

PROBLEM

15,000 Corrugated Cartons Daily

Dillard's Department Stores, a large retailer operating more than 225 stores in 21 states, needed to dispose of approximately 15,000 corrugated cartons daily at each of their five major distribution centers. The cartons range in size from 12"x 12"x 12" to 24"x 24"x 36". Dillard's cost containment objective required the removal of these thousands of cartons with minimum manpower, and the least possible number of hauls of their 40 cu. yd. containers.



SOLUTION

A Conveyor Disposal System

A conveyor disposal system specifically designed for warehouses and distribution centers carries empty cartons to BloApCo shredders mounted over compactors, which are located outside the distribution warehouse freeing up valuable floor space. Dillard's large distribution centers often have two shredders. Each shredder, operating unattended, is capable of processing up to 60 cartons a minute... equaling 58,000 cartons in an eight-hour shift. The shredder's unique "Pierce-and-Tear" action, with teeth specifically designed to handle corrugated material, actually "pulls" the cartons into the shredder without a requirement for any type of mechanical in-feeder. It effectively tears the cartons apart, reducing them to smaller, uniform pieces – eliminating the possibility of clogging the compactor inlet hopper, and permitting more densified container loads.



Shredding before compacting increases the amount of material that a 40 cu. yd. container can hold – from only 8,000 pounds of cartons (compacted only) to an efficient 18,000 to 20,000 pounds of shredded, compacted material. They now only have three containers that are hauled away versus their prior need of hauling seven containers that were filled with non-shredded material.

In setting up their distribution centers, Dillard's evaluated various disposal methods, comparing no-shred compacting vs. shredding before compacting. The hard figures on all the methods in the evaluation showed that the BloApCo shredder/compactor system resulted in **MORE DENSE LOADS** with lowest overall costs. It yielded the best economic return, was the least labor intensive and the most trouble-free, high-volume production system. Dillard's installs shredder/compactor systems in all their major distribution centers – so far, a total of nine BloApCo shredders. The scrap handling system, operating unattended, means to Dillard's that, "It's an automated system. The boxes go in... get shredded... get recycled. No problem."

Dillard's Department Stores and Distribution Centers, USA