

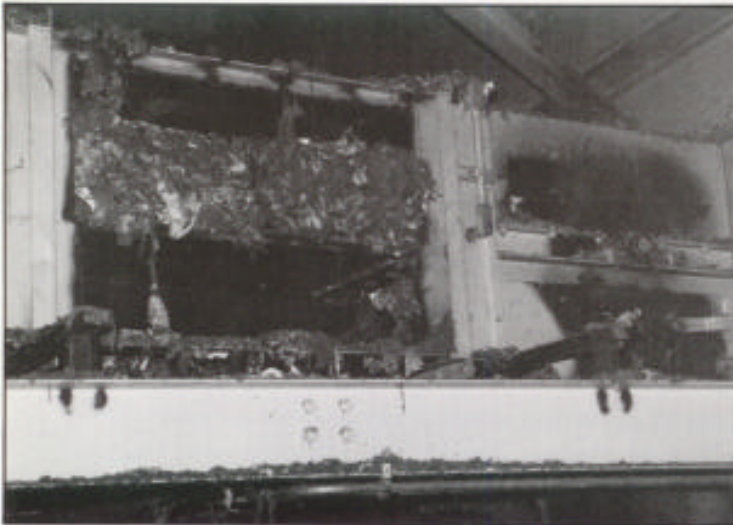
REFUSE DERIVED FUEL INFEED SYSTEM IN MUNICIPAL POWER PLANT



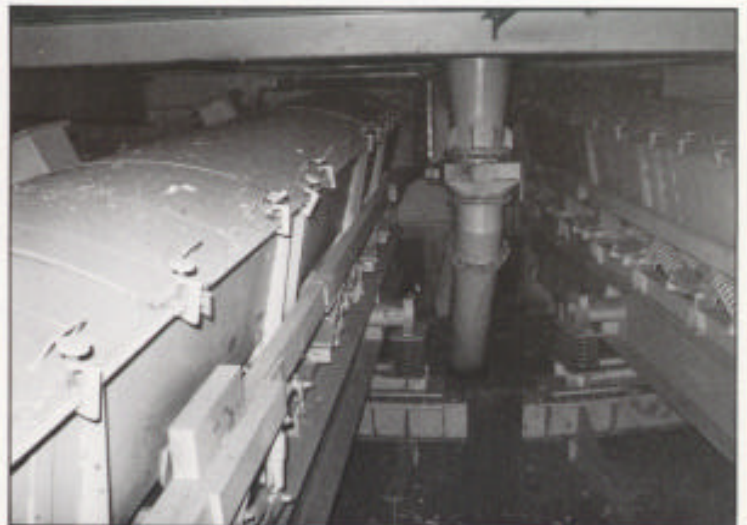
- * MAXIMUM EFFICIENCIES
- * MINIMUM MAINTENANCE

**CARRIER EVENS THE FLOW AND
CLEANS UP GARBAGE HANDLING**

**CONVEYORS SAVE
MILLIONS OF DOLLARS PER YEAR
IN OPERATIONAL FUNDS**



BEFORE:
FACILITY HAD MULTIPLE PROBLEMS



AFTER — Solution:
ONE EFFICIENT SYSTEM

Carrier

Vibrating Equipment, Inc.
P.O. Box 37070 - Louisville, Kentucky 40233
502| 969-3171 - Telex 20-4129

CONVEYORS FOR REFUSE – DERIVED – FUEL SYSTEM

SUBJECT: Two Carrier heavy duty balanced and isolated coil spring conveyors with bolted, domed covers and built-in chutes to mate with charging units.

APPLICATION: Conveyors receive refuse from screw conveyor, break down lumps, level surges and evenly distribute feed to boilers in a municipal power plant.

PRODUCT

SPECIFICATIONS: Shredded municipal refuse, variable moisture content, 15 TPH Maximum capacity; 2 PCF minimum bulk, density.

PROBLEMS: This power plant suffered severe losses due to the previous infeed system in their RDF facility. Uneven loading to the boilers via belt conveyors resulted in low fuel efficiencies. Downtime and maintenance costs were excessive due to chute pluggage and burning garbage on return belt runs. Belts and idlers required frequent replacement, a hazardous environment existed, and extra manpower was necessary to clean up spillovers around the belt conveyors.

SOLUTION: City officials had toured refuse plants throughout the country in an effort to determine what type of equipment would provide the most effective solution to their problems. Carrier was invited to join in discussions. Feasibility studies to consider vibrating conveyors in the power plant modifications were conducted. Our engineers worked with the customer to test sample refuse in Carrier's Lab. It was determined that vibrating conveyors were the answer! Design parameters were established from test results to assure that Carrier conveyors would meet exact requirements in actual plant performance.

REASONS FOR PURCHASE WERE THE SUBSTANTIAL ECONOMIC ADVANTAGES OF CARRIER'S VIBRATING CONVEYOR INFEED SYSTEM: Maximum Efficiencies – Safety – Minimal Downtime and Maintenance – Good Housekeeping

- Increase in fuel efficiencies eliminated the need for combining this feed with coal. The significant improvement in RDF consumption represents a fast payback in the plant's conveyor investment as well as a profitable future outlook.
- Surges are leveled, preventing chute pluggage. There is no danger of fires back through the chuteworks. Burning refuse at the charge point is contained in the deep, covered conveyor troughs and forced back into the boiler, with no damage to the conveyor pans.
- Extra manpower is no longer necessary for cleanup. Downtime and maintenance has been reduced to a minimum.
- An added savings enjoyed through the use of this infeed system is less frequent replacement of boiler grates. Noncombustible metal is separated and accumulated for removal before feed to the boiler, protecting against grate damage. The smooth steady flow of feed allows a slowdown of grates to half-speed, increasing life expectancy of the grates.

