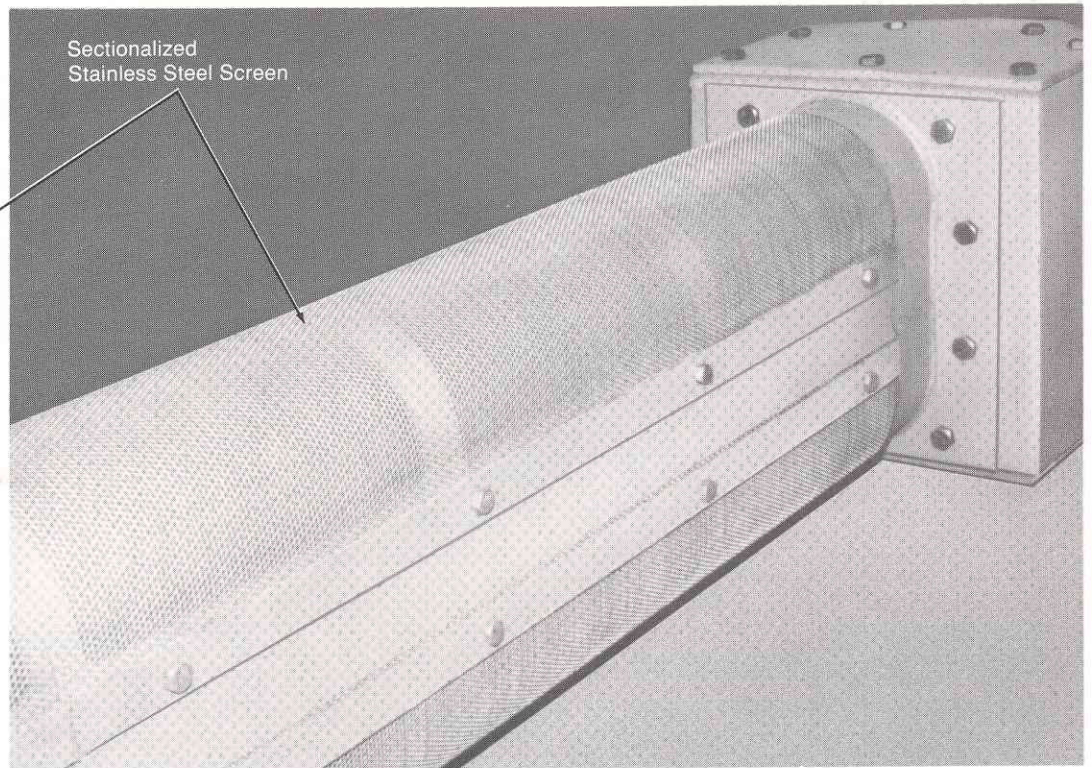




## CENTER DEWATERING ELEMENTS ALLOW RAPID WATER DRAINING WITH MINIMAL ASH CARRYOVER



Sectionalized  
Stainless Steel Screen

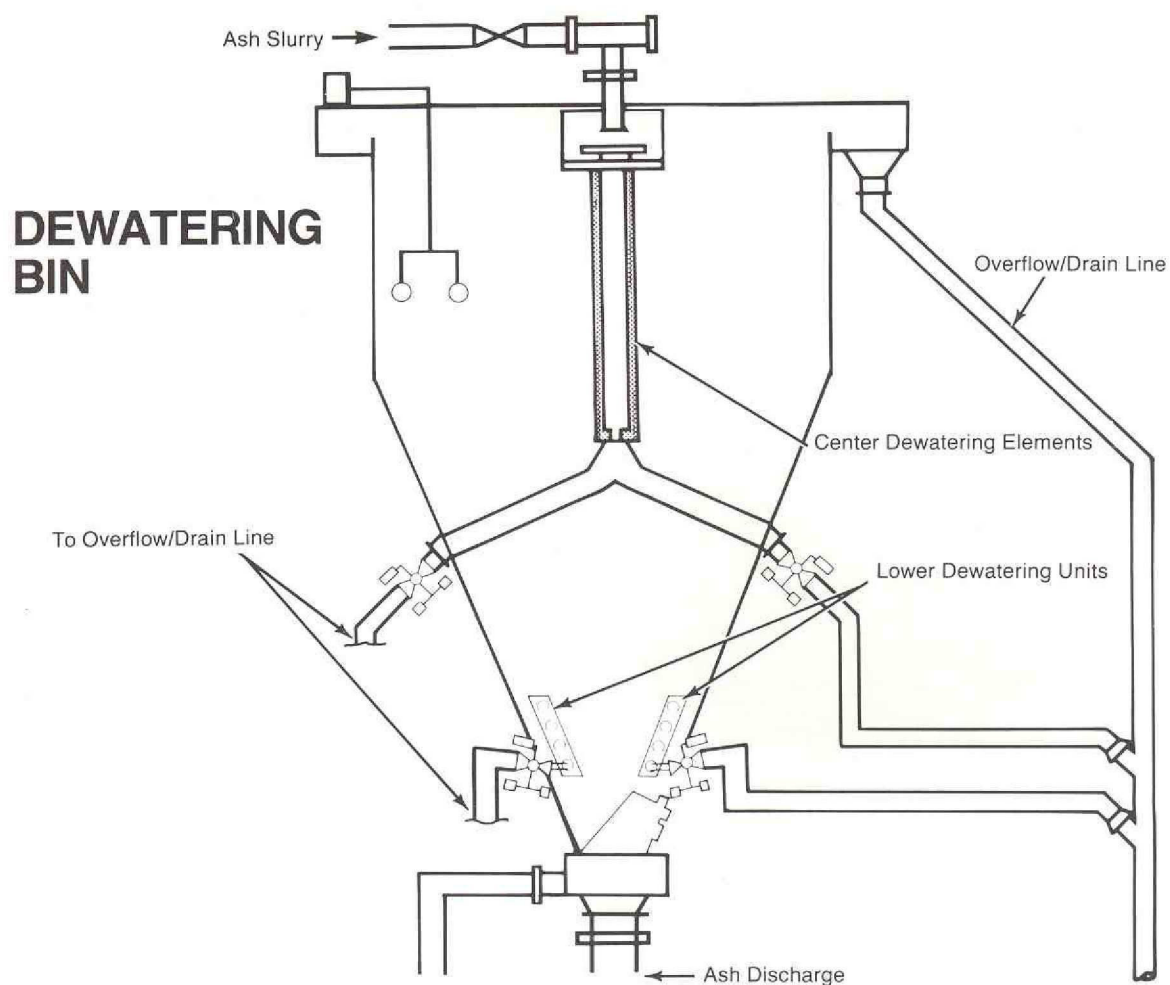


Support  
Structure

In a recirculating bottom ash system, material is conveyed from the ash hopper to the dewatering bins, where most of the ash settles and is stored before unloading. Conveying water drains from the bins through stainless steel dewatering elements, or screens. UCC's recent development of a center dewatering element which works together with four external elements on the lower cone, has greatly enhanced the dewatering process. A UCC center dewatering element consists of sectionalized stainless steel screens in a carbon steel support structure.

### **Reduced Dewatering Time Increases Bin Availability.**

In a typical UCC installation a Texas power plant reduced the dewatering time in its 35-foot diameter bin by more than 50% after installing a UCC center dewatering element. Instead of waiting more than eight hours before unloading, they were able to unload fully dewatered ash after only three hours.



## Ash Carryover and Plugging are Minimized

Within a dewatering bin the coarse ash settles close to the center, while fines collect around the perimeter, where typical upper dewatering elements are located. Many fine ash particles will permeate and plug segments of the dewatering elements; others pass through, producing excessive sediment in the drain water.

UCC's design has given the customer full benefit of natural ash distribution, because our new dewatering elements are located in the center of the bin, where the coarse ash settles. As water drains toward the center of the bin, the pile of coarse ash acts as a filter bed, capturing the finer particles before they reach the center dewatering element. Ash retention is improved, resulting in minimized carryover.

## Optimum Dewatering Sequence

Optimum dewatering is achieved by first using the lower external elements to drop the water level below the apex of the ash cone. Then, while the lower elements remain open, the center dewatering element drain is opened to speed dewatering without allowing excessive amounts of particulate carryover.

UCC's center dewatering elements have been installed in dewatering bins ranging in diameter from 18 to 35 feet and can be applied to bins of any size, from any manufacturer.

*For additional information, please contact United Conveyor Corporation or your UCC Sales Representative.*



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