

Rotoshear® screen cleans up debarking water

Problem

A Midwest semi-chemical medium mill removes bark from pulp logs in a debarking drum. Shower water is used to wash the bark, as well as sand, dirt, and fibrous solids, out of the debarking drum.

In an effort to reduce fresh water use, the shower water was recycled back to the debarking drum. Reuse of unscreened water resulted in high solids build-up in the shower water which meant fresh water had to be added continually to flush the system.

This increased both flow and settleable solids loading to the mill's wastewater treatment system.

Solution

The mill elected to install a Parkson Rotoshear® Model HRS60120 with 0.030" openings to treat an average flow of 1,500 GPM shower effluent at 2,000 mg/L solids.

The unit is capable of treating a peak flow of 3,000 GPM. Filtrate from the Rotoshear® screen is recycled directly back to the debarking drum showers.

Results

The mill is quite satisfied with the large amount of solids removed from the wash water by the Rotoshear® screen. Solids recovery ranges in excess of eight tons per day, and fresh water usage is reduced by 500 GPM.

Captured bark and fines are dewatered and sent to the mill's hog fuel boilers.



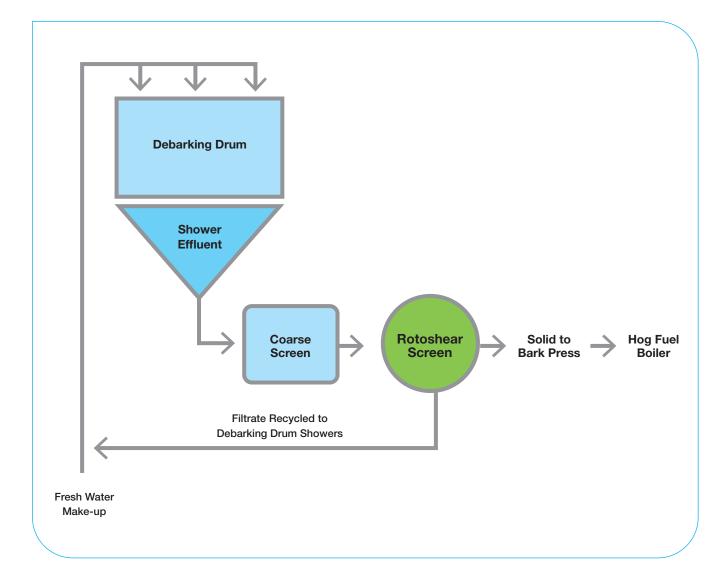
Water recycling and solids recovery from debarking drum shower effluent

Rotoshear® Model HRS60120 x .030" with shallow headbox

Flow: 1500 GPM average (3000 GPM peak)

Inlet solids concentration: 2000 mg/L avg.

Recovered solids consistency: 8-10% avg.







Fort Lauderdale Chicago Montreal Mumbai

1.888.PARKSON rotoshear@parkson.com www.parkson.com