

Brandt Tractor Ltd. Warehouse

Fort St. John, BC, Canada (2019)

PRODUCT USED:
Hard-Cem®

OWNER:

Brandt Tractor Ltd.

GENERAL CONTRACTOR:

Ledcor Group

READY-MIX SUPPLIER:

Inland Concrete

DISTRIBUTOR:

Kryton International Inc.

BACKGROUND

As the world's largest privately held John Deere Construction & Forestry dealer, Brandt Tractor Ltd. is recognized as a company that can supply reliable construction equipment to builders all across Canada. With 56 locations, over 800 certified service technicians, and more than 6,000 units of both new and used equipment to help them, they have only grown from there. In fact, just recently in 2018, they had grown enough to construct a new warehouse in Fort St. John, British Columbia, Canada.

This new warehouse would help the company support the sales, customization, and maintenance of their tractors. As a result, Brandt Tractor Ltd. couldn't use just any concrete for the warehouse's flooring. They needed concrete that would be able to withstand the wear and tear from all the heavy equipment that would be moving across the warehouse. That and the outdoor portion of the warehouse flooring that would be exposed to cold weather would need air-entrained concrete. So any solution Brandt Tractor Ltd. went with to increase the concrete's resistance to wear and tear would need to be able to work with that type of concrete too.

With that in mind, Brandt Tractor Ltd. set out to find the durability solution that would meet their requirements for their new warehouse flooring.

SOLUTION

After discussing their situation with their general contractor, Ledcor Group, and with Kryton, Brandt Tractor Ltd. decided that Kryton's concrete hardening admixture, Hard-Cem, was the perfect solution. Incredibly versatile, Hard-Cem would be able to increase the warehouse flooring's resistance to wear and tear while also remaining compatible with both regular and air-entrained concrete. It's able to do this by increasing the hardness of the concrete paste and reducing fine and coarse aggregate exposure. That doubles the concrete's wear life and gives it more resistance to abrasive and erosive forces.



SMART CONCRETE®



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Hard-Cem does all this without the need for either extra labor or a time-consuming application process. Unlike surface-applied solutions like dry shake hardeners, Hard-Cem does not need to be manually applied on to the concrete. Instead, it is added directly into the concrete mix, letting the admixture permeate throughout the concrete. That way, the entire concrete slab would have Brandt Tractor Ltd.'s desired durability. In return, there's no risk of application errors or additional time and money spent on extra labor to apply Hard-Cem.

All of which ensures that Hard-Cem can meet the needs of Brandt Tractor Ltd. while expediting the company's construction schedule and lowering the risk of future maintenance costs.

On top of that, Hard-Cem would be able to increase the safety of Brandt Tractor Ltd.'s warehouse. With its ability to boost the concrete warehouse floor's resistance to physical forces, Hard-Cem would protect the new flooring from getting worn enough to form hazardous dips, which might otherwise tip over heavy equipment, causing damage to it and surrounding workers.

To turn these benefits into a reality, Brandt Tractor Ltd.'s ready-mix supplier, Inland Concrete, added 16,000 kg (17.64 tons) of Hard-Cem to their concrete mix while builders got to work placing it.

In the end, their hard work had paid off. The Hard-Cem-treated concrete worked so well that Brandt Tractor Ltd. went on to add Hard-Cem again to a new concrete slab for an ice rink at the Sherwood Twin Arenas.

