

SUPREM develops thermoplastic composite for Pressure Vessels

Suprem is developing high-quality and high-performance thermoplastic composite materials to support the expanding use of pressure vessels aiming to reduce CO₂ emission.

Relying on 35 years of experience in producing unidirectional thermoplastic Tape for reinforcing pipes and tanks, Suprem is dedicated to the industrialization of new, recyclable solutions for Type III, IV and V pressure vessels.

Suprem's low porosity Tape can be wound and consolidated in one-step with no post-treatment. Hence, it avoids time consuming and costly post-curing needed for thermoset materials. Such clean, automated and continuously controlled winding process reduces down-time. The Tape consistent quality and high mechanical performance also allow to reduce the amount of material needed to manufacture high-pressure tanks.

Thermoplastic materials inherently offer opportunities for recycling and re-use after service.

Pressure vessels with Suprem's thermoplastic composite materials can be used for compressed natural gas (CNG), renewable natural gas (RNG) and hydrogen gas (H₂) for applications on the sea and up to the space.

Dr. Anatole Gilliot, CEO:

“It is a privilege for Suprem to contribute to the reduction of CO₂ emission. Suprem's thermoplastic composite materials are ideal to reduce parts weight and to manufacture pressure vessels, which will both reduce CO₂ emission. The intrinsic recyclability of thermoplastic is also contributing to the circular economy, which needs to be adopted.”

www.suprem.ch

Suprem SA
Z.I. Le Bey 17
1400 Yverdon-les-Bains
Switzerland

