

ADVANCED CARBON FIBER COMPOSITES SOLUTIONS TO AVIATION AND ENERGY SECTORS

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Abstract

DowAksa, Turkey's only carbon fiber manufacturer formed in 2012 between Dow Europe and Aksa Akrilik (a subsidiary of Akkök Holding) will continue carbon fiber operations under new name, Aksa Carbon as of Aug 2025 through the completed acquisition of Dow Europe Holding B.V.'s 50% stake. Bringing the benefits of carbon fiber to the industrial marketplace, Aksa Carbon offers this enabling technology for transportation, energy, defense, aerospace and infrastructure markets with a product portfolio covering a wide range of solutions. Aksa Carbon is among the few fully integrated solution providers in the industry with a product range extending from precursor to carbon fiber, and from carbon fiber to prepreg, laminated plates, and fabrics, along with engineering solutions, technology, and know-how. The company's state-of-the-art production facility, equipped with advanced technology, is located in Yalova. Very strong and lightweight, carbon-fiber-based materials are used in a variety of applications where weight savings, emissions reduction, durability, and energy efficiency are key performance factors. The composite industry is poised for growth driven and is driven by sustainability initiatives, technological developments and new material innovations. The future of composites is focussing towards sustainability including bio-based composites, recycling

and repurposing the existing composite parts. Innovations in composite manufacturing technologies and materials developments through nanotechnology and advanced matrix systems are expanding the application of composites in many fields.