



PROBLEM SOLVED™ PAPER

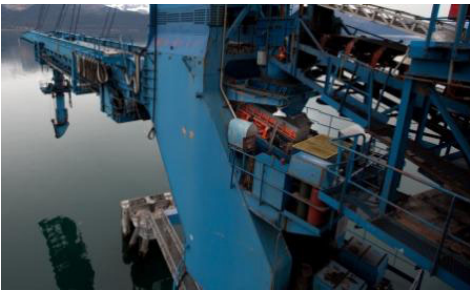
SOLUTION: EVO® Modern Conveyor Architecture

INDUSTRY: Bulk Transportation

LOCATION: Aurora Energy Services, Seward, Alaska



Located on Alaska's scenic Resurrection Bay, the shiploader at the Port of Seward loads coal for export.



To improve flow and reduce the escape of dust and spillage, Aurora Energy Services authorized improvements to the shiploader's boom conveyor.



With its slide-in/slide-out cradles and external wear liner, the EVO® Conveyor Architecture simplifies maintenance.

PROBLEM

To allow expansion of its cross-Pacific coal exports, Aurora Energy Services (AES) needed to increase the flow of coal through the shiploader at its Port of Seward terminal. But transfer chutes on the shiploader choked at rates above 750 mtph, which limited loading speed and slowed ship-turnaround. Even worse, the escape of coal dust during loading led to concerns from a nearby cruise ship dock and marinas, as well as environmental groups.

SOLUTION

AES officials looked for ways to upgrade the terminal's material handling system and selected the EVO® Conveyor Architecture from Martin Engineering. Included in the improvements was a transfer chute, custom-engineered for increased material flow without bottlenecks. This "hood and spoon" chute provides consistent flow to reduce material spread and impact. Components of the EVO® System improve the serviceability, because they are accessible from outside the structure. The EVO® External Wear Liner and Martin® ApronSeal™ Double Skirting combine to prevent dust and spillage. "When AES management realized they could increase through-put, improve safety and reduce environmental impact all at once with the EVO® technology, they were all for it," said Terminal General Foreman Vic Stoltz.

RESULTS

With the EVO® System in place, the Port of Seward has raised its loading rate by more than 15 percent, to 850 mtph. Shiploading time has been cut by an average of 21 hours, resulting in a significant reduction in demurrage charges. With the improved control of the material stream, there is also less dust. Stoltz reports cleanup is minimal and the process is complete in less than four hours. "We've reduced the cleanup time on the shiploader and dock by over 40 man-hours per ship," he added.