

## Chek Mate® Belt Matching



When multiple belts with slight variations in length are used on a single drive, some belts may appear to hang unevenly or “sag.” If belts are not matched, the shortest belt carries the load. This prevents the belts from working together as a team to achieve the full horsepower capacity of the drive. “Matched belts” are required to obtain optimal performance and belt life on a multiple-belt drive. In the past, a “sag number” or “matching code” was needed to identify variation from the target specification. Chek Mate replaces the need for finding belts with a matching number, because all Carlisle belts by Timken branded with the Chek Mate symbol will match.

### Belt Matching

- All manufacturing processes have variation
- One key belt variation is length
- Optimal performance on drives with multiple belts requires “Matched Belts”

### Chek Mate®

- Chek Mate® is a process that manufactures belts to meet or exceed Association for Rubber Products Manufacturers (ARPM) tolerances for a matched set
- Matching numbers are not required on these Carlisle belts which carry the distinctive Chek Mate logo or symbol: Super Blue Ribbon®, Super II®, Super Power-Wedge®, Power-Wedge® Cog-Belt® and Gold-Ribbon® Cog-Belt®
- Maximizes belt life and performance by eliminating mismatching

### Importance of Using Matched Sets

- When it’s time to change one belt on a multiple-belt drive, replace *all* belts with a matched set of new belts. This allows the load to be properly shared between each belt.
- Unmatched belts may cause sheaves and belts to wear unevenly resulting in premature belt failure
- Unmatched belts may increase belt whip and vibration

### When Replacing Sets of V-Belts

- Always replace with the right type of v-belt for the application
- Never mix new and used belts on a drive
- Never mix belts from different manufacturers:
  - Belts cannot be matched and will not deliver the service life they should
  - The dimensions of belts from different manufacturers will vary
  - Construction differences may cause belts to ride differently in the sheaves and stretch differently
  - Belts may seat in the sheave differently
- Problems that appear to be caused by belts that are not matched may be due to other causes such as misalignment and sheave wear

**Chek Mate icon ensures matched belts**



# 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](http://www.carlislebelts.com)