

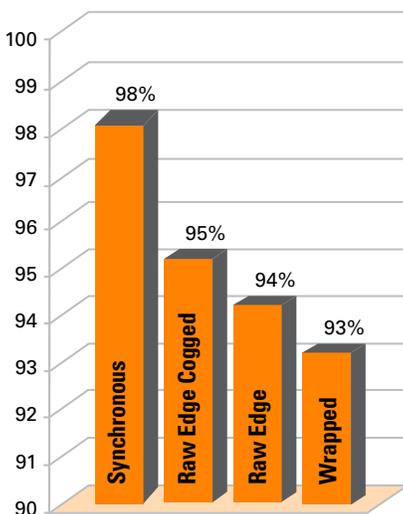
Maximize Drive System Efficiency in Two Simple Steps

Industry has made intensive efforts to improve the efficiency and productivity of motors and driven equipment. However, the belt drive connecting these components is critical to achieving maximum efficiencies. Two simple solutions for improved system performance are the use of energy efficient belts and proper drive installation.

1. Energy Efficient Belts

According to the U.S. Department of Energy, wrapped belts operate on average at a 93% efficiency rate, raw edge cog-belts operate at 95%, and synchronous belts at 98%.

You can quickly and easily save energy with Carlisle® belts by Timken. Payback is significant and begins immediately! The greater the number of drives and the higher the horsepower of your drive, the more you save.



The Raw Edge Cog-Belt Solution

Install a Gold-Ribbon® or Power-Wedge® Cog-Belt® on your existing v-belt drive to realize immediate energy savings without changing sheaves or modifying your drive! Our raw edge Cog-Belt flexes more easily around the sheave, generating less heat which contributes to longer belt life. Raw edge side walls produce a higher coefficient of friction which keeps a tighter grip on the sheave and minimizes slippage.

The Synchronous Belt Solution

Drive out inefficiency and put some teeth into your energy conservation program with Panther® and Panther® XT belts by Timken. When designing a new drive or replacing worn sheaves on an existing drive, consider a synchronous drive system. The positive engagement between the belt and sprocket eliminates slippage and speed loss common to v-belts. Power transfer from the motor to the driven unit is on average 98% efficient.

For more information about energy saving belts, please visit www.carlislebelts.com.

2. Proper Drive Installation

A belt drive system loses efficiency when the belts and pulleys fail to maintain proper contact. Correcting drive installation factors such as improper tension, poor alignment and worn sheaves or sprockets ensures that the drive is operating as designed, resulting in increased belt life, efficiency and performance.

Drive System Tools from Timken Belts

Drive Engineer™ Mobile Web App
The Drive Engineer app delivers robust drive design and existing drive analysis to your desktop or mobile device. www.driveengineer.com

PowerMiser™ Mobile Web App
Calculate energy savings with PowerMiser, a simple desktop and mobile-friendly app. Instantly see estimated annual energy costs, savings and payback on drives upgraded with Carlisle belts by Timken. powermiser.driveengineer.com

Tension-Finder® V-Belt Tensioning Device
A simple, easy and accurate alternative for tensioning individual v-belts or bands. Part No. 108039-A

Spring-Loaded Tensiometer
Measures the force required to deflect a span length by a given amount, as related to the tension in the belt. Part No. 102761

Frequency-Finder
An electronic instrument that precisely measures the frequency used to calculate the static tension in synchronous, v-belts and v-ribbed belts. Part No. 109061

Laser-Align
Magnetically mounted lasers allow fast and accurate alignment of belt drive pulleys. Only one person is needed to perfectly align your drives. Part No. 109083

TIMKEN

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, gears, chain, couplings and related mechanical power transmission products and services.

www.carlislebelts.com