Global shredding giant UNTHA has launched its 3rd series XR waste shredder, following more than 10 years at the forefront of this progressive industry.

The UNTHA XR was first brought to market as a robust pre-shredder that could effectively process a myriad of municipal, commercial and industrial wastes in readiness for the alternative fuel production market.

But committed to strengthening the profitability of clients' operations – not just their functional capabilities – the Austrian-headquartered team continued to innovate. In 2014, a ground-breaking shredder was released that could manufacture SRF in a single pass. This feat of engineering halved operators' capital outlay and reduced energy consumption by up to 50%, without any detrimental on throughputs, uptime or product quality and saving. Typical savings of hundreds of thousands of pounds also began to be recouped. A 'moveable' version of the technology was brought to market in late 2015, when the XR became the world's first electrically-driven mobile shredder with the same bottom-line benefits.

However, knowing the XR was still capable of so much more, the research and development continued in UNTHA's Innovation Centre in Kuchl, near Salzburg. And, following extensive trials throughout Europe, a 3rd series waste shredder has now been revealed.

Whilst aesthetically the machine has the same sleek construction as its predecessors, it is the internal workings of the technology that have been refined to enable the XR to handle a wider range of input materials and achieve even more impressive performance figures than before.

Different cutter configurations, torque settings and motor modifications mean that one day the shredder can be producing a p63-specification biomass fuel with low fines output from waste wood, for example. The next it could be manufacturing a high quality SRF with homogenous <30mm particle sizing, before going on to achieve a 75mm gasifier material – all in a single pass, and all with this one piece of equipment.

UNTHA's head of the waste shredding division Peter Streinik explains more: "We have always known the capabilities of the XR are virtually limitless. We are a problem-solving team hungry to engineer ever-smarter solutions for the global waste market as it continues to push new boundaries. But, as with many technological industries, the process takes time.

"The evolution of the XR has therefore been an iterative process – this 3rd series machine has

been 3 years in the making and has taken months of trials and €1,000,000 to perfect. But now we have a truly remarkable shredder with flexibility like no other equipment in the marketplace. It can tackle everything from ordinary commercial waste through to incredibly complex applications like pulper ropes. And we've designed the machine so that it achieves the throughputs achieved by a higher speed shredder, with far lower wear rates, operating costs and energy consumption."

It seems that the message from UNTHA's HQ is that anything is possible. "Whether clients opt for a static or mobile machine, the beauty of the new XR is the breadth of its capabilities," continues Peter. "The build and rigidity of the kit, along with its in-built protection from 'unshreddables', has opened up a whole new world of opportunity. We're even configuring one machine that gives excellent recovery rates when using optical sorting equipment within a MRF or fuel preparation line – this would have previously only been possible using two shaft technology.

"The waste industry is, quite rightly, continually demanding more, and this shredder addresses that yearn for more flexibility, more uptime and more profits."

More than 40 XRs are now in operation in some of the most innovative alternative fuel production plants worldwide.