

Gibraltar Mine

Williams Lake, BC, Canada (2012)

PRODUCT USED:

Hard-Cem®

OWNER:

Taseko Mines Ltd.

ENGINEER:

Allnorth Consultants Ltd.

READY-MIX SUPPLIER:

CIF Construction Ltd.

DISTRIBUTOR:

Brock White Canada Co.

BACKGROUND

Taseko Mines Ltd.'s Gibraltar copper-molybdenum mine is located in south-central British Columbia, approximately 60 km (37 mi) north of the City of Williams Lake. Built in 1972, the Gibraltar Mine is the second largest open-pit copper-molybdenum mine in Canada.

As part of the mine's multi-phase expansion and modernization program, Allnorth Consultants Ltd. provided engineering for the construction of a new four-bay truck shop and maintenance facility. This new area would house Komatsu 930E haul trucks, which weigh 207 tons empty and around 495 tons loaded and have a body capacity of 211 m³ (276 y³).

Without proper wear resistance, the concrete floor supporting such vehicles could easily have suffered wear and tear from abrasion.

SOLUTION

To prevent this abrasion, the owner chose to add Kryton's Hard-Cem to the concrete as they knew it was a proven technology that would increase concrete wear resistance. Adding to the appeal of their choice, Hard-Cem is also fully compatible with conventional admixtures and is the only hardening admixture of its kind currently on the market.

Once added to the concrete mix, Hard-Cem's full-depth concrete hardening extended the service life of the flooring in the shop and facility, particularly in high-traffic areas that were subjected to long-term abrasion from equipment service and long-term erosion from wash areas. In turn, this prevented costly repairs and replacement and corresponding facility downtime. In short, Hard-Cem proved to be a cost-effective solution for the owner, offering long-term savings with lower maintenance costs while improving the wear resistance of the shop and facility's floor for employee safety.

