



our nanotech future

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Manufacture of Wood Replacement Products from Waste Tyre Rubber

Dena is a Nanometric Process Intensification Technology Company based in the UK, which offers a number of reactor based processes to produce a high value product and to give zero waste, emission free tyre recycling.

A variety of durable products can be produced from 100% recycled tyre rubber and thermal material. The recycled material is extremely tough and durable and easy to clean, which makes it perfect for floors, trailer boards, wall liners, wood replacement, seawalls, ports, marina's and extreme conditions. This material is stronger than others, it is impervious to water. UV resistant and repels fuels, making it the perfect choice for decking, foot paths, tiles etc.

" This new development is considered 'Green from Green' – the rubber comes from the tree to produce car & truck tyres, the tree is not taken away, we take what would pollute (waste tyres) and recycle it into something useful without any harmful emissions, while creating a product which replaces the need to use wood! Hence, Green from Green" – Dr Sulaiman

Products made from it will not crack, rot or split, so will last longer. The material is an environmentally friendly, economically viable, easy to maintain and a superior choice for a number of products; the material can also be recycled several times given good control of the original and of the recycling process.

This technology is very flexible and can do all types of products such as irrigation hoses and accessories including dripping pipes and leaky pipes. Home and building construction, replacement of plywood casing boards for wall, ceiling and pillar construction, outdoor wood replacement and other general products.

One key issue with tyre recycling is disposal of both the steel and the fabric recovered from the tyres. The clean steel can be sold to be recycled. For the fabric recovered, Dena has developed a number of processes to use the waste fabric and produce a number of insulation and sound proofing products. The various formulations of the three ingredients crumb rubber, waste fabric and a matrix chemical can give varying applications.

What we can offer as a manufacturer:

- Technology transfer with awarding manufacturing licence.
- Dena investment board take a small % of equity shares.
- Exclusive right to the technology in the country of sale.
- Turnkey project / management jointly with partner.
- Operational training & service management.
- Assist in marketing & selling both locally & internationally.
- Standardisation to ensure the products meet European & world standards.
- New Technology – pass to keep us in forefront of technology.
- This Joint Venture can be jointly part of the Dena Group & Partner Group to achieve worldwide benefits. www.dena.co.uk

