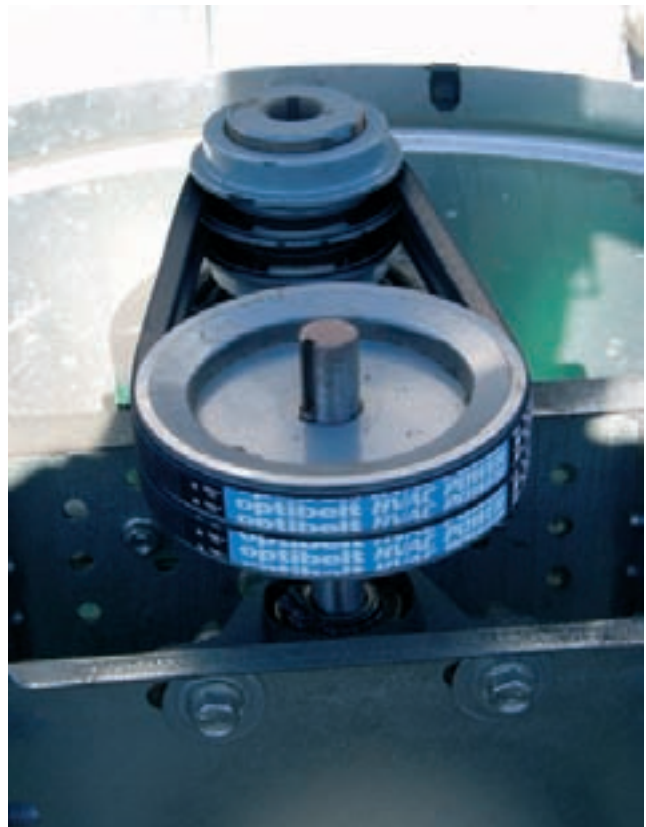


## HVAC POWER V-belts resolve drive problems in fan drives

Portillo's restaurants serve up the world famous Chicago style hotdogs in multiple locations in the Chicago metropolitan area. Their properties include old remodeled fast food franchise locations along with multiple new construction buildings, usually two story with open areas in the dining room extending clear to the roof. For their HVAC systems they employ many small exhaust fans using fractional horsepower motors and belt drives.



One particular unit was in the heat stream of the exhaust plenum of one of their cooking units. The belt life on this particular unit was three to four weeks from the date of installation. This had been the case since the unit was brand new. The contractor had tried many different types of belts and many manufacturers' belts with no noticeable gain in belt life.



Optibelt introduced the contractor to their newest special recipe stock belt, HVAC Power. The belt incorporates learned technology from the company's experience with their Red Power II belts. This Red Power II belt is employed on large industrial drives and has proven to extend belt life 2-3 times over standard belts. The reason is the maintenance free aspect of the cord along with special rubber compounds unique to Optibelt's manufacturing capabilities.

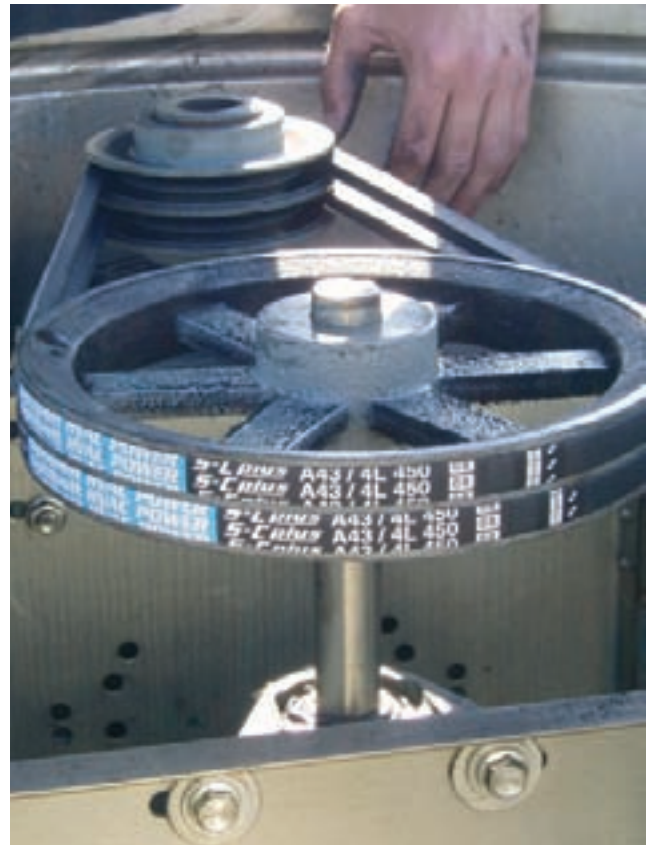


Power Transmission

The HVAC power belt uses similar compounds, fabric and cord structure to enhance drive performance and belt life. The base rubber in the belt is a high temperature heat resistant rubber that increases flexibility without sacrificing fatigue bending life. The wrapping is special that allows the belt to wrap around the smallest variable pitch pulleys that are popular in the HVAC industry. The cord structure has been tested internally to show very little to no stretch over its lifetime hence eliminating the need to re-tension the belt after initial run-in periods. Optibelt's field engineers worked with the contractor

on installing the initial belt on the drive. Proper tensioning and alignment was insured by the use of the company's CAP 10.12 program, TT Mini sonic belt tensioner, Optikrik tool and laser alignment tools.

The resultant belt life has been astounding. At the writing of this article the belt has been running for 10 months without re-tensioning, replacing or attention by a mechanic. This has eliminated many extra visits by the contractor and has allowed the restaurant to continue full operation over this time.

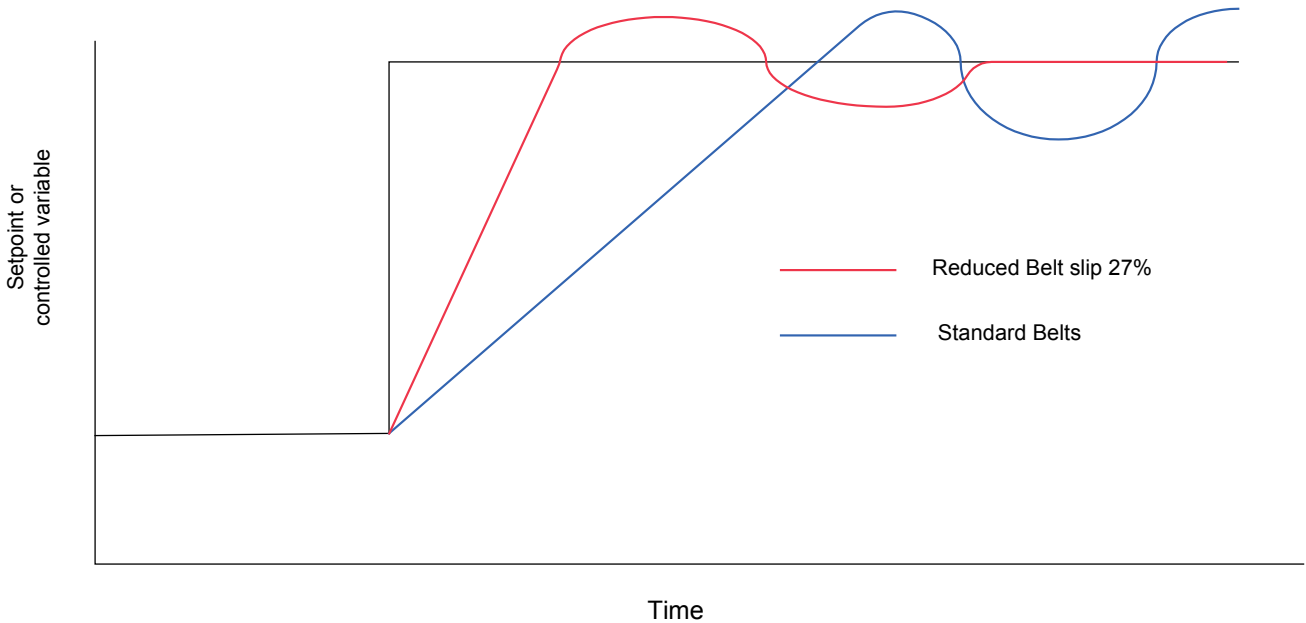


The HVAC Power belt is available in A/4L and B/5L sections and lengths up to 47" from stocking distributors across the United States and Canada. The recipe can be carried forward to longer lengths under special order from and distributor that promotes the Optibelt brand. In addition, higher horsepower units can employ the Red Power II belts and experience extended belt life and maintenance intervals.

The hotter the better due the belt's heat resistant properties. Practical tests in Las Vegas, Nevada have shown belt life extensions up to four times that of a normal belt.

Additional testing done by the manufacturer in Germany has proven that this construction reduces belt slip and hence increases efficiency. Applying this information to closed loop control systems can reduce the energy cost for operating the system.

The above sketch shows the concept of reducing energy cost on a closed loop control system. There are two advantages; less slippage means faster a response curve to the new set point. The second is less settling time and tighter hysteresis. All of these add to increased control efficiency and reduced energy cost.



An increase in belt efficiency will :  
 Increase response rate  
 reduce settling time  
 reduce control hysteresis  
Therefore reducing energy consumption



January 17, 2008

Mr. Philip Carlson  
President  
Optibelt Corporation  
1120 W. National Ave.  
Addison, IL 60101

Dear Mr. Carlson,

I am writing this to compliment Optibelt on your new HVAC POWER V-Belt line! Our customer, The Portillo Restaurant Group has some very demanding ventilation applications. In fact over the last few years we have had to replace belts every 30 days or so. This was costing us a lot of money considering the contract obligation we had in place and the cost for each visit. In fact the cost of the belt is insignificant compared to making a service call every 30 days just to replace the belts.

Your sales representative David Carroll and Dick Geiken of Dreisilker Electric Motors made the recommendation to try your new HVAC Power belt and even helped install the belt for evaluation purposes. I have to say that this was in late June 2007 and as of this time the belt is still running and looks like new!

Your claims about this new V-Belt are validated as far as I am concerned and we will look to put this product on other blowers. I would think any mechanical contractor should consider this V-Belt line as a value added solution for the contractor and the user.

Sincerely,

Tim Uher  
GT Mechanical, Inc.

