



CASE HISTORY ~ CH-033

BIO-DECK 190 REPAIRS AND PROTECTS 'TOWVEYOR' TRACK IN BUSY MATERIAL HANDLING FACILITY. ALMOST NO WEAR AFTER FIVE YEARS OF GRUELLING SERVICE

THE CHALLENGE: A busy material handling facility in the Pacific Northwest had over 11,000 feet of Towveyor™ track which had become heavily rutted and broken up after a few years of service. The original steel particle reinforced cementitious track material had succumbed to the extreme wear and abrasion of heavily loaded carts rolling on the computer guided system every few seconds, 24hrs per day for seven days per week. Breakup of the track had resulted in dangerously high noise levels from the reverberating aluminum carts and severe shaking caused packages to be thrown from fully loaded equipment resulting in extra work resending them. Repair of the track was unavoidable however it was mandatory to use quick setting, non-hazardous and odor-free materials to avoid problems with scheduling and with plant personnel.

THE SOLUTION: BIO-DECK 190 was specially developed by TFT to have extreme abrasion resistance (4.4mgs loss/1,000 cycles/1,000 gr./CS17 wheels), while exhibiting extremely quick cure to allow return to service within 4 hours at 75°F and having NO odor or hazards to plant personnel. Once the failed cementitious material had been removed using manual and power chisels the application of BIO-DECK 190 track material was easily accomplished using a simple screed box and conventional mixing equipment. During lab development the viscosity of the BIO-DECK 190 mixture was adjusted to provide slight leveling after screeding into the Towveyor wear channel – this yielded an extremely smooth and quiet rolling surface for a particularly long service life.

The application crew came to the job with epoxy coating experience and learned to install the 10" wide by ¼" deep BIO-DECK 190 track during the first few hours of the project. Production rate and finished track quality were completely acceptable within hours of starting the project.



RESULT: The photograph above shows the track after five (5) years of continuous service. Wear measurements taken using a straight edge laid over the track show a typical wear of less than 35 mils after five years or less than 7 mils per year. As the surface has worn it has become velvet smooth and even more dense suggesting that the rate of wear will steadily decrease to an absolute minimum level over years of service for a probable service life in excess of 20 years.

For more information regarding this project, contact:

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PRODUCT: BIO-DECK190

YEAR: 2002

LOCATION: FEDERAL WAY, WA

We go where others fear to spread!

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