

PearlWeave Safety Netting Corp. Provides Netting Solution For DIA



More than 440,000 sq. feet of safety netting was installed under and around 20 miles of steel track that manage checked baggage at Denver International Airport.



Unique three-sided safety netting system consisted of two vertical nets attached to a larger horizontal net.



A tightly woven, high-strength, multi-use safety netting system has solved a big material handling problem at the Denver International Airport (DIA). Following an OSHA inspection which cited United Airlines for fall protection deficiencies in the fall of 1996, Hensel Phelps Construction Co., maintenance contractor for United Airlines, selected PearlWeave Safety Netting Corp. to provide this innovative netting which has since been installed under and around the tracks of the unique baggage handling system that serves this massive facility.

The cornerstone of this large system is a series of 400-lb. moving carts which carry luggage along tracks utilizing linear induction motor technology. These destination coded vehicles (DCVs) serve 80 input points throughout DIA where luggage is loaded into the carts. Controlled by customized computer software, the DCVs, reaching speeds as high as 17 miles per hour, move baggage to 80 off-load points throughout the system.

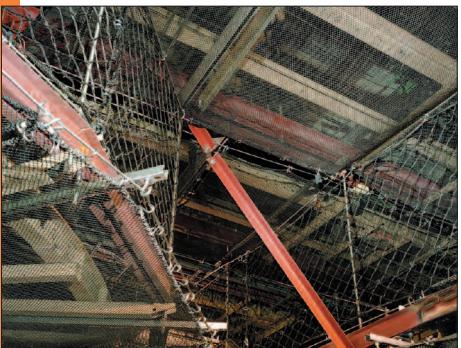
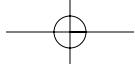
With a total of more than 20 miles of steel tracks which manage checked baggage for the more than 400 daily out-bound and in-bound United flights at DIA, the baggage system lacked fall protection for personnel working above the tracks and overhead debris protection for those working below the tracks.

As a result of this situation, a special Hensel Phelps project team, comprised of more than 20 staff members and other DIA personnel, concluded that the most efficient solution to the problem would be safety netting installed throughout the entire length of the tracks which carry the fast-moving carts.

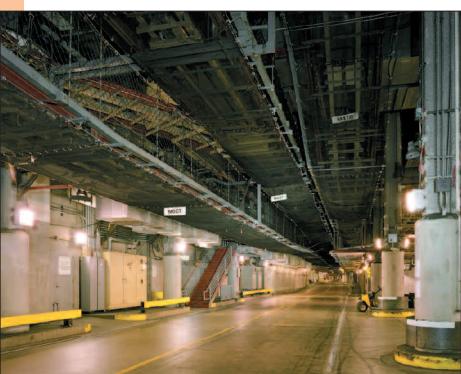
PearlWeave Develops Three-Sided Netting System Solution

After touring the site, PearlWeave representatives determined that they could develop a unique three-sided system consisting of two vertical nets attached to a larger horizontal net. This innovative solution would provide the passive fall protection and debris protection that OSHA required.

The three-sided system was fabricated from durable, flame-retardant nylon twine and was designed and tested to provide 17,500 foot-pounds of strength. The unique horizontal portion was constructed from one-half-inch mesh, while the vertical portions were constructed from the more traditional double-stranded, four-inch mesh. The finished product greatly exceeded the 12,000 foot-pound strength mandated in the OSHA violation.



Safety netting system provided OSHA-compliant passive fall protection for personnel working above the tracks and passive overhead debris protection for personnel working below the tracks.



606 West 131 Street
New York, New York 10027
(800) 732-7566
(212) 283-0505
FAX: 862-8951
Web: www.pearlweave.com

Jim Korber of Hensel Phelps Construction Company says, "Our rather unique job specifications required the horizontal personnel and debris net to have a maximum mesh opening of one-half inch. These exceeded PearlWeave's netting loom tolerances, according to the loom's manufacturer. They were ingenious enough to determine a way to overcome this obstacle and produce a net to meet our specifications...before they had won the bid!"

Safety Netting Solution Exceeds OSHA and ANSI Specifications

Hensel Phelps Construction Co., established in 1937 and headquartered in Greeley, Colorado, has built dozens of major airports throughout the United States. It has a permanent, special project team assigned to DIA which handles ongoing maintenance and safety issues. The DIA project is the first time the company has purchased such a huge quantity of custom-woven safety netting. Members of its special team, including Jim Korber and Loyd Short, were responsible for designing and producing a portion of the hardware needed for the safety netting project including thousands of custom-made T-bolts. Hensel Phelps superintendent Roger Naranjo and project manager Kerry Gardner maintained close communication with OSHA while the project evolved and was completed in compliance with OSHA and ANSI (American National Standards Institute) performance specifications.

PearlWeave Sets the Standard for Project RFP Specifications

In providing a unique solution for Hensel Phelps at DIA, PearlWeave Safety Netting Corp. worked to meet a number of stringent requirements in order to solve the OSHA Subpart-M fall protection deficiencies. These included: the 12,000-lb. fall protection factor, the use of lightweight materials, the need to meet Denver Fire Department fire code conditions, and the ability to comply with demanding post-installation height restrictions and lighting requirements.

Because of the nature of the project, a "request for proposal" process was required in order to select the most competitive supplier of safety netting. As PearlWeave Safety Netting Corp. had developed the prototype which successfully passed the initial drop test, it became the standard for the RFP, which was mailed in early 1997.

The high standards set by PearlWeave through its innovative solution and tested prototype were not matched by any other vendor. This, together with PearlWeave's responsiveness and cost effectiveness, won them the bid.

Hank Sweere, original superintendent for Hensel Phelps, says, "PearlWeave did everything possible to make this project happen. They made sample nets...they made special shapes as requested. I am fortunate to have worked with them early on in the project. They did a lot that was innovative in their field. The project evolved over time and they continued to respond effectively at every turn."

PearlWeave Country's Largest Producer of Safety Netting

All told, more than 440,000 square feet of safety netting was produced and 6,500 finished nets were fabricated and installed at DIA over the course of the project. This was the first major airport project undertaken by PearlWeave. Lawrence Greenberg, president of PearlWeave, notes, "We were the most competitive supplier for this project because of our manufacturing capabilities. Our safety netting fabrication operation is the best in the country. We knew we could meet all of their requirements and provide even greater strength at a very competitive price."

A long-term maintenance contract is in place for Hensel Phelps to provide regular testing of the completed installation and to make any repairs which might be needed. Life expectancy for this customized safety netting will, in all likelihood, exceed more than 30 years.

PearlWeave Safety Netting Corp., whose parent company was founded in 1934, was established in 1986. The company offers safety netting systems for all construction, industrial, maritime and recreational applications. Annually, PearlWeave produces in excess of 4,000,000 square feet of safety netting. Nearly all projects are