



Tracy Cobb-Reeves.



Carbon black.

A CLEAN ACT

Kal Tire to open mining tyre recycling plant in 2017

By Nelendhre Moodley

Canadian mining tyre service provider Kal Tire, which is looking to open its first mining tyre recycling plant in Chile next year, is in talks with the South African Department of Environmental Affairs to establish a similar plant in South Africa, Kal Tire recycling project manager, Scott Farnham told *SA Mining* during Electra Mining Africa 2016, which was held at Nasrec in September.

Kal Tire sells, services, repairs and retreads tyres and given the call by industry to reduce the global carbon footprint, the company is looking to establish a strong presence in the mining tyre recycling market.

“We wanted to be a part of the complete

lifecycle of the tyre we sell and service,” says Farnham. “It’s important to our customers and the countries in which we operate, and it’s important to us.”

According to director of communications, Tracy Cobb-Reeves, Kal Tire partnered with Italian firm Marangoni Meccannica, a large tyre equipment manufacturer, in 2013, to work on solutions in the tyre lifecycle, and, in particular, the recycling process.

“The aim is to help mine operators meet their mandate of environmental responsibility and prepare for earthmover tyre recycling legislation being developed in several regions. Kal Tire saw an opportunity to give customers measurable value that would make a difference for

generations. Two solutions — each with their own advantages — surfaced. The first was shredding. The second was thermal conversion.”

Farnham notes that South Africa’s long history of mining sees around 30-40 years worth of old tyres available for recycling.

In fact, in 2012 government established the tyre recycling plan and South Africa has since then been active in the tyre recycling market with adoption of the Recycling and Economic Development Initiative of South Africa’s (REDISA) Waste Tyre Management Plan — a unique approach to waste stream management that is a world-first.

According to The REDISA Integrated Industry Waste Tyre Management Plan gazetted in November 2012, the aim is to support and promote tyre recycling, including providing the collection and depot infrastructure required to collect waste tyres from across the entire country and to deliver them to approved recyclers.

REDISA estimates that there are 60 million waste tyres lying in stockpiles countrywide, many of which are illegal and unsafe, or simply dumped in open fields. REDISA website indicates that since December 1, 2015, to end May, 2016, 226 059t of tyres were collected, with 147 822 tonnes of tyres already processed. Over this timeframe 3254 jobs were created.

As such, South Africa’s waste tyre management plan is well aligned with Kal Tire’s recycling strategy. However, since the REDISA plan does not currently include recycling of mining tyres, Kal Tire would work



Steel bars.

directly with the mining companies.

Farnham explains that, following the establishment of the first tyre recycle plant in Chile, Kal Tire will look to replicate the plant in other regions of the world.

“We are looking to partner with industry and governments in a bid to establish mining tyre recycling plants in as many areas in the world as possible that Kal Tire operates in. We want, especially, to interface with mining customers so that we can give back value-add for their products.”

Farnham meanwhile explains that the facility in Chile is being constructed to exceed the environmental standards of the Europe Union — the highest in the world. “That will put the plant designs in good stead as Kal Tire brings its thermal conversion technology to more international mining markets in the coming years.”

Thermal conversion — a treatment that thermally decomposes organic materials with heat in the absence of oxygen, and turns tyres into fuel oil, steel wire and carbon black — has only been used on passenger and truck tyres until recently.

Farnham explains that the intention is to use the diesel fuel extracted during the process to generate electricity, which will be fed back into the local electricity grid and

Fuel.



Kal Tire's Mining Tyre Group provides mining tyre management services to more than 150 mine sites across five continents and has been operating in Africa since 2009. The company provides services to customers in South Africa, Botswana, Mozambique, Tanzania, Zambia, Ghana, Burkina Faso, Mauritania, Mali, Senegal and the Democratic Republic of the Congo.

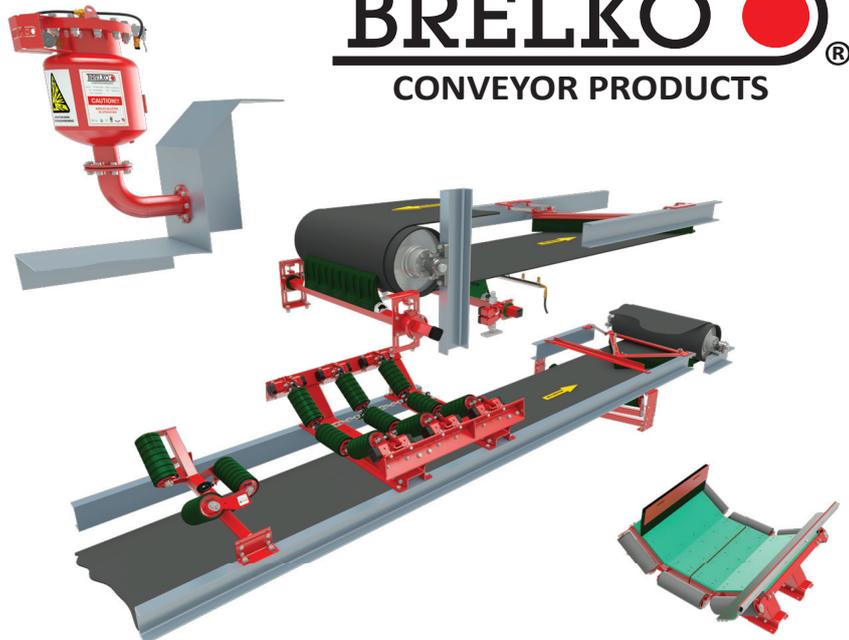
also provide fuel for ANFO, the explosive mixture used to blast rock. The carbon black, he explains is a 'universal compound' used for UV protection and as an abrasion-resistant, while the third component, steel wire, will be readily recycled. “The fourth component, synthetic gas, will be used to power the recycling plant.”

According to Farnham talks with the South African government and the mining industry have so far proved to be extremely positive. ■



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