

Canadian Construction and Mining News

Spring 2004, Fourth Edition



Flygt helps you to keep your head way above water

Where there is a mine or a construction site in Canada, chances are high that there will be Flygt pumps. For the past five decades, our concept of submersible units, capable of handling any task under harsh conditions has proven itself in demanding applications like tunnelling, construction and mines. Flygt not only offers superior products, it also offers **peace of mind**. You can rely on Flygt's service to keep your original Flygt equipment in top shape. For Flygt, service is not only about fixing problems. Above all it's about preventing them from happening. We know how important your pumping equipment is to your daily activity, and the problems and headaches caused by pump downtime.

At Flygt, we consider service as a lifetime commitment. Our 15 service centers located from coast to coast are a prime example of our dedication to support our customers efficiently. Every repair performed by our technicians is made using original spare parts and with the highest standard for repairs. In addition, repair work is checked with a test tank, available at every service location.

Flygt also has maintenance programs tailor-made for the industry and training programs specifically for your maintenance personnel. Consult your nearest Flygt office for information on these programs.

In summary, Flygt offers original spare parts, factory-standard repair and guaranties parts, at a competitive price.

Above all, Flygt helps you keep your head way above water.

Louis Dumoulin, Eng.
Market Manager, Construction, Mining and Industry

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Flygt



ITT Industries

Flygt Canada comes to the rescue at McArthur River mine flooding

The McArthur River mine situated 620 kms north of Saskatoon is the richest uranium mine in the world. It is partly owned by operator Cameco Corporation. On April 6th, 2003, while miners were excavating the development, a 10 metre long portion of the roof suddenly caved in and flooding began. None of the mine's 275 workers were injured since personnel were evacuated as soon as the first cracks appeared.



Photo credit: Cameco Corporation

McArthur River is the world's largest, high-grade uranium deposit. Shown here is the Pollock shaft used to access underground tunnels.

By mid April, water was flowing into the development gallery at a rate of 1000 cubic meters per hour. That is when Flygt Saskatoon went into action. On short notice, pumps from the rental fleet were mobilized across Canada and geared up to be shipped to the mine for emergency dewatering. A total of 31 submersible drainage pumps were sent to the McArthur River operation to set up emergency drainage and to provide additional capacities to the existing treatment plant.

Initial estimates stated that the McArthur River mine would be non-operational for at least six months but with the dedication of its employees and major suppliers such as Flygt, the mine restarted operations on June 30th, a full month before the best case scenario.

This is a prime example of the capacity of Flygt to supply complete solutions to chronic or urgent customer problems. Our national network can be mobilized promptly to answer any emergency situation that requires a rapid deployment of pumping equipment. In time of urgency, you can count on Flygt.

Flygt launches two new slim line submersible Bibo pumps. For use in active dewatering.

Flygt has launched two new slim line models from the hard working Flygt Bibo range of submersible pumps. These are designed specifically to handle liquid containing high amounts of clay, stone chips, drilling fines or other solids, common in heavy construction and mining dewatering applications.

The new 60 Hz models, which range between motor size 6hp and 13hp with voltage range 230V to 600V, can handle up to 55 litres per second and pump at heads up to 70 meters equipped with 3" or 4" discharge connections.

They are made from cast aluminum and have an outer casing of stainless steel. The multi-vane impellers are made from hardened high-chrome cast iron (HRC 60) in order to withstand tough and abrasive operating conditions.

In order to meet the demands of active dewatering, the pumps come in two sizes, 11 1/2" (295 mm) and 14 3/8" (360 mm) in diameter, and they can fit easily into most pipes.

Just like any other member of the Flygt Bibo range, the pumps are portable; therefore they

can be simply lifted from one pipe to another and set to work. The ideal product for equipment rental markets.



Canadian Construction and Mining News

is published 2 times per year by **Flygt Canada**
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INCO Crean Hill Mine uses Thompson diesel pump

How to maintain settling ponds pH level?

