

# Canadian Construction and Mining News

Fall 2002, Second Edition

## Welcome to the second edition of the ITT Flygt Canadian Construction and Mining Newsletter

This newsletter created by ITT Flygt is dedicated to the Construction and Mining markets in Canada. Focussing on applications, products and services, the main purpose of the newsletter is to share market information. The present issue includes an article on Quinsam Coal mine, which is today, the only underground coal mine in operation in Canada. Also mentioned are new product introductions and offers, which may be of interest to you.

### ITT Flygt in Canada

ITT Flygt in Canada is in the business of sales, services and rentals of ITT Flygt submersible products and adjacent equipment. ITT Flygt has been operating in Canada since 1955 and has 15 strategically located sales offices across Canada. Each sales location provides extensive technical sales and product service support. The company provides additional customer sales and service support with our distributor partners in selected regions of the country.

Wherever your business is in Canada, ITT Flygt and its partners are there to serve you in your dewatering needs. I invite you to visit our internet site at the following address: [www.ittflygt.ca](http://www.ittflygt.ca) to find the nearest office to your location.

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



ITT Flygt in Canada

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Flygt



ITT Industries

## Quinsam Coal Corporation, an underground coal mine using ITT Flygt explosion proof pumps

Quinsam Coal Corporation, owned by Vancouver-based Hillsborough Resources Ltd., operates the Quinsam Mine. The mine, located near Campbell River on Vancouver Island in British Columbia, produces a high quality thermal coal for power generation and cement plants.

Quinsam Coal Mine started as a small open pit operation in 1987. The underground mine went into production in 1990. The open pit mining stopped in 1994, and all activity has been in underground mining since then. Today the mine produces 360,000 tonnes per year with 45 employees dedicated to production and maintenance.

The pumps and all electrical apparatus used in an underground coal mine need to be specially designed and approved for an explosion proof application. ITT Flygt has a line of drainage pumps that has the EMR approval by CANMET (Canada Centre for Mineral and Energy Technology) for use in underground coal mines. The pumps are specially designed with an enclosed motor that will contain an explosion, so that it will not ignite the mine atmosphere. The so called explosion proof enclosure is designed with tight openings that will cool the



Aerial view of the Quinsam mine, located near Campbell River, on Vancouver Island, BC.

hot burning gases before they can come into contact with the external atmosphere.

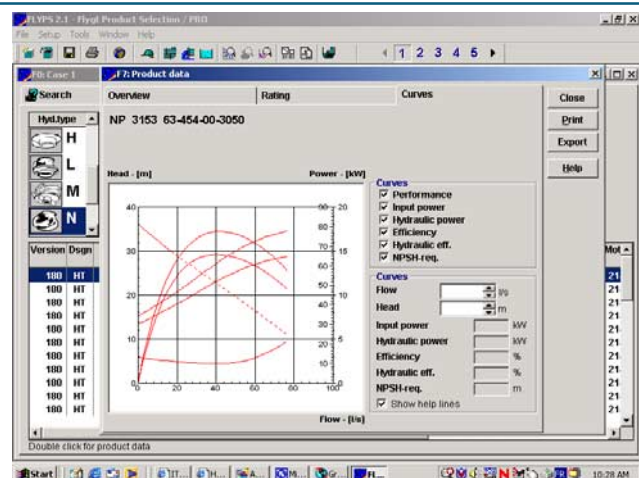
Quinsam own over 25 ITT Flygt EMR approved pumps. This collection of pumps which range from 5.4 to 58 HP comply to different pumping requirements. The pumps are used close to the drilling face as well as in pump sumps. The ITT Flygt pumps have proven over a long period of time, their excellent performance and reliability. In addition, the repair and maintenance of the pump fleet is done by the ITT Flygt sales location in Vancouver, which is approved by CANMET to perform the repair on these specially approved products.

## FLYPS 2.1, a great tool to be used when planning a dewatering project

Flyps 2.1 is a comprehensive PC tool for Windows designed to meet today's demands for designing your entire dewatering project. Developed by ITT Flygt, Flyps 2.1 helps to quickly and easily find the pump best suited for the application. The program features pump selection modules and a number of pump system tools such as pipe system design, including friction loss calculation, tandem and parallel pumping configuration, and pump performance analysis.

The Flyps 2.1 can be ordered online at the ITT Flygt Internet site or by contacting any Flygt office or Distributor Partner.

**Consult our internet site at  
[www.ittflygt.ca](http://www.ittflygt.ca)  
for more information on our  
products and services.**



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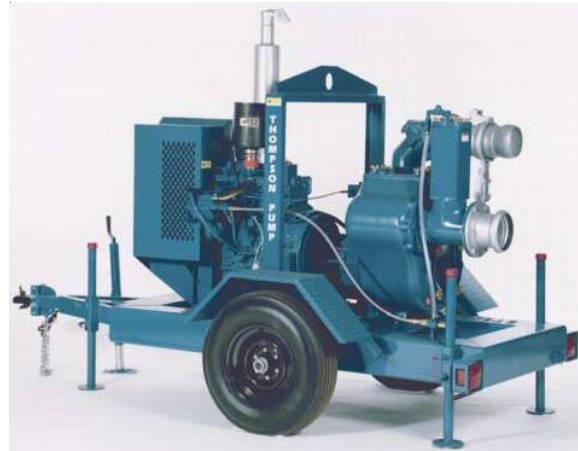
## Thompson Pumps: available now in the ITT Flygt Rental Fleet

Thompson self-priming portable pumps are now available for rental. Thompson Pumps from Port Orange, Florida have been in the pump making business for many years. We are now able to bring their excellent products and expertise to our rental and construction customers.

Applications for the Thompson pumps are found in many different areas. A common use for a suction pump is for by-pass pumping. When you have to pump around a plant process or have to divert flows from a manhole, these types of pumps are ideal. The pump can lift a liquid from about 25 feet and can discharge at rates up to 10,000 GPM.

Other typical applications for these pumps are:

- Marble Industry for cutting and dressing water
- Agriculture Industry for liquid manure and animal feed
- Textile Industry for wash water and dye water
- Chemical Industry for acid sludge, emulsions, and dyes
- Aquaculture Industry for water transfer and re-circulation



Enviroprime™ Open Trash / Sewage Pump model.

The pumps are very portable and can work in all climatic conditions. Most pumps have a diesel engine connected to the pump. There are suction and discharge connections that make the set up and disassembly of the installation easy and quick.

Complete information and technical support are available from any ITT Flygt office or from any Distributor Partner.

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## ITT Flygt introduces the Pump Flotation Module

The ITT Flygt pump flotation module has been introduced to provide a lightweight and cost effective alternative to the traditional steel pontoon. The flotation module is prefabricated from lightweight, fibre reinforced plastic and includes a stainless steel bracket to fix the pump to the module.

Applications for the flotation modules include:

- Mine dewatering
- Underground dams
- Tailing dams
- Sewage treatment and aeration ponds
- Construction dewatering site

Once in the water, the module can be towed by a boat, if required, and secured in position using an anchor or ropes. The floating module remains visible above the water surface for easy recovery.

By having the pump floating close to the surface, its' service life is increased through



Pump Flotation Module model PFM 200.

reduced maintenance, since it is no longer working in a high solid environment. You benefit from lower operating costs and fewer headaches.

## The upgrade of the Kingston West Sewage Treatment Plant is done with the Help of ITT Flygt

The Kingston West Sewage Treatment Plant located in Ontario handles a population of 44,000 people plus a nearby industrial plant. The treatment plant was in desperate need of upgrading. The general contractor T A André from Kingston had the complex task to provide a bypass system. This would enable the incoming effluent to be carried off during the upgrade without disturbing the day to day operation of the treatment plant. The contractor looked to ITT Flygt Canada to provide a complete solution and installation for the bypass operation.



A worker supervising several Thompson diesel suction pumps on site.

Flygt Canada came up with a rental proposal for pumps, piping and accessories for the bypass. The pumping equipment was required to bypass the incoming effluent to another location in the treatment process. The temporary installation needed to handle an average flow of 25,000 m<sup>3</sup>/day and also a peak water

flow of up to 100,000 m<sup>3</sup>/day, if heavy rain occurred.

The equipment supplied included the Thompson diesel suction pumps, Flygt submersible sewage pumps, diesel generators, piping and controls. ITT Flygt supplied and engineered the piping requirement for the project. Installation of the HDPE piping was also carried out under ITT Flygt's responsibility. ITT Flygt delivered the project to the great satisfaction of the contractor. The dewatering concept used by ITT Flygt reacted very well to any variation of the effluent inflow and allowed for the upgrade to the grit chamber without any disturbance or down time.

For your pumping projects large or small, ITT Flygt is there to supply a complete dewatering package.



**Keeping your mine dry**

The poster is titled "Keeping your mine dry" and features a central 3D cutaway diagram of a mine shaft and tunnel system. Several callout boxes point to different parts of the mine, each showing a specific pump application. Below the diagram are five numbered sections, each containing performance curves and technical specifications for different pump models:

1. Billion range of heavy-duty pumps
2. Cast iron dewatering pumps
3. Stainless steel pumps
4. Heavy-duty slurry pumps
5. Submersible mixers

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ITT Flygt logo

## ITT Flygt Mining Poster

ITT Flygt produced this year a special poster dedicated to the use of ITT Flygt pumps for the mining market. The poster is a comprehensive package as it includes pictures of the pumps, performance curves, dimensions and ratings. The poster also shows some typical dewatering applications.

The 70 X 100 cm poster is ideal for posting in the mine luncheon room and engineering offices. It will give a fast indication of the performance of a specific unit.

This attractive poster is free and available for distribution. It can be ordered from any Flygt office or from any Distributor Partner. The poster can also be requested at the following email address: [fdninfo@fluids.ittind.com](mailto:fdninfo@fluids.ittind.com).

Please take advantage of this offer!