



Case Study: Cement Kiln Dust – Holcim, Brazil

IN BRIEF

Holcim Cantagalo recently came to Macawber Engineering’s Brazilian licensee, PDL Sistemas for a quality Cement Kiln Dust pneumatic conveying system for an intermediate system conveying to a final storage silo. This is to replace a pressurized silo truck which led to dusty conditions and inefficient plant operations. The systems have been installed and continue to operate reliably for the customer.

MATERIAL CHARACTERISTICS

Material	Cement Kiln Dust (Filter Dust)
Bulk Density	Aerated 500-700 kg/m3 (31-44 lb/ft3)
Size	14,000 Blane
Temperature	130°C (266°F)
Moisture Content	0%

Condition Medium abrasiveness, with poor flowing characteristics (fluidizing pads and Teflon coating were required)

SYSTEM OBJECTIVES

1. Cost reduction on material handling
2. Automatic conveying for material transfer
3. Elimination of dust spillage

SYSTEM PERFORMANCE

System Type	Cementveyor
Transfer Capacity	10 Mt/h (11 t/h)
Conveying Distance	294 m (965ft)
Reception Points	One
Vertical Lifts	Four

