos organismes de recherche, réussissent pleinement leurs transitions dans ces filières stratégiques. L'enjeu : leur permettre de répondre de manière compétitive aux enjeux écologiques et d'attractivité du monde qui vient, et faire émerger les futurs champions de nos filières d'excellence pour ainsi renforcer la souveraineté et l'indépendance française dans des secteurs clés. 50 % des dépenses seront en ce sens consacrées à la décarbonation de l'économie, et 50% fléchées au profit d'acteurs émergents, porteurs d'innovation sans impact défavorable sur l'environnement (au sens du principe *Do No Significant Harm*).
- ✓ **Sera mis en œuvre collectivement** : le plan est pensé et déployé en concertation avec les acteurs économiques, académiques, locaux et européens qui ont contribué à en déterminer les orientations stratégiques comme les actions phares. Les porteurs de projets sont invités à déposer leur dossier via des procédures ouvertes, exigeantes et sélectives pour bénéficier de l'accompagnement de l'État.
- ✓ **Est piloté par le Secrétariat général pour l'investissement** pour le compte de la Première ministre et mis en œuvre par l'Agence de la transition écologique (ADEME), l'Agence nationale de la recherche (ANR), Bpifrance et la Caisse des Dépôts et Consignations (CDC).

Plus d'informations sur : france2030.gouv.fr

Contact Presse :

Gratiane Sametin (Hodos)
gsametin@hodos.paris // +33 7 85 92 60 78