



## FlexLink Conveyors Help Valvoline Meet Just-in-Time Production Requirements

### Problem:

Keeping production operations running optimally is critical to meeting Valvoline's just-in-time delivery requirements. That's why the reliability and efficiency of process equipment and supporting systems is so important to the ongoing success of modern production operations. With the intention of improving its production operations over a number of years, the Canadian packaging plant required a highly flexible conveyor solution that could be easily modified, adjusted or even reconfigured to match evolving production requirements. Design diversity was also a must as the plant had space restrictions that required lines to travel up and around the facility. Accumulation areas were also required between operations to execute machine change-outs without stopping on-line production. And as new high-speed labelers were added to production lines, diverters were necessary to direct product to correct packaging lines.

*"Production output continued to increase with the addition of the FlexLink conveyor systems throughout our bottling line," says Hugh McCrie, Valvoline Canada Plant Manager. "The flexibility of the FlexLink components also enabled us to quickly and cost-effectively rebuild lines by adding onto existing conveyors."*

### Solution:

Having learned about the design diversity and flexibility of FlexLink conveyors from TOPS Conveyor Systems, an authorized FlexLink System Builder, Valvoline turned to the Ontario based conveyor company to install a conveyor line that would increase manufacturing efficiency and quickly adapt to changing production requirements.

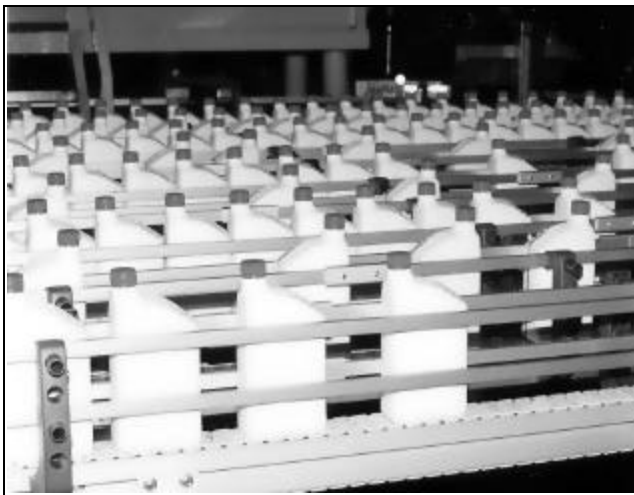
TOPS Conveyor specified a FlexLink XM conveyor system for Valvoline's small container bottling line based on its vertical conveying capabilities and flexible design abilities. The conveyor also met objectives for quiet operation, easy maintenance and the design diversity to transport bottles in various configurations throughout the Valvoline plant.



**Bottles after being labelled, are feeding the hand pack-off area.**

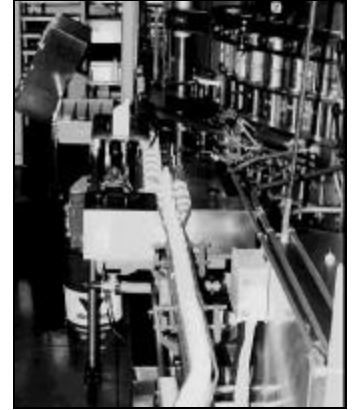
Based on the success of the initial installation, Valvoline continued to extend the FlexLink line from the filling station through capper, sealing and onto labeling operations. "Production output continued to increase with the addition of the FlexLink conveyor systems throughout our bottling line." says Hugh McCrie, Valvoline Canada Plant Manager. "The flexibility of the FlexLink components also enabled us to quickly and cost-effectively rebuild lines simply by adding onto existing conveyors."

Due to the success of the Initial FlexLink conveyor systems the XL line was extended downstream from the labeler, to two separate small container lines where a heavy duty XH conveyor was also added to transport case goods of oil from the cartoner to the case packer. The original drop chute was also replaced with a one-sided wedge conveyor for a more controlled vertical transport of containers. A custom conveyor was also built with an intralox high-temperature 6" cleated belt on FlexLink structural components to quickly remove flashing to a recycling grinder.



***Approximately 200 linear feet of XL buffer downstream of filler, capper and check weigher. Buffer then feeds one of two labelers.***

Valvoline has since added FlexLink XL conveyors to create 200 linear feet of accumulation area between filler and labeling operations. They have also added a second high speed labeler and FlexLink diverters which automatically direct product flow to the two labelers. Now when Valvoline wants to change over from one labeler to the next FlexLink diverters will automatically redirect containers. The same is true with filling operations. By incorporating FlexLink diverters, Valvoline can quickly redirect containers from one filler to the other to keep production operations moving.



***New high speed 36 head filler.***

"The long term use and on-going installation of FlexLink conveyors has proven to be a very prudent investment, offering long-term reliability, design diversity and flexibility," says McCrie.

Since the initial installation of FlexLink conveyors, production output of Valvoline's small containers has increased more than 300%. The conveyors operate 3 shifts a day, 5 or 6 days a week virtually maintenance free. Valvoline is currently planning to replace the last of its outdated tabletop conveyors, which will extend the use of FlexLink in its plant to approximately 1,000 linear feet.