

Unshreddables prove no problem for UNTHA XR in Minnesota



The online search for a best-fit waste shredder – capable of handling complex materials and producing on-specification RDF – brought LJP Waste Solutions to UNTHA...

Overview

Company: LJP Waste Solutions

Shredder: UNTHA XR

Input Material: Primarily C&I waste

Output / Goal: RDF manufacturing

In 2016, LJP Waste Solutions contacted UNTHA America to find out more about the world-renowned XR shredder.

The alternative fuel production machine had hit the industry's global headlines for its ability to process a variety of input materials in order to manufacture on-specification RDF (Refuse Derived Fuel).

At the time, LJP Waste Solutions was no stranger to RDF production. The organization handles commercial and industrial waste – plus residential garbage – from throughout the central and southern parts of the state. And as part of a zero waste to landfill commitment, the team has long transformed residual materials into an Energy from Waste resource that is utilized to power an adjacent steam plant.

But LJP Waste Solutions' incumbent shredding technology – a twin-shaft shredder – was struggling with some of the complex materials often found in the waste stream. Stretch film plastic and large rolls of plastic labels proved particularly difficult to process, for example, and consistently-defined particle sizing became tricky to guarantee. If this had continued, the offtaker may have rejected the RDF supply.

The team therefore accompanied colleagues from UNTHA America on a reference visit to Texas.

Here, the client had the opportunity to trial the XR shredder using test materials from their own site.



Impressed with the results, LJP Waste Solutions invested in a complete RDF shredding system including a stationary UNTHA XR3000C with 2 x 155hp motors and 5" screen, discharge conveyor, overbelt magnet for maximum metal separation / recovery, and a control room.

Installed in August 2016, the solution was configured to manufacture up to 20 tons of homogenous <5" RDF per hour, which is sold to the client's neighboring energy customer.

"My advice when investing in a piece of capital equipment such as a waste shredder, is to ensure the machine can process EXACTLY what you need it to. We knew the complex and variable nature of our waste and were clear in the throughputs and particle sizing requirements that the XR would need to achieve. UNTHA America didn't just promise that the XR would deliver – they proved it.

We trialed the technology using our own materials – including the components of our waste stream which had always proven particularly tricky to shred – and we knew an on-specification RDF output was attainable.

Since investing in the XR we've been especially impressed with the easy extraction of unshreddable items, which can be removed from the machine quickly, and without causing any damage to the equipment.

This relationship is also as much about the people as it is the technology. This is an Austrian-manufactured shredder, so language and time barriers could prove an obstacle to our partnership. However, the guys at UNTHA America really have our back – they clearly want to get things done – and this local support plus prioritization of our needs, is crucial to our business.

Yes, we've encountered potential problems along the way, but they've always been resolved. The XR has been a great investment and the shredder has definitely paid for itself."

Tom Froehlich, site manager, LJP Waste Solutions