

Cost-cutting conveying

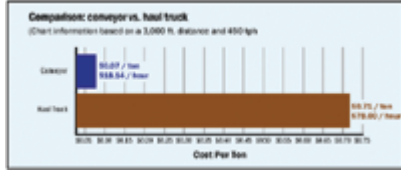
Effective material handling equals major cost-per-ton savings. Period.

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Comparison: conveyor vs. haul truck

Aggregate mining and processing facilities are becoming rare commodities in many regions. Consider that in the early 1980s, up to 27 percent of the nation's counties consumed more aggregate than they produced. By 2001, that statistic increased to 43 percent. Natural aggregates are in high demand where supply is short. This alone is changing the face of aggregate transportation within the processing facility, and from the pit to the point of use.

Punch in the data, the various conveyor systems versus haul truck inputs, and the result is clear: Producers are saving big bucks per day, week, month and year when using conveyors — rather than haul trucks — to move and stockpile material. Based upon certain parameters, the savings may be as high as \$0.46 per ton, \$2,800 per day, \$14,000 per week, \$60,000 per month, and a whopping \$700,000 annually. It's a startling picture that illustrates a stunningly quick payback period for today's advanced conveyor systems.

Even beyond costs-per-ton, there are other big returns. Conveyors are environmentally friendly, while individual trucks or loaders emit and stir pollutants along the entire transfer path. Furthermore, trucks are limited to level applications, and are highly compromised when operated on grades exceeding a 6 percent incline.

The use of equipment such as automated telescoping radial stackers, portable jump conveyors, tripper conveyors, mobile stackable units, stationary overland systems and more equals cost-cutting conveying, based upon the following key benefits:

- **Improved product quality:** Conveyors eliminate the multiple handling of material, while preventing the compaction and contamination typically caused by trucks and/or loaders. Importantly, telescoping conveyors eliminate segregation and material degradation.
- **Lower operating expense:** Conveyors cut labor and training costs. They are not reliant upon humans. They require no breaks or shift changes, and will operate at maximum efficiency during every hour of operation, conveying at capacities ranging from a mere trickle to 30,000 tph (on major overland systems). By contrast, trucks and loaders require operators and intensive, costly day-to-day maintenance.
- **A limited inflationary effect:** Luckily, rising fuel and energy prices have little effect on conveyor operating costs. Conveyors are not sensitive to fuel shortages. Consider that electricity costs are fairly stable compared to diesel prices — and conveyors can move material during off-peak energy intervals.

Above all, cost-cutting conveying equals a long-term savings benefit. With a lifespan of more than 20 years, their high-capacity performance and low-cost operation is still building the "profit stockpile" long after the truck or loader has hit the salvage yard. In addition, flexibility in conveyor design allows customization to limitless applications.

Operation cost of equipment				
<small>Based on 2,000 hours per year, 500,000 tons per year</small>				
Equipment	Model	Operating \$/Hour	Annual Cost	Cost/ton
Mobile stacker	5000	\$15	\$30,000	\$0.10
Overland belt	3000	\$25	\$75,000	\$0.15
Wheel loader	7750	\$45	\$135,000	\$0.27
Wheel loader	9000	\$50	\$150,000	\$0.30
Truck	400	\$100	\$400,000	\$0.80

Operation cost of equipment

So take a close look your options. Identify your current costs. The numbers may tell you that it's time to make a change.