Waste management specialist The Niramax Group, has overhauled its alternative fuel production line with the switch to new shredding technology. The move is expected to boost capacity for the Hartlepool-headquartered organisation, by as much as 30% per year.

Previously operating a high-speed system to transform pre-sorted commercial and industrial waste into a refined SRF for use in combined heat and power plants, the Niramax development team was encountering repeated problems with machine damage, unplanned downtime and excessive wear costs.

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Keen to boost the reliability, throughput and profitability of the plant, Niramax has therefore re-evaluated the marketplace and made the switch to an UNTHA XR3000 mobil-e with new XC

cutting configuration.

The purchase of the energy-efficient machine follows a successful trial on the Hartlepool site, where operators put the XR to the test using their own materials.

Despite the varying and often challenging nature of the input waste, the shredder was able to achieve a homogenous, on-specification <80mm SRF at a continued rate of 30 tonnes per hour. With in-built foreign object protection mechanisms, the shredder came to a stop – safely and without causing machine damage – so that any unshreddables could be safely ejected.

Elaborating on the trial, Niramax's Managing Director, Nick Elliot said: "We soon learned that UNTHA's clever foreign object design feature protects our operators as they don't need to 'enter' the machine at any point to investigate the issue. Our machine is protected from excessive wear and potentially costly damage too.

“At the same time, we’re safeguarding the quality of our fuel and maintaining consistent throughputs, which means we can deliver clients’ expectations with ease, and further boost the capacity of our site.”

Now fully operational, the UNTHA SRF shredder is expected to achieve fuel consumption savings of up to 40%. Supplied on rubber tracks with integrated discharge conveyor and cross-belt magnet, it boasts a quick-change cutting system which provides maximum flexibility should Niramax wish to vary their in-feed processes or output specifications.

Commenting on the project, UNTHA UK’s sales director Gary Moore said: “For years, the industry has been persuaded that high speed operations are the only way to achieve impressive throughput volumes. But the production of RDF and SRF is a complex process, not least because the input materials can contain anything from chunks of metal to rigid plastics, textiles, film and more.

“High speed machines simply can’t withstand the pressures that come with processing these tricky and often unexpected wastes, which means at best they encounter continued, costly wear, if not disruptive breakdowns that soon limit the throughputs the operator seeks.

“They risk jeopardising the safety of the plant too, which can no longer be tolerated. Engineering advancements mean slower speed, high torque operations can now satisfy capacity requirements without the same downtime, environmental, financial and safety risks.”

UNTHA UK has launched a series of flexible finance packages with zero deposit and VAT deferment options – plus varied customer support programmes – to help the waste industry keep moving during the COVID-19 pandemic.

For further information visit www.untha.co.uk