

Weartech® SHS™ Overlay Wear Plate

Outperforms Q&T and Chrome Carbide Overlay Plates



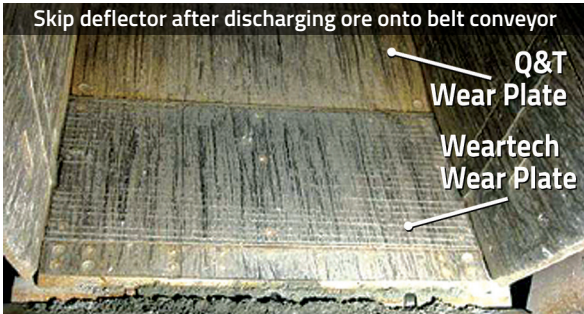
PROBLEM: **SEVERE SLIDING ABRASION AND IMPACT**

Skip cars are used in underground mining for transporting ore in process from one station to the next. During loading and unloading, wear plate inside the cars are exposed to sliding abrasion and impact.

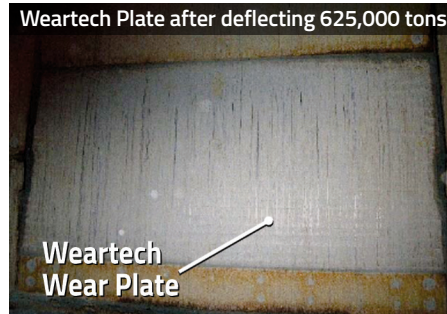
In an underground gold mine in Canada, 20 ton capacity skip cars transport ore between two levels. During loading, ore drops 30 ft. (9 m) onto a wear plate deflector and slides into the car. During unloading, the skip car is tilted at a 30 degree angle on one side and the ore slides over the wear plate deflector onto a belt conveyor for transport to the next station.

**SOLUTION:
WEARTECH OVERLAY WEAR PLATE**

To increase the life of the skip car deflector and reduce surface material loss, the mine installed a Weartech® SHS™9800U overlay wear plate, 1/2 inch thickness (3/16 inch overlay on 5/16 inch substrate), for resisting sliding abrasion and impact.



Weartech SHS9800U overlay wear plate, 1/2 inch thickness, after deflecting 410,000 tons and exceeding Q&T plate life by 1.2x



Weartech SHS9800U overlay wear plate has exceeded Q&T plate life by 1.8x



Weartech SHS9800U overlay plate has exceeded Q&T plate life by 2.9x

**RESULT:
WEARTECH® SHS™ EXCEEDS LIFE OF Q&T PLATE
BY 2.9X AND CRC PLATE BY 2X**

The Weartech SHS9800U overlay wear plate was removed from service for maintenance after deflecting more than 1 million tons of ore. This represents a service life increase of 2.9x over 500 Brinell quench & temper (Q&T) wear plate, 5/8 inch thickness, and up to 2x over chrome carbide (CrC) overlay wear plate, 5/8 inch thickness (5/16 inch overlay on 5/16 inch substrate). Upon being placed back in service, mine engineers predicted the Weartech SHS9800U plate to exceed Q&T plate life by 4.3x before requiring replacement.