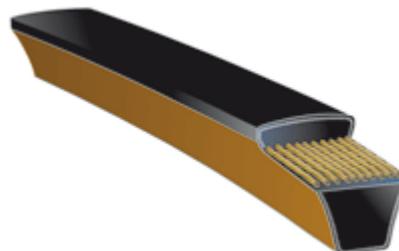




Predator® V Belt Powerbands Belts and Singles

Predator Single Belt- when PowerBands aren't an option, Predator Singles are the best problem solver available. These belts are specially designed for use on metric multi-groove sheaves, deep groove sheaves and drives with limited room for "take up". They can also be an "A" section solution for multi-groove A/B sheaves.



Predator PowerBand Belt - Replaces several belts with the strength of a single belt. Features a multiple layer tie band that provides excellent lateral rigidity to prevent belts from turning over or from coming off of the drive.



Predator belts help solve your most common shock-load belt drive problems and save you money at the same time!

The scenarios and case studies listed below are real-life examples of how Predator belts can work for you.

Situation:	Solution:
Belt drives lose their tension regularly.	Predator belts use KEVLAR® or aramid tensile cords, which result in near-zero stretch. This means less frequent re-tensioning and increased productivity.

Applications with extreme shock-loads may result in shorter belt life; sometimes less than one month.	The tie band on Predator PowerBand belts helps resist vibration and lateral movement, and keeps the belt from “dancing” out of the grooves. In addition, the near-zero stretch KEVLAR® or aramid tensile cords prevent slippage and allow the belt to withstand the shock that others cannot.
Short belt life on standard cross sections.	By switching to a Predator belt and the appropriate sheave, capacity is improved by over 20-50 percent more than standard belts.
Belt and sheave wear from change in center distance of drive (usually under shock load).	Use Predator belts with double fabric cover to reduce belt wear.
Debris damage to drive belts and sheaves by rocks, sand or “fines” (small dust and dirt particles capable of passing guards).	The double layer of fabric on Predator belts helps resist debris damage. Gates recommends that you identify expanded metal guards that let debris pass through, and if possible make the guard solid on the top and sides.



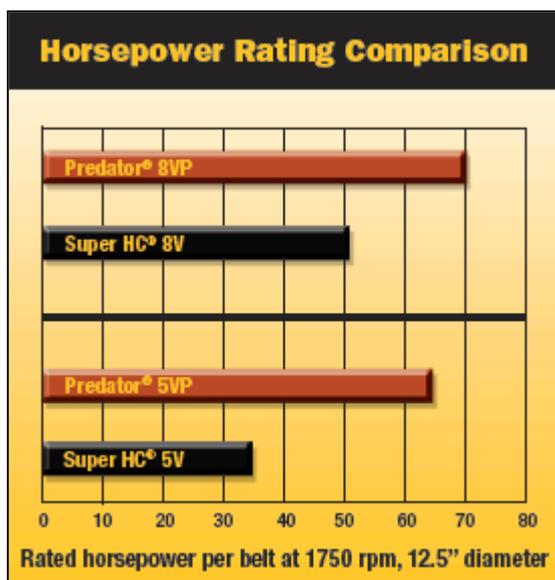
[Car](#)

Shredder

A machine that easily shreds cars to the size of baseballs in 30 seconds can be demanding. The 48-groove 8V section drive constantly needed re-tensioning, but the design of the drive did not allow for it, so the belts flopped until they wore out. The recycling company was continually spending time and resources to maintain the equipment. Gates provided an innovative solution for running the 3,600-horsepower car shredder: matched sets of Predator PowerBand 2-strand 8VP belts. The “clutching”, near-zero stretch belts means no re-tensioning, but has doubled the standard belt life by 2 years.

Predator Construction Features	Predator Construction Benefits
"Clutching" non-rubber surfaced cover	Allows momentary slippage due to excessive overloads without burning belts up
KEVLAR®* or aramid tensile cords	Give extraordinary strength, durability and virtually zero stretch
Virtually zero stretch	Eliminates the need for constant belt re-tensioning
Chloroprene rubber compounds	Provide superb oil and heat resistance

<i>Specially-treated extra tough cover</i>	Withstands slip and shear forces at peak loads without generating excessive heat; fends off penetration by foreign materials
<i>Gates curves</i>	Compensate for effects such as sidewall bulge, which occur when belts bend around a sheave. This yields uniform loading, giving maximum belt life and even wear on the sheave sidewalls (eliminates dishing).
<i>Double fabric cover</i>	Creates maximum abrasion resistance that protects against wear caused by fine airborne dust in rock quarries and lumber mills, which can cause rapid belt sidewall wear resulting in early failures.
<i>Over 20%-50% more horsepower than standard V-Belts</i>	Enables new equipment designers to utilize the full load-carrying capacity of these high performance belts.



Gates Predator V-belts are very unique in their extreme robustness and high load carrying capability.

Predator V-belts have the highest power density of any V-belt, and stretch one half as much as standard cross sections. Predator belts are excellent problem solvers that perform well in harsh environments and in extremely demanding applications where standard V-belts may have performance issues.

- Predator Singles are available in:**
- Classical Narrow - AP, BP, CP, 5VP, 8VP
 - Metric - SPB, SPC

Note: The load capacity of standard off-the-shelf sheaves should be evaluated before using Predator V-belts.

Sheaves With new, increased horsepower ratings, drives designed with Predator V-belts can potentially over load standard sheaves in heavily loaded applications. The load capacity of standard off-the-shelf sheaves should be evaluated before using Predator V-belts.

Case Studies

Chipper Drive for Timber Industry Four people were required to work six hours every three months in order to maintain a chipper drive running eight SPB 4750 belts. Downtime was costing the company about \$7,000 each year with another \$2,000 in belt costs annually. By switching to Predator Singles, the company was able to eliminate three belts. Not only are the belts expected to last longer than three months, but it is also anticipated that replacements will not be needed until the 12-month life mark



Hogger Drive for Timber Industry A hogger drive running five 5V 850 belts was burning through them every few months. When the belts failed, there was 1-2 hours of downtime to replace and re-tension the drive. After running KEVLAR® reinforced 5VP cross section Predator Singles belts on this application for 20 weeks, there was no noticeable wear.

Band Saw for Timber Industry Significant improvement has been made on a band saw drive using Predator Singles. Even though the pulleys weren't replaced, the new Predator Singles exceeded the prior four-month life expectancy with no noticeable signs of wear. For every set of belts that they do not need to replace, the company saves \$2,000.

Designed for the toughest, dirtiest and most aggressive applications and environments, Gates