

September 25, 2025

JEA Northside Generating Station
Biomass Screener Purchase
Specification

Purpose:

JEA purchases Biomass in the form of tree mulch which has a density of approximately 15 pcf with a moisture content of 25 percent. Moistures as high as 40 percent have occurred as a result of rain. The biomass is loaded into a Conex which is 8 foot wide and 20 foot long with a front-end loader. Four screws in the bottom of the Conex feed the material to a conveyor. Material larger than 3" creates damage to the screws. We have rented a vibratory screener and a Trommel screener and found the Trommel is what works best for us. This specification is to purchase one (1) electric Trommel Screener similar to what we are renting and listed in the below specifications.

Specification

General

Purchase one (1) Trommel screener with one (1) radial conveyor and one (1) overs conveyor 180 degrees apart.

Screen Drum

The screens shall be stainless steel 6-foot diameter and a total of approximately 26 to 28 feet long as a combination of two (2) 3-inch screens at the hopper end followed by two (2) 2 ½" screens. The screen drum shall have a chain variable speed drive. The unit shall have an upper walkway with handrails, toe kicks and access ladder to aid in servicing and changing the screen panels. The unit shall include a screen drum and screen system with a quick-change design.

Hopper and apron conveyor

The hopper shall have a minimum capacity of approximately 6 yards with extensions for increased capacity. The hopper will be fed with a front-end loader that has a bucket width of approximately 11 feet. The hopper shall have a minimum width of 13 feet. The conveyor length shall be approximately 16 feet with a minimum belt width of approximately 42".

Electric motor

The screener shall be electric utilizing 480/3/60 power.

Control Panel

The machine shall be equipped with a soft start control panel mounted to the side of the machine.

Electronic Controls

The unit shall be equipped with a side access panel capable of operating all machine functions as well as having a wireless radio remote control with LCD readout screen.

Screen Brushes

The screen brushes shall be the full length of the panels and ground level adjustable. A hinged assembly shall allow the brushes to be lifted off the screen when they are not needed.

Fines Conveyor

The minimum radial stacker stockpile height shall be 16 feet to enable discharge directly into a Conex having an opening of 8-foot x 16 foot and a rim height above grade of 13 feet. The conveyor shall be attached to the trommel screen and raised and lowered by use of hydraulic cylinders. The conveyor shall have a minimum 150-degree rotation and a minimum width of 42". Variable speed for belt discharge.

Overs Conveyor

The overs conveyor shall be attached to the machine and lowered for operation by use of a hydraulic cylinder. The conveyor shall be approximately 19 feet long with an adjustable height between 3 feet and 10 feet approximately. The conveyor belt shall have a minimum width of 42".

Bid requirement

Specify minimum and maximum output based on the biomass specified.

Provide operator and maintenance manuals, 3 sets.

Provide a 1-year limited warranty, parts and labor.

Screeners Stockpile location

