



Hammarisdale facility fully vertically integrated, combining moulding and recycling processes under one roof

AS ONE of South Africa's only remaining tyre recycling operations, Mathe Group is not only dedicated to reducing the burgeoning number of waste tyres piling up, but also to developing innovative products that can contribute to the growth of the green economy and the creation of jobs.

Mehran Zarrebini, CEO of Mathe Group and Van Dyck, two pioneering companies within the PFE International Group which operates from Hammarisdale in KwaZulu-Natal, says that the company is committed to sustainable practices which have been underscored by both innovation and ongoing multi-million-rand investment.

Impacted by the Covid-19 pandemic as well as the poorly performing economy and political unrest in the province, Mathe Group has only been fully operational from January 2022. However, the business has made considerable strides.

It processes around 700 radial truck tyres per day and has increased capacity to the point where it produces around 25 to 30 tons of rubber crumb per day. The upcoming commissioning of new plant is expected to increase this to 45 tons per day. The plant will then process about 1 000 tyres per day.

At present, there are no up-to-date statistics regarding waste tyre

accumulation in South Africa. According to the Waste Bureau, which took over the management of waste tyre distribution since the demise of REDISA, during 2018/19, South Africa generated approximately 300 000 tons of waste tyre material. Of this, 89% was passenger tyres and 11% truck tyres.

"We process only radial truck tyres at our facility. Our clients prefer GTR (Ground Tyre Rubber) derived from radial truck tyres due to the higher percentage of natural rubber content. Passenger tyres provide an additional waste stream (fibre) which has a very limited re-use in South Africa, unlike the EU which has developed novel ways of utilising this waste in concrete applications," said Zarrebini.

He adds that the pandemic enabled the company to strategise and plan for future growth, focusing on further integrating the supply chain between Mathe Group and Van Dyck.

While Mathe Group repurposes radial truck tyres into rubber crumb, Van Dyck transforms this raw material into value-added products such as flooring and paving for gyms, fitness areas and playgrounds, as well as ballistic tiles, acoustic underlays, and livestock mats. A large portion of these products, as well as rubber crumb, is exported.

"In order to streamline our operations,

Van Dyck relocated existing machinery from its old Durban factory and commissioned additional plants, enhancing overall output. This strategic move ensures that the Hammarisdale facility is fully vertically integrated, combining moulding and recycling processes under one roof.

"Our current position provides ample opportunity for scaling our business. The new investments are set to more than double our output, maximising the use of rubber crumb generated by Mathe Group for both internal and external purposes. As we face an increasing demand for recycled rubber, our next phase of investment will focus on augmenting our recycling capacity," he adds.

A further investment has been in solar energy. The installation of 1000 x 580 KW solar panels on to the roofs of the three buildings in Hammarisdale enables the company to use renewable energy for more than half of its operational requirements. This is a first for South Africa's tyre recycling industry.

"This has been a very proactive way of tackling the energy crisis. We are a sustainable company, so it makes sense that we use energy sustainably as well," he says.

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