



Flygt

# The new BS2640 - Pumping coal ash slurry at Prairie Mines

Highvale Coal Mine, Alberta, Canada

**Customer:** Prairie Mines, Highvale Coal Mine, Alberta, Canada.  
**Pumped media:** Coal ash fines - very abrasive.

## The Background

The mine had been having problems with their transfer house sump pumps that typically handle wash down material from reclaim tunnels and conveyor belt overflow. The existing pumps, end suction units, were in place for about 15 years, took up a lot of space and from a maintenance standpoint were fairly unreliable.



## The Challenge

The existing units were failing at an unacceptable frequency, creating significant problems with flooding and a considerable build-up of material in the sumps, which subsequently had to be cleaned out by hand.

At times submersibles were used as a backup but were unable to handle the abrasive material for any significant length of time before they too failed. The decision was made to replace the old pumps with a similar model or a submersible pump that could handle the job.

## The Solution

Initially, after visiting the site and reviewing the applications, we proposed the 5100 slurry pumps which are typically used for such pumping medium and extreme conditions. Nevertheless, Coal Handling Plant (CHP) maintenance



*Floor wash down sump*

planner in charge of the operation, Mike Bandura, had some additional requirements. The replacement pumps had to be:

- Lighter to easily move around and install manually.
- As durable as the heavy duty slurry pump (5100 series).

At the time ITT Flygt was introducing our new 2600 series pumps designed to replace the old Bibo line. With differentiated product benefits such as:

- Advanced wear resistant hydraulic end (5 times as much as the Bibo) made possible with the patent Dura Spin technology.
- The durable Plug-In seal with double protection (lasts 3 times as much as conventional mechanical seals) with patent Spin-Out technology.

*Engineered for life*

c. Lighter weight than similar powered pumps in the market.

We offered the pump as a proper fit. The first pump was immediately installed in one of the most notorious locations. Due to the impressive pump performance, just 3 days of operation, the Edmonton branch received notification that the mine would require 8 of these units as soon as they could be delivered.

When asked how they had made such a quick decision Mike Bandura said "Quite easily; the light weight, ease of installation, exceptional performance of the unit, and the value for the money compared to the others."

The units installed have been in operation for over six months and have performed flawlessly. In a follow-up conversation with the mine, we were informed the installation of these lightweight, very efficient units have significantly reduced the maintenance hours, typically required for similar operations.



*Mike Bandura, Coal Handling Plant (CHP) maintenance planner.*

Prairie Mines have since inquired about additional units similar to the ones above for one of their other Coal Handling Plants that is also experiencing similar problems with the sump pumps.

**Derrick Chaulk**, ITT Flygt, Western Regional Manager, Edmonton at (780) 489-1961