

In This Issue

The Hendrik Group, Inc. and Imperial Technologies, Inc. in a joint venture to convey potentially hazardous materials without spillage!

The Hendrik Group, Inc. offers a practical solution for the prevention of belt alignment problems! The patented, Synchro Take-Up hydraulic belt monitoring system!

HoverGlide Q & A...The Hendrik Group, Inc. continues to answer the most asked questions about air supported belt technology.

HoverGlide

Air Supported Belt Conveyors

The Hendrik Group, Inc.
193 Sprain Brook Road
Woodbury, CT 06798 U.S.A.
203-263-7025
203-263-7425 fax
email:
support@thehendrikgroup.com

The Hendrik Herald



Volume 1, Number 3

October, 2003

Toxic Trick-n-Treat



It's Alive!
It's Alive!
Our
creation
LIVES!

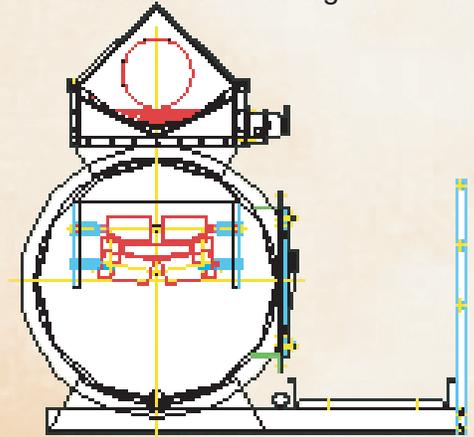
No, it's not the Frankenstein monster, but it is a creation worth taking a second look at.

The Hendrik Group, Inc. in conjunction with Imperial Technologies, Inc., is supplying a hybrid HoverGlide™ Air Supported Belt Conveyor to assist a client with their hazardous waste handling application.

The client is handling a potentially explosive hazardous waste, over a building and a roadway, and does not want spillage from the carrying side or the return side to fall on the cars and trucks below. To address these issues, they contacted Imperial Technologies and The Hendrik Group, pioneers in the bulk material handling industry.

Because the material is potentially explosive, nitrogen is being introduced into the air chamber of The Hendrik Group's HoverGlide™ carrying side to nullify ignition of the gasses. The film of nitrogen in the 45° plenum bed plate creates a

parabolic curve that totally supports the belt and load, which eliminates all friction between discharge and tail. Continuous, gasketed, hip roof covers on the top strand prevent any and all spillages between the loading section and the discharge.



On the return strand, the Imperial Technologies' Multi-Fold™ system folds the belt in on itself so the carrying side is totally enclosed. This is accomplished by the use of two flexible hinging areas that allow the belt cover flaps to fold over and contain the material that was not get cleaned off in the discharge area.

The HoverGlide™ troughing sections are supported on a 4'-0" tube section, enabling a clear span of 130'-0".

How may we help you?

HoverGlide Q&A

The Hendrik Group fronts many questions about the air supported belt conveyor on a daily basis. We hope it is because people are as excited about this technology as we are. We will try to address your issues in this section, but of course, feel free to call us for additional information.

Q: What prevents the holes in the plenum from plugging?

A: When the conveyor is in operation, air is forced between the plenum bed and belt, which escapes along the belt edges. This creates a positive seal against dust and material from entering between the plenum bed and belt. When the conveyor is not operating, the belt lies in the trough and seals the holes.

Q: Will the conveyor operate without air?

A: If the conveyor is short enough, probably. It would act as a slider bed conveyor. However, the fan is interlocked with the conveyor motor. When the conveyor is started, the fan is activated first. Through an adjustable pressure switch, the conveyor drive is started once the plenum pressure is reached.

Q: If the conveyor is not covered, will rain water enter the plenum sections?

A: Yes, there may be seepage between the belt and plenum bed plate. We generally provide a bleeding valve at the tail end of the conveyor. If the conveyor is operating in a cold climate and not covered, we recommend keeping the blower on and possibly a creep drive to keep the conveyor running.

More in the next issue.

Belt Monitoring & Tensioning...All In One!!

Maintaining a relative position of a bucket boot pulley or conveyor take-up pulley bearings so that the belt remains centered on the pulley while providing constant tension on the belt to prevent slippage on the drive pulley is exactly what the Hendrik Group's Synchro Take-Up System does.

These functions are accomplished by maintaining alignment of the two bearings supporting the take-up pulley. Each bearing is mounted on a slide, attached to a hydraulic cylinder. One cylinder is "Reference" and one cylinder is "Follow-up" which is interlocked with the "Reference" cylinder.

If bearing misalignment occurs, it is transmitted from the bearings, through mechanical means to a sensing pin. The sensing pin activates a servo control valve.

When the bucket elevator or conveyor is loaded with product, the belt stretches, moving the take-up pulley. Since the system maintains constant hydraulic pressure, the "Reference" cylinder compensates for this movement by taking up the slack. The control valve is actuated and sends a hydraulic flow,

proportional to the error, to the "Follow-up" cylinder. The "Follow-up" cylinder then moves in the required direction until the alignment of the bearings is reached.

Since some of dust ignition disasters have been attributed to belt misalignment problems, the Synchro Hydraulic Take-Up is a practical, preventative solution.

Please give us a call for additional information and let us know how we may serve you.



Represented by:



The Hendrik Group, Inc.
193 Sprain Brook Road
Woodbury, CT 06798 U.S.A.
203-263-7025
203-263-7425 fax

support@thehendrikgroup.com
www.thehendrikgroup.com

Thought for the day: "Success is how high you bounce when you hit bottom."
General George Patton