

Seawool®
Marine Energy
Masterbatch

Seawool® Marine
Energy Yarn

Smawarm®
Insulation Material

Waste Reduction and
Recycling, Innovative Oyster
Shell Technology



About Creative Tech Textile

Creative Tech Textile Co., Ltd., established in 2010, set up their main headquarter in Taiwan and branch offices in Mainland China and US. Creative Tech Textile designs and manufactures various functional textiles with innovative, practical, and waste-reducing concept in mind. In addition, Creative Tech Textile focuses on material research development and creates multi-functional composite material combining oyster shells and recycled polyester by collaborating with domestic oyster farmers. The material gives the discarded oyster shells brand new mission in life and firmly implements the concept of circular economy.

Creative Tech Textile built its brands and registered their patents and trademark in multiple countries. The firm launched Smawarm® Insulation Material, which could replace animal down, and Seawool® Marine Energy Fabric with moisture absorption and quick-dry properties. Its textile received the Bluesign® certification, with clientele from famous outdoor apparel brands of European countries, US, Japan... etc.



Product Introduction

Taiwan generates nearly 160 thousand tons of discarded oyster shells each year. Creative Tech Textile puts these shells through an advanced nano modification manufacturing process and produces non-chemical and eco-friendly masterbatch that is mixed with recycled PET to develop a new generation of eco textile materials. The abundant minerals derived from oyster shells provide the textile product with numerous properties, such as low thermal conductivity, mildew proof, anti-bacteria, odor-control... etc. Research achievements by Creative Tech Textile not only resolve the pollution challenges caused by discarded oyster shells, but also gives added value to new generation textile products. Moreover, this is a practical cradle-to-cradle case study of marine circular economy.

Seawool® Marine Energy Masterbatch

Using natural discarded oyster shells and recycled PET bottle as raw material, Seawool® Marine Energy Masterbatch is manufactured without any chemical solvent and has low thermal conductivity with mildew proofing and anti-bacteria, anti-static and anti-ultraviolet properties. Thus, the masterbatch could be widely applied to the production of textiles and various plastic goods, such as children tableware and toys, sanitary and bathroom equipment, 3C products.

Seawool® Marine Energy Yarn

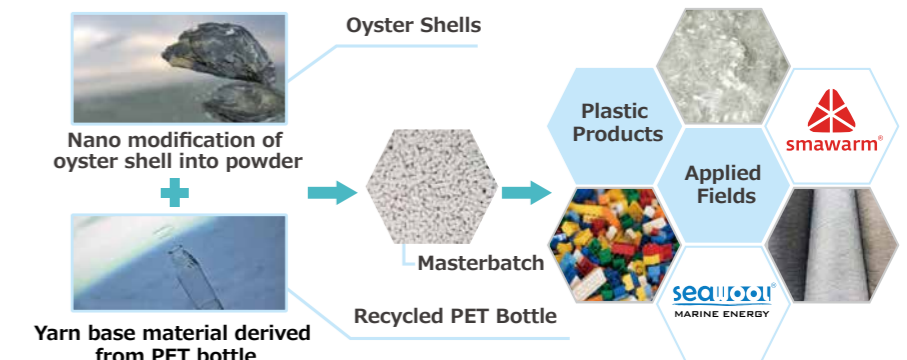
The yarn could be widely applied in mixed fabric and has a wool-like texture due to the nanoscale marine mineral powder from oyster shells, which is different from the conventional polyester. Moreover, the little trace of metal from the shells provides excellent anti-bacteria and anti-static properties that could effectively improve the static accumulation problem in traditional recycled PET yarn. The low thermal conductivity feature has the effect of shielding against the summer heat and insulating body heat in winter, increasing the comfort of clothing.

Smawarm® Insulation Material

Smawarm® Insulation Material is a low thermal conductive material, its thermal conductivity rate is merely 0.044, which is 50% lower than the rate of polyester. When combined with the 3D spiral structure that locks the air tight, it allows the material to reach an outstanding heat insulation performance and is an excellent alternative to replacing animal down. Furthermore, it could be produced as padding, ball, and down-like stuffing that could be applied to various goods

such as sleeping bags, bedding, jackets... etc. The product received the Red Dot Design Award, Germany ISPO Best Product award, and other numerous honors at home and abroad.

The Applied Fields of Oyster Shells Combine with Recycled Polyester Materials



Product Features

