

# Want to SAVE...

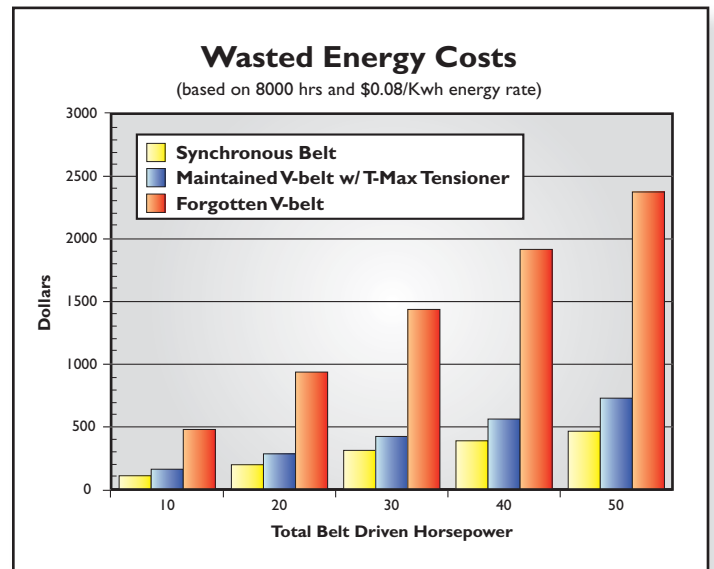
- ✓ Energy?
- ✓ Time?
- ✓ Money?

*Now you CAN by maintaining proper V-belt tension with Fenner Drives' T-Max® Automatic Belt Tensioners for optimum drive efficiency and life.*

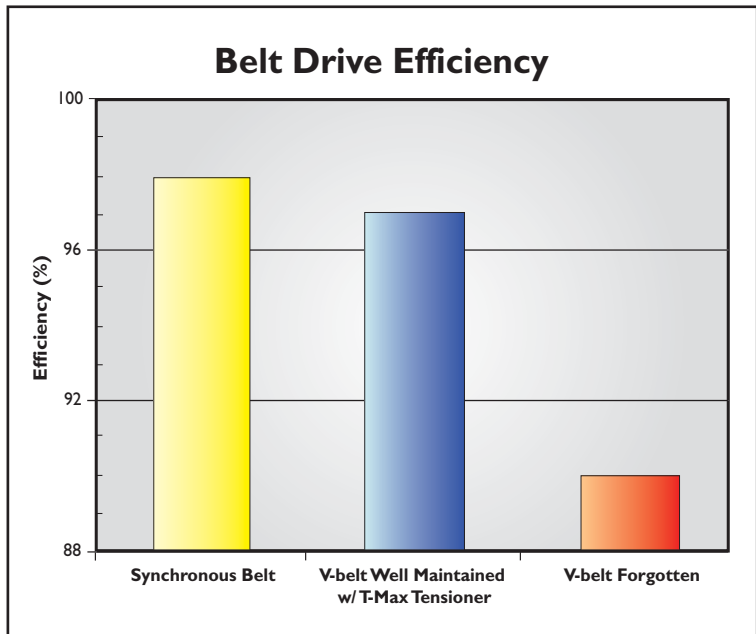
With energy prices soaring, efficiency is the name of the game when it comes to battling the costs of keeping cool. During an energy audit, efforts to increase efficiency often focus on better sealing, managing replacement air, more efficient motors, sophisticated electronic controls or other high tech solutions that improve the situation but offer lengthy returns on your investment. In this struggle to squeeze every BTU out of each kilowatt hour, auditors tend to overlook, trivialize or completely ignore climate control fan drive systems as an opportunity to make significant efficiency gains and achieve cost savings.

On many AC units, the drive system often utilizes the popular V-belt to transmit power from the motor to the fan and/or compressor. Some companies would have you believe that this well-established power transmission system is outdated and inefficient, suggesting the path to increased efficiency is with a synchronous belt drive. While there is no

question that synchronous belt drive systems are very efficient in their power delivery, they are more costly, they emit a telltale whine resulting in higher noise and their inherent precision requires more meticulous drive alignment. Conversely, V-belts are inexpensive, uncomplicated, forgiving, quiet and reliable. The misnomer with V-belts is that they are inherently inefficient. The truth is that a properly designed, installed, and maintained V-belt drive system is virtually as efficient as a synchronous belt drive. The problem lies with the stretch of and regular maintenance required for V-belts. Over their life, V-belts will continue to stretch and if they are not regularly retensioned, their efficiency can drop from 96%+ to well below 90% resulting in wasted energy and reduced belt life. (more...)



**T-Max**  
BELT & CHAIN TENSIONERS



and life. As the V-belt stretches, the spring loaded tensioner takes up the slack and maintains the proper tension. By applying one of these tensioning devices, you maintain the reliability and simplicity of a V-belt drive system with the maintenance-free efficiency of a synchronous belt drive.

While the obvious solution to this problem is regular preventative maintenance on the V-belt drives, this often isn't as straightforward as it might seem. Unfortunately, many maintenance departments are minimally staffed and a preventative V-belt drive maintenance program is not a priority. Additionally, difficult to get to locations, inclement weather, and ill functioning tensioning systems are just some other reasons these belt drives are not maintained to produce optimum power transmission efficiency. Fortunately there is a solution to this conundrum: the use of an automatic spring-loaded belt tensioner.

The key difference between these two routes is the payback period on your investment. While a variety of factors will affect your return on investment, it is typical to see the energy savings cover the cost of a tensioner within 6 months while a retrofit to a synchronous belt drive may take over 2.5 years.

Whether you decide simply to bolt on a spring-loaded belt tensioner or go to the significant extra expense of changing out pulleys and belts to a synchronous system, you will see energy savings over your existing un-maintained drives.

Belt tensioners work by applying a preset load to the V-belt which yields the proper tension for optimum efficiency

 **Fenner Drives**<sup>®</sup>  
an ISO 9001:2000 certified company

311 West Stiegel Street  
Manheim, PA 17545-1747

Hudson Road  
Leeds, LS9 7DF UK

TEL: 800-243-3374  
TEL: 717-665-2421  
FAX: 717-665-2649  
e-mail: info@fennerdrives.com

TEL: +44 (0)870 7577007  
TEL: +44 (0)113 2493486  
FAX: +44 (0)113 2489656  
e-mail: sales@fennerdrives.com

[www.fennerdrives.com](http://www.fennerdrives.com)