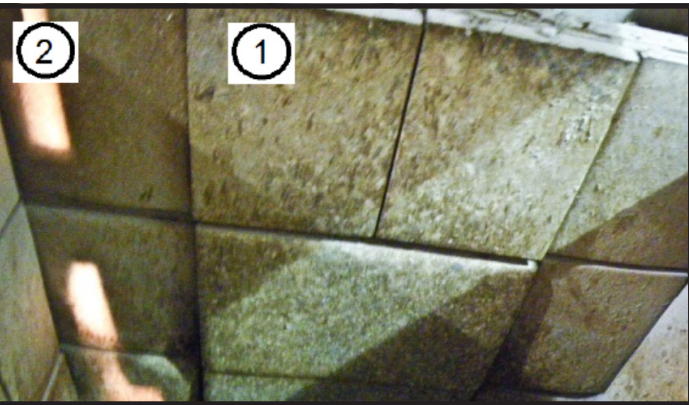




ENDURA

Extreme Impact and Abrasion Conditions

A Mining Industry Case Study Titus Steel's ENDURA greatly outperforms Hardox 500



Problem: Excessive Wear of Center Liners

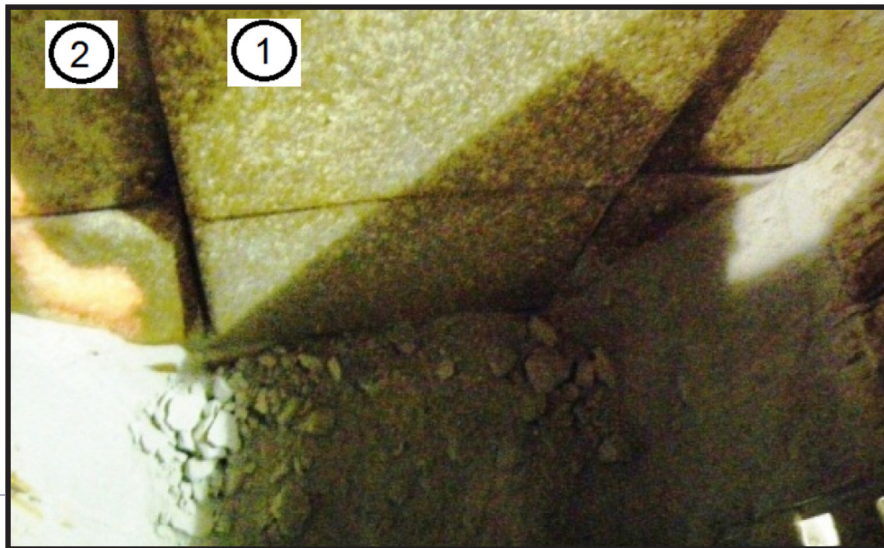
In an underground gold mine located in Quebec, Canada, the gold ore hits wear plates shown in the pictures. All liners were originally Hardox 500 plates 1.5" thick.

The higher concentration of material hammering the middle of the wall was forcing the replacement of the middle plate (1) significantly earlier than the side plates (2). Several extra maintenance interventions were thus required to replace the middle (1) liner.



Solution: Titus Steel's ENDURA

ENDURA was substituted for Hardox 500 on the middle liner (1) in the fall 2011 while the side plates experiencing LESS abrasion (2) remained in Hardox 500.



Result: Endura Outperforms Hardox 500 by more than 2X's... and counting!

The photos were taken after a period of time that was DOUBLE the standard life of the Hardox 500 plates in the same location. Despite lasting TWICE as long as the Hardox plate, the material surfaces of the ENDURA 500

are still in excellent conditions and show only minimal wear. Due to the exceptional life-span of ENDURA, more operating hours on the center plate will be required before the full benefits of the material can be realized!