

Shredding tyres down to size

The introduction of used tyres as a secondary fuel at Atbara Cement in Sudan has led the cement producer to install an alternative fuels preparation line at the plant in Sudan. Designed to efficiently shred tyres to a pre-determined size, the new system is up and running and facilitating Atbara Cement's alternative fuel efforts.

■ by **Terier sro**, Czech Republic



Tyres being fed into Atbara Cement's new shredding system, Sudan

Atbara Cement Co recently added a shredding line at its plant situated in Atbara, northeastern Sudan, to prepare waste tyres for use as an alternative fuel. Supplied and assembled by Terier sro, the line processes tyre chips to dimensions of 50-100 x 50-100mm. It has a throughput of 2-5tph and is equipped with a tyre shredder, radial mesh screen and four conveyors.

Shredding process

Plant personnel feed tyres via a conveyor belt into a two-shaft, low-speed, Terier SCE tyre shredder. The shredder has two solid rotors equipped with knives, which are easy to change as they are attached

to their holders by screws. Between the knives are 0.1mm spaces to cut the tyre.

The used tyres are preshredded into scraps of around 100-250 x 100-250mm which are then screened. Tyre chips that exceed the required dimensions are returned to the shredder while appropriately-sized material is transported to the feeding reserve.

Shipment from the Czech Republic to Sudan

Terier manufactured the line in six months at its plant in the Czech Republic, after which equipment was loaded into two 40ft containers and shipped to Port Sudan for transportation to Atbara Cement.

Assembly, installation and trials

For the assembly process, three specialised members of Terier staff travelled to Sudan to work with five mechanical fitters and three electricians from Atbara Cement.

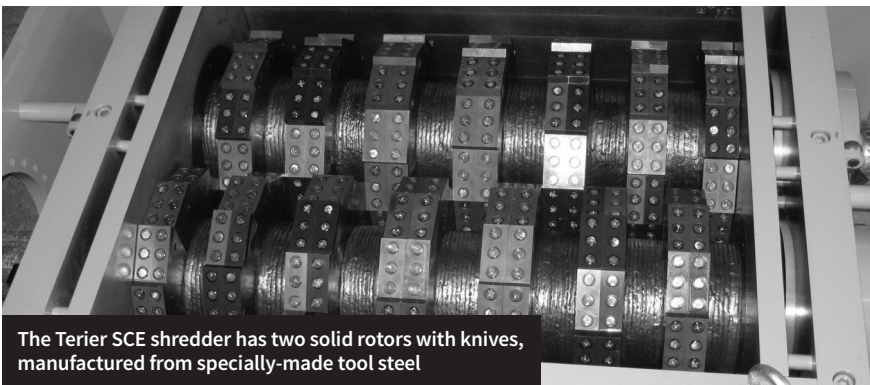
Installation and trial operations of the alternative fuel preparation system were completed in just five days. ■

About Terier

Terier sro's first alternative fuel preparation line was for Lafarge's Cizkovic works in the Czech Republic.

Since 1992, the company has manufactured and installed more than 500 shredders and knife mills in various countries across Europe, Middle East and Africa.

The Atbara Cement secondary fuel preparation line is the company's most recently-supplied project.



The Terier SCE shredder has two solid rotors with knives, manufactured from specially-made tool steel