

SHOPTALK

Cement-bag Adhesive Helps Lafarge Increase Safety, Savings

Plagued by the safety hazard of falling and breaking cement bags, Lafarge North America found a solution that not only improved safety and reduced costs, but also increased customer satisfaction. A product from Lock n' Pop achieved both safety and savings objectives.

Lafarge is the largest diversified construction materials company and supplier of cement, aggregates and concrete, and other materials for residential, commercial, institutional, and public works construction in the United States and Canada. The company has an extensive network of distribution terminals for packaged product with warehouses linked by truck and rail.

Transporting large volumes of packaged product, however, is not without its challenges. Bagged cement is manufactured in a dusty environment and surface dust makes bags slippery. Even with multiple layers of stretch wrap, bags are prone to shifting. According to Jim Nicholos, Lafarge's Atlanta sales manager, it was not unusual to have bags fall off of trucks on I-85 between Charlotte and Atlanta as well as on the Western New York freeway. In addition, bags would shift in transit, creating irregular columns, increasing unloading time and oftentimes resulting in falling and broken bags.

These problems prompted Lafarge to look for another way to handle cement bags on pallets. Their search found Lock n' Pop, an industrial product that performs like the glue on Post-it notes. Lock n' Pop's adhesives have high shear strength to ensure that bags don't shift during shipment and reduce—or eliminate—the need for stretch wrap.

Lock n' Pop adhesives have low

fracture tensile strength to allow packages to "pop" apart when individual bags are offloaded from the pallet. Lock n' Pop is applied to the Lafarge bags at the Brenner palletizer at rates as fast as 1,300 bags per hour. The material sets sufficiently for handling within a few minutes.



Top, the Lock n' Pop adhesive is sprayed on Lafarge cement bags, which can then be piled high on pallets (bottom) without stretch wrap.

Paul Nicholos, the packhouse manager at Lafarge's Atlanta plant, likes the size and simplicity of the application systems. "The equipment is reliable and trouble free. Other than switching from an empty to a full Lock n' Pop container about once a month, the only maintenance is dusting off the photocell once a week," said Nicholos, who further notes that the product is applied in an unheated location and works even at subfreezing temperatures.

Garrett Griffin, plant manager at Lafarge's Calera, Ala. plant said, "Lock n' Pop keeps bags from sliding, but leaves little evidence when bags are popped and bags are easy to remove." Stretch wrap is rarely used in either

the Atlanta or Calera plants and only for special requests. "An added benefit is a savings in warehouse space as the pallets are so secure with Lock n' Pop we can stack three high instead of two high," Griffin added.

Dave Beck, a vice-president at Franklin Brick, a key Atlanta customer, says that he is the first to complain if a pallet is shipped without Lock n' Pop. "I no longer have the problem unloading trucks of disoriented pallets and experiencing falling and breaking bags," he said. "Lock n' Pop has not only prevented a safety hazard but it has also created a savings in the lost time and cost of manpower used to clean up the mess. It also helps maintain stability in partial pallets routinely carried by forklifts across construction sites."

Aside from safety and efficiency benefits, Lock n' Pop is perhaps a third or quarter the cost of multiple wraps of stretch wrap on a palletized load. Lafarge's Nicholos said, "We haven't lost a bag off a truck since we started using it." **CA**

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Lock n'Pop
(800) 225-3009
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