

2016

Innovation in Materials | Winner: Sicut Enterprises Ltd

Combining plastic waste materials to produce highly durable, long lasting, extremely tough plastic lumber without the need for steel reinforcement.

Overview

Sicut Enterprises Ltd is a UK company that holds the exclusive rights to a portfolio of intellectual property that enables the manufacture of a range of composite infrastructure products from recycled polymer waste streams.

Sicut is exploiting this unique technology across a range of sectors where its combination of performance, durability and sustainability are unparalleled. This includes in the rail sector where it use is well proven in railway sleepers and in bridging applications.

Sicut's railway sleepers are a blend of plastic waste materials and glass fibre sourced from the consumer and industrial waste streams. Sicut's unique blends and processing methods deliver highly durable, long lasting and extremely tough structural materials without the need of steel or other reinforcement. Sicut sleepers meet all of the necessary performance requirements of rail track owners as a sustainable and much better value alternative to existing materials, especially timber but also concrete. Sicut's railway sleepers require no maintenance during their very long lives and are also 100% recyclable after use, limiting future liabilities for asset owners.

Unlike with other traditional materials, Sicut's recycled polymer composite's offer a truly 'closed loop' solution, even to the extent that Sicut uniquely offers a rebate to customers for every kg of its composite returned against any new purchase. The value in this returned material to Sicut means that Sicut can offer innovative finance models to its customers to address the dichotomy between short term budget constraints and whole life value.

Partners & collaborators

Regain Polymers Ltd

Procurement of raw material & manufacture of finished product in accordance with Sicut's stipulated manufacturing and QC processes and procedures.



"Sicut Enterprises is delighted that its unique recycled polymer composite technology has been recognized by the judges at this years Composites UK Awards. This is an exciting time for the business as it opens its first UK manufacturing line following approvals for its railway sleepers by London Underground, Deutsche Bahn, SNCF and Trafikverket. Turning Today's Waste into Tomorrow's Infrastructure is now becoming a reality for the UK; a great UK success story just as the Paris Agreement comes into effect."

William Mainwaring, CEO, Sicut Enterprises Limited

The Composites UK Industry Awards are presented at the black-tie dinner on the first Wednesday in November. The event is aligned with the Composites Engineering Show in Birmingham.

Keep an eye out for our annual nomination process every May for your chance to apply.

www.compositesuk.co.uk/awardsdinner