

## **ARE YOU USING DISPOSABLE CONVEYORS?**

When a major packaging machine manufacturer selected Conveyor Technologies Ltd. as their source for conveyors, it was predicated on the construction, functionality, and especially, reliability. Continuous 24-hour-a-day, 365 days a year system reliability was required. They indicated that "disposable" type conveyors were not compatible with high-speed continuous processes, especially in food, pharmaceutical, and clean room applications, due to a much higher level of contamination. Some "DISPOSABLES" have multiple areas capable of producing excessive wear particulate.

Disposable conveyors are considered to be those with characteristics that contribute to a reduced service life of components. The primary causes of this accelerated wear can be faulty bearing systems, under-size pulley diameters for a given width, pulley knurling, high wear "Vee" tracking, and improper belt tension. Small pulleys increase flexure stress of belting, reducing belt life, as well as bearing life, since bearings must normally be smaller than pulley, and run at higher R.P.M. as pulley size decreases. Knurling can reduce both belt, and pulley life, as well as causing slippage and miss-tracking when contaminated, and may require periodic belt removal for cleaning belt debris from the knurl, and vee guide.

Service manuals advocating stocking "REPLACEMENTS" for major conveyor components and deleting bearings from the warranty, might be clues of a disposable conveyor. Vee belt retainers, and lack of crowning, might also be indications of inability to provide appropriate "Tracking Tension".

It is widely accepted that a "Properly Designed" crowned pulley system can greatly outperform a "Disposable" in terms of load, speed, flexibility, operating cost and DURABILITY. DISPOSABLES often require routine replacement of their perishable components such as knurled pulleys, bearings, bearing housings, and belts due to worn vee guide, belt elongation, and knurl abrasion. Some Conveyor Suppliers suggest maintaining spare drive, and idler spindle assemblies for your convenience. These two assemblies can make up 46% of the total custom components of the entire conveyor. Based on this suggestion, when these are utilized, you would then invest in another "46% convenience." These routine replacement costs, and their reduction of "Production Efficiency" along with potential influence on "Customer Attitude" after a late delivery, or contaminated product, should be evaluated.