

SUSTAINABILITY: CIRCULARITY**FINALIST: SM8RT**

SM8RT is redefining sustainable composites by creating high-performance, fully circular materials from UK-grown industrial hemp. Unlike traditional “green” materials that end at recyclability claims, SM8RT manages the entire lifecycle, from agricultural waste to end-of-life recovery.

Through extensive R&D, SM8RT has engineered and validated hemp-based composites across multiple formats, including dry fabrics, thermoplastic prepregs, and injection moulding compounds. Its waste valorisation model achieves over 99% material utilisation, transforming offcuts and fibre waste from manufacturing into recycled thermoplastic pellets, and converting hemp shiv, typically low-value bedding waste, into engineered fillers for moulding applications.

A closed-loop recycling system ensures all thermoplastic organosheets are collected and reprocessed at end-of-life, a process independently verified through multiple recycling cycles with leading UK research institutions. This eliminates landfill waste and reduces embodied carbon while maintaining consistent mechanical performance.

SM8RT’s innovation also benefits farmers, who now profit from the entire hemp plant, and manufacturers, who cut disposal costs and gain access to sustainable, high-performance materials compatible with existing composite processes.

Unlike competitors limited to single resin systems, SM8RT offers thermoset-compatible dry fabrics and fully recyclable thermoplastic options, giving customers true flexibility without performance compromise.

With repeat validation orders, Tier 1 trials, and growing commercial demand, SM8RT is poised to unlock multi-million-pound market potential, combining economic value, waste reduction, and verifiable ESG impact to establish the UK’s first scalable model for circular bio-composites.

Learn more at: www.sm8rt.uk