Sam Scola, of INCO Limited, Sudbury Operations, was working in the Crean Hill Mine, 45-minutes from Sudbury, Ontario, Canada. He needed a way to help maintain the pH levels in the Crean Hill Mine's settling ponds before the water was returned to the environment. Large loads of lime were being used to help neutralize the water's acidity. Having had success working together on previous projects, Mr. Scola contacted Dan Adams of Flygt, Sudbury, Ontario to see if there was anything he could suggest to circulate the water in the ponds and increase the lime's effectiveness. Mr. Adams suggested renting a Thompson Pump trailer-mounted 6-inch Compressor-Assisted Dry-Priming Open Trash/Sewage pump to do the job. Flygt collected the pump unit and the required suction and discharge hose, and delivered the equipment to the Crean Hill Mine.

The application was not focused on achieving a certain flow or providing certain pressure. Rather, the pump was used to re-circulate the lime and the acidic water within the treatment ponds in order to achieve proper pH balance. The proper pH balance is essential in reducing metals in mine water to within regulatory limits, prior to returning water back to the

natural environment. The rugged and reliable Thompson 6-inch Compressor Assisted Dry-Priming Open Thrash/Sewage pump is ideal for mixing and treating a wide range of water quality under the most demanding conditions.

"This self-priming/auto-draining Thompson pump makes my job a lot easier. It has helped me maintain the proper pH levels in my retention ponds", reported Sam.

Flygt Canada is the master distributor for Thompson Pump in Canada. For more information please contact your nearest Flygt office.



The Thompson 6-inch Compressor-Assisted Dry-Prime pump recirculated the acidic water and lime mixture to maintain pH levels.

Flygt Dewatering is introducing a fish exclusion box

Flygt Dewatering has recently introduced into the rental fleet a fish exclusion box. The box is designed in two sizes, to accommodate our line of drainage pumps. This box is generally required when a pump is installed in a lake, a stream or the ocean in order to protect the surrounding underwater wild life. These boxes are custom made for Flygt Dewatering to conform to the Fisheries and Oceans Canada (DFO) fish screen criteria.

For all your dewatering needs, Flygt Dewatering has a complete solution to offer!



**Consult our internet site at
www.ittflygt.ca
for more information on our
products and services.**

Hakim Lake is now dry

Flygt Dewatering provides a complete solution

Often mineral exploration leads to unusual locations where ore is found in hard to reach places.

RSM Mining Services Incorporated (RSM), a mining contractor located in Labrador City, was mandated by a local mine to dewater Hakim Lake in order to access approximately 1.1 billion tons of ore partially located under it. This operation presented some special challenges, one being the harsh conditions prevalent in the area during the month of October. Another limitation was that the dewatering operation needed to be completed before the lake began to freeze, which meant pumping the lake dry within three weeks. Overall, 356,000 m³ of water had to be pumped within an 18-day period, to a stream approximately 900 meters away.

Taking all these factors into consideration, RSM challenged Flygt Dewatering to come up with a complete solution. At an early stage in the project, Flygt Dewatering specialists were deployed on site in order to evaluate the task at hand. Following the site visit, Flygt Dewatering presented RSM with a complete dewatering solution that included: the supply of pumping equipment, installation supervision and assistance, maintenance and continuous operational supervision of the dewatering system. In partnership with Flygt Dewatering, RSM coordinated the project with the mine and agreed to supply: heavy lifting equipment, labor to install, fuel, maintenance, and dismantling of the dewatering system.

Flygt Dewatering selected a skid mounted 12" JSC Thompson Pump compressor-assisted, dry priming open trash pump, complete with 900 meters of pipes to be installed and fused on site.

The pumping of the lake was achieved within the required time frame and the operation was successfully completed to the satisfaction of the mining contractor and the mine operators. The dewatering objective was met despite old man winter's arrival. Hakim Lake is now dry.

Flygt Dewatering is a division of Flygt Canada.



12 in. JSC Thompson Pump compressor assisted, dry priming open trash pump.

This is the best time of the year for hockey fans!

The hockey playoff season is now active and generating a lot of enthusiasm from fans all across the country. Several Canadian hockey teams were in the playoffs this year and competition is at a very high level.

Make sure to drop us your coordinates at fcdn.info@itt.com, Flygt will add your name to a draw to win a Montreal Canadiens, Koho Team Color Jersey. The winner will be announced on June 11th.

Good luck to all!

