An engineering company specialising in the scientific bio-degradation of waste has formed a partnership with UNTHA shredding technology, to roll out a sophisticated aerobic digestion solution for a selection of mixed waste streams.

Bath-headquartered Advetec has treated a variety of waste and effluent, since it was established in 2000. But keen to develop a more homogenous product for optimal digestion rates, the business reached out to UNTHA to explore the capabilities of its four-shaft shredding system.

Municipal waste shredding trials led Advetec to invest in two UNTHA RS30s, which were shipped to the Caribbean and USA to process materials down to a defined <50mm specification. But as dialogue unfolded, it became apparent that UNTHA could play an integral pre-treatment role in Advetec's turnkey XO aerobic digestion solutions, moving forward.

UNTHA's low maintenance two-shaft S25 shredder will now be supplied as part of Advetec's rapid organic waste digestion innovation. The small footprint in-vessel system can achieve a 60-90% mass reduction of mixed organic waste streams, in less than 72 hours.

The process sees Advetec's bespoke blend of natural bacteria and stimulants digest the organic content and produce an exothermic reaction which in turn creates a self-sustaining biomass. With each solution tailored to the client's specific requirements, the Advetec XO series can process anything from 500kg to 10,000 kg per day with output material which is dry and has a

high calorific value. This makes it suitable for food and drink manufacturers, hotels, restaurants and municipal waste handlers.

Five S25s have already been sold to Advetec, for use on clients' sites – two in the UK and three in the USA.

Commenting on the collaboration with UNTHA, Richard Goff, Advetec's chief operating officer, said: "We have worked hard to establish our reputation for devising innovative bio-augmentation products and micro-aeration systems, and as we look ahead to ongoing expansion in the UK, wider Europe and America, is it important that we maintain this commitment to delivering quality-led solutions.

"The UNTHA brand is synonymous – worldwide – with quality, and their exacting shred is exactly what we required to strengthen the homogeneity and optimisation of the Advetec XO process."

Gary Moore, UNTHA UK's sales director, added: "The modular construct of the compact S25 shredder makes it the perfect addition to Advetec's turnkey solution. It integrates perfectly, with an easy-to-use control panel for maximum operational simplicity. The technology is currently configured to produce a 100mm x 19mm strip shred, which we know will result in digestion consistency for organisations who produce – and treat – their waste at source, with the help of an Advetec system."

For further information visit www.untha.com