



Power Transmission Products

Elongation Method of Tensioning

Recommended Elongation Factors Tensioning Stock BESTORQ® V-Belts & Banded V-Belts

SIMPLIFIED PROCEDURE

ELONGATION METHOD OF TENSIONING 2-PULLEY V-BELT DRIVES

This method is chiefly used for larger belt drives.

This method must be used with care and accuracy on belts with Kevlar Cord (BESTORQ Thunder)

Step 1. For your drive look up the **ELONGATION FACTOR** for the belt cross section and type in the graphs on the following pages.

Step 2. Measure the outside length of the belt with no tension applied to get the “**FREE LENGTH**”
(Note: if this a used belt on an existing drive you must slack off the drive until no tension is on the belt.)

Step 3. Multiply the “**FREE LENGTH**” by the “**ELONGATION FACTOR**” you found in step 1. This gives you the “**TENSIONED LENGTH**” of the belt.

Step 4. Actually tension the belt on the drive.

With the belt installed on the drive, measure the outside length of the belt.

Tighten the drive until the outside length of the belt equals the “**TENSIONED LENGTH**” you calculated in step 3.

EXAMPLE DRIVE: 20” Diameter 8V driver pulley and 36” Diameter Driven Pulley and a 8V2000 Banded Belt.

First the 8V2000 banded belt is measured around the outside with a steel tape and it measures 200-3/8” (200.375”); this is the “**FREE LENGTH**”. Look on the chart for a 20 inch diameter pulley and the “**ELONGATION FACTOR**” is 1.0132. Multiplying the “**FREE LENGTH**” (200.375”) times “**ELONGATION FACTOR**” (1.01032) equals “203.02”, the “**TENSIONED LENGTH**”.

The belt would need to be tensioned until the outside length of the belt measures 203”; the “**TENSIONED LENGTH**”.

Special note: DO NOT use a string to measure around the belt due to the fact the string will stretch too much. You must use something that will not stretch, such as slim steel tape measure.













