

KONE EcoMod™
A replacement solution that saves time and money



PROJECT
San Diego International Airport
San Diego, California

OWNERS
San Diego County Regional
Airport Authority

MARKET SEGMENT
Airport

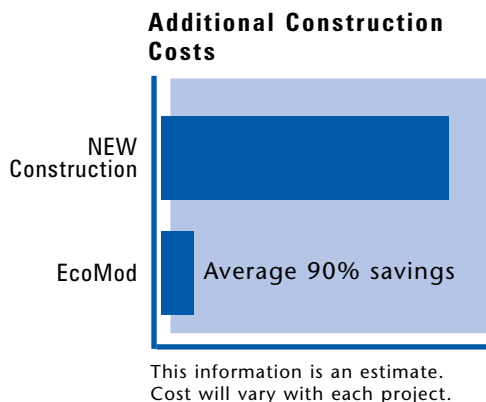
TIMELINE
August 2008 – March 2009

PROJECT SOLUTION
Five EcoMod Escalators

“The EcoMod product has saved us hundreds of hours of labor cost and reduced the turnaround time to about half. This product is truly amazing!”

Stanley Moore, Senior Maintenance Project Inspector, San Diego County Regional Airport Authority

the savings



the challenge

- Replace five escalators in an airport that serves 15 million passengers per year
- Limit interference with airline passenger traffic
- Coordinate the work within the strict guidelines of airport safety and security (two of the five units operate less than 10 feet away from a TSA security checkpoint)
- Provide a solution that is cost effective, provides safe passenger use and addresses today's environmental issues

the KONE solution

- Install EcoMod escalators to shorten the project schedule and reduce labor costs
- Provide an installation that doesn't impede airline passenger traffic
- Replace the escalator in the existing envelope and avoid costly construction expenses
- Increase energy savings through KONE's EcoStart® soft-starter
- Provide air travelers with an efficient, smoother and safer ride



"I appreciate the knowledge, work ethic and professionalism demonstrated by KONE throughout the entire project. Everything went so well on this project that we have requested funding for the replacement of an additional five units in the next fiscal year."

Stanley Moore, Senior Maintenance Project Inspector,
San Diego County Regional Airport Authority



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the client's situation

An airport committed to providing a passenger-friendly experience that affords travelers the ability to move from vehicles through security to gates and back again safely, efficiently and comfortably.

When the San Diego International Airport – the nation's busiest single-runway commercial airport serving more than 15 million passengers – decided it was time to upgrade its escalator systems, it had several requirements. First, passengers could not be unduly disrupted during installation. Second, the installation crews had to accommodate tight work spaces and close proximity to critical TSA security operations. And third, the product and vendor contract had to comply with the airport authority's sustainability policy, one of the first sustainability policies formally adopted by a U.S. airport in 2008.

The San Diego Airport staff selected five escalators to be replaced, two inside and three outside. "The job was really two projects in one as we had different issues to address for the indoor and outdoor locations," said Kevin Wigley, KONE Regional Escalator Modernization Sales Manager. "We were confident, though, that our EcoMod escalator project would exceed expectations."

the KONE achievement

KONE had great confidence in its product because EcoMod escalators do not require a complete tear out of existing escalators. All but the steel truss is removed and the new escalator components are placed within the existing framework. Not only does this unique process eliminate major construction, it compresses work schedules and lowers labor costs. The EcoMod system also allows for the replacement of one escalator while the adjacent one continues normal operation.

Because of the airport layout, KONE installation crews inside had to work in extremely tight areas near security checkpoints. "We worked within the requirements of the TSA surrounded by a secure eight-foot wall system we developed so as not to jeopardize airline and passenger safety," said Wigley. Outside, where three escalators were replaced, smooth traffic flow was maintained at the pedestrian bridge. The crew replaced one escalator at a time, not affecting the other two.

The KONE EcoMod escalators utilize the patented EcoDrive™ with direct drive technology which eliminates the need for drive chain lubrication and allows for oil change intervals of 30,000 operating hours – nearly twice as long as traditional escalators. The lifespan of the drive itself is extended because of reductions in wear and tear. KONE EcoDrive utilizes a set of planetary gears that are 96 percent efficient, which reduces energy consumption.

"Customers can achieve energy savings with this technology," said Wigley. "We also are able to recycle most of the components of the old escalator and use some parts as spares for older escalators still in operation."

the bottom line

The KONE EcoMod escalator delivers an efficient, safe and comfortable ride. It saves hundreds of hours of installation labor costs, as well as cuts the installation time nearly in half. Savings also come in the way of lower energy bills. The product and its installation process also can meet best practice standards established by an organization's sustainability policy.



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