



PROBLEM SOLVED™ PAPER

SOLUTION: Martin® Impact Cradles

INDUSTRY: Mining

LOCATION: Sokolovská Uhelná Mines
Czech Republic



Martin® ImpactCradles were installed at the Sokolovská Uhelná Coal Mine to cushion the impact of falling lumps and to reduce damage to conveyor components.



At the Sokolovská Uhelná Mine, Martin® Impact Cradles have more than three years of service in absorbing the impact of large lumps of brown coal dropping more than 20 feet (7 meters).

PROBLEM

A drop of approximately 23 feet (7 meters) onto the belt proved hard on conveyor components, causing excessive wear and damage to both the belt and idlers.

SOLUTION

Installed below the conveyor's loading zone, Martin® Impact Cradles absorb the impact originating in lumps of material landing on the belt. The cradles prevent impact damage to the belt and other conveyor components and stabilize the belt line to reduce load zone spillage. Each rugged steel cradle contains a set of Martin® Impact Bars, each composed of a top layer of low-friction UHMW to allow the belt to slip over the top, and a lower layer of energy-absorbing SBR rubber.

RESULTS

The Martin® Impact Cradles have worked without failure for more than three years. The units have been in uninterrupted operation with the original parts since installation.

Mine management was very satisfied with impact performance and service life of the Martin® Impact Cradles.