

DAILY COMMERCIAL NEWS

AND CONSTRUCTION RECORD

LATEST NEWS

Heavy Equipment | Roadbuilding | O H & S | Steel | Building Envelope | Trade Contracting

February 14, 2011



LOADPATH INDUSTRIAL INC.

A 20,000-sq.-ft. mine truck-shop building was designed to provide maintenance facilities for the mine haul trucks and other equipment. The building supports a 50-tonne bridge crane.

British Columbia's LoadPath Industrial handles 'aggressive' schedule on mine structures

PETER KENTER
correspondent

The open-pit Copper Mountain Mine in Princeton, B.C. has been a hotbed of industrial activity as the site prepares to start ore production this year.

LoadPath Industrial Inc., a Burnaby, B.C.-based company specializing in pre-manufactured industrial metal buildings, was called on to build two large industrial mine-service structures, a concentrator building and a truck shop, in a \$12-million back-to-back contract concluding in the fall of 2010.

The builder worked under the direction of construction manager Merit Consultants and primary consultant Hatch Engineers, both of Vancouver. LoadPath partnered with Garco Buildings of Spokane, Wash. to design, supply and erect the building structure.

The concentrator building, designed to refine copper ore, measured about 120,000 square feet (approximately 400 by 260 feet plus ancillary buildings) and stood 120 feet tall when completed. The building was designed to support two interior cranes — a 50-tonne unit with a 10-tonne auxiliary crane on one side of the building, and a 15-tonne crane on the other.

A 20,000-sq.-ft. mine truck-shop building was designed to provide maintenance facilities for the mine haul trucks and other equipment. The building supports a 50-tonne bridge crane.

"These were back-to-back projects completed in one continuous six-month period, with about a month overlap," says Greg Harms, P. Eng., and president of LoadPath.

"Both projects had a design-build aspect, as we worked with the owner, the engineer and the vendors and suppliers to accommodate everybody's needs."

Some design aspects are finalized during construction. Harms says, for example, that the locations of doors and openings for conveyors are often finalized after construction begins.

LoadPath worked with Garco to provide the most efficient and cost-effective solution to realize the two buildings, based on the engineers' drawings. The steel was fabricated in Spokane and then shipped by truck to Copper Mountain.

"There's excellent highway access to the turn-off road, so delivery of the steel wasn't a problem," says Harms. "However, the road to the mine site was being reconstructed when we arrived and that was a little bit rough for a while."

Project Manager Pat Robertson says the tight construction schedule was "definitely aggressive," but not a strain for the 35-member peak construction crew whose prime activity was bolting the pre-manufactured building elements together, with some field welding.

"On the concentrator building, the challenge was that a lot of the lifts were high and heavy and we needed large cranes on site to facilitate the lifts," says Robertson.

"We also had to lift the bridge cranes into place onto the parallel runways before putting the roof on the structure. Footprint access on these sites can be in short supply, so you do as much as you can from the outside of the building."

Although construction continued through the winter months, Robertson says that the greatest weather-related construction challenges involve wind and lightning.

"There were days when we got a weather system over the top of the mountain and everything had to be dismantled," he says. "During a thunderstorm, we always postpone lifting and construction."

Robertson notes that safety was a prime consideration, especially considering the height of the buildings involved.

"At these heights, any fall would be tragic," he says. "We instituted a 100 per cent fall protection program, and used a safety net spread over the entire skeleton of the roof before the cladding went on."

Harms says the mining plant project is a harbinger of a busy period for industrial construction in Western Canada.

"I think 2011 is going to be busy," he says.

"We've gone through a deep recession internationally, but the world is emerging from that and we're seeing a huge demand for commodities. Mining is going through a growth phase with a lot of mine developments going forward, oil and gas are coming back online, power generation is huge and even forestry is really starting to recover.

"Even where there's no new construction, we're seeing capitalization in modernization and energy optimization of existing plants."

The company is currently working on a number of large projects, including a 260-megawatt natural gas-fired electrical plant in North Battleford, Sask. on behalf of general contractor Kiewit.

"We're predicting an excellent range of opportunities in our core market over the next four years," says Harms.

500 Hood Rd, 4th Flr., Markham, ON. L3R 9Z3
Phone: 905-752-5408 | Fax: 905-752-5450
Toll free: 800-465-6475 | Toll free Fax: 888-396-9413
E-mail: dcnonl@reedbusiness.com

© [Reed Business Information](#) a division of [Reed Elsevier Inc.](#) All rights reserved.