

**Contributing to the advancement of the domestic recycling market through our technology
Taking on the upcycling of apparel**



Eiichi Shimizu

President
TOYOBO TEXTILE CO., LTD.

While the Toyobo group has established a variety of recycling technologies, recycling related to apparel has been limited to the reuse of fiber scrap in plants. One reason for this is that the development of a domestic recycling market in the field of apparel is still a matter for the future. A considerable problem has existed in that value creation supporting both the economy and the environment cannot be achieved without the creation of recycled clothing with greater appeal to consumers. However, unlike general apparel manufacturers, our textile business performs integrated production that spans fiber to yarn making and sewing. Accordingly, operating a recycling loop throughout the supply chain will enable higher-value recycling. TOYOBO TEXTILE CO., LTD. is undertaking full-scale upcycling of apparel, seeking to create a market by providing high-quality and compelling recycled products in Japan.



Upcycled apparel products (hangers made from crushed and pelletized fiber scrap)

**Contributing to the protection of lives and the environment
Successful development of airbag fabric technologies**



Tadao Kuroki

General Manager
Airbag Operating Department

For its heat resistance and other merits, nylon 66 has been widely adopted as airbag fabric that protect lives in emergencies while driving. However, the material faces issues including shortages of supply and difficulty in recycling, leading to increased calls for polyester fabrics.

Compared to nylon, the use of polyester as a raw material is expected to roughly halve CO₂ emitted in the polymer resin production process. A high percentage of recycled polyester materials can also be used. Our company has undertaken the development of polyester airbag fabric that features outstanding environmental compatibility. The material achieves heat resistance and storability on par with nylon 66, and was adopted by automobile manufacturers in 2022.

We will continue advancing technological innovations aimed at creating “the solutions needed by people and the earth.”



Varied types of airbags to secure greater safety