

WRAP IT SMARTER



## **TURNING WASTE TO VALUE**

US-based recycling and clean energy company RePower South has invested in two recycling and engineered fuel facilities; one in Berkeley SC and one in Montgomery, AL. The facilities handle mainly municipal solid waste but are equipped to process various other waste streams as well.

In the front end of the plant, supplied by Bulk-Handling-Systems (BHS), recyclable commodities, like aluminum, steel, and certain plastics, are retrieved. The remaining material is sorted again into two fractions. The medium quality fibers from paper and cardboard as well as the medium quality plastics are used as raw material for high quality engineered fuel. The remaining material is residue, which goes to a landfill.

The fuel feedstock continues to further processing, which mainly consists of further removal of organics, metal, and PVC. Then the feedstock is shredded, dried, and homogenized in a so-called Rocketmill from A-Tec, a subsidiary of Loesche GmbH, into a fluff. This fluff is low carbon, high quality fuel called ReEngineered Feedstock (ReEF), for which RePower South bought a license from Accordant Energy LLC. ReEF has been determined to be a Non-Hazardous Secondary Material by the EPA, which means that it is considered as a product and not as waste fuel.

### **COLLABORATION BRINGS RESULTS**

RePower South was supplied with Cross Wrap bale wrappers by Loesche GmbH who has been partnering with Cross Wrap Oy, when providing waste-to-energy machine solutions to customers all around the world. The plant engineering company Loesche has over 100 years' history in plant and mill

engineering with many technological breakthroughs during its journey. The company operates in the cement, mining, power and services plant engineering.

The original system for RePower South was designed by Oregon-based Bulk Handling Systems, who has also partnering history with Cross Wrap Oy.

- This collaboration gathered many plant and machinery designers together and a lot of expertise as well, so the results do speak for themselves. Now we have two highly efficient plants, which operate as pioneers in making renewable fuel in the US, RePower South CEO Mr. Brian Gilhuly explains.

# TWO LOCATIONS, TWO CROSS WRAP BALE WRAPPERS

RePower South's waste-to-energy operation model is new to the US market, where landfills have been the destination for almost all types of waste materials – even the valuable and recyclable types of materials.

Matt Allers has been the Owner's Representative for RePower South LLC in the Berkeley and Montgomery projects. Matt has also worked for Accordant Energy, from whom RePower South bought the license for these technologies. He considers it as a great step forward for the US recycling industry to have pioneering companies such as RePower South investing in greener and more sustainable waste handling and recycling operations.

The ReEF fluff is baled by PAAL Dokon balers and then wrapped by Cross Wrap bale wrappers. Since RePower South has two different locations, there are two CW bale wrappers in operation. "We are very satisfied with the

Cross Wrap equipment and also CW's after sales support", Matt Allers stated.

#### A BRAKETROUGH SYSTEM, THAT SETS NEW STANDARDS

This kind of operating model is still quite new to the US, where landfilling has been and still is - the most used method for waste handling. By separating valuable materials from waste and creating effectively waste fuel product with good market value, the company sets up new operation model, that would hopefully grow to become a standard in the US.

- By enhancing recycling using modern technologies, RePower South is leading the way for others. This is very important step for moving towards a more sustainable future, Matt Allers sums up.

## IN A NUTSHELL:

Company: RePower South HQ: Charleston, SC.

Business: Economically sustainable recycling, waste recovery and clean energy solutions

Fuel material produced: RDF (ReEF™)
Other recycled commodities baled:
Cardboard, Paper, Plastic bottles, Metals,

Plant locations: Berkeley, S.C. and Montgomery, Ala.

Technology partners: Accordant Energy, LLC; Loesche Energy Systems and Bulk Handling Systems

CW Machine(s): 2 x CW 2200 bale wrappers

www.repowersouth.com www.crosswrap.com