











**Plant Name and Location Converted Organics** Keasby, NJ



**KWS Manufacturing** 3041 Conveyor Drive Burleson, Texas 76028

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# Food Waste Incline Conveying System

## **General Description of the Application**

Converted Organics<sup>™</sup> produces all-natural fertilizers, bio-stimulants and soil amendment products by processing recycled food wastes. These products are used in place of chemical fertilizers to grow healthy crops. Food waste in the form of fruits and vegetables are delivered to the Converted Organics processing facility. The waste fruits and vegetables are checked for metals on a horizontal belt conveyor and then loaded into an inclined tubular screw conveyor to be fed into a macerator tank. The inclined screw conveyor provides a very efficient, totally enclosed solution since the fruits and vegetables have a tendency to roll around and leave behind residue, particles, and juices.

#### **Design Parameters of Application**

Product Type: Waste Fruits and Vegetables
Material density: 50 Lbs. per Cubic Foot
Conveyor System Capacity: 1000 Cubic feet per Hour
Duty: 24 Hours per Day, 7 Days per Week

## **Advantages Provided by KWS**

The customer wanted to replace their existing belt conveyor with an inclined screw conveyor. The belt conveyor had the disadvantages of product rolling off and being very difficult to keep clean. KWS engineers took into account the existing plant machinery and layout and the Customer's concerns, needs, and goals. Working together with the Customer KWS was able to provide a successful and effective conveying solution.

### **Special Features of KWS Design**

KWS engineers designed a special inclined screw conveyor with an internal UHMW liner. The liner created a close clearance between the screw and the tubular housing so all of the food waste could be fully captured and conveyed with very little fallback. KWS designed the unit without a seal or bearing at the lower end making it completely enclosed and liquid tight. This design feature eliminated the constant maintenance and cleanup of juices and other materials that leaked out at the bottom of the previous unit. The entire product contact surfaces were constructed from 304 stainless steel and food grade plastics, which made them easy to clean..

"The KWS equipment looked great and exceeded our expectations."

Rob Bayliss – Plant Manager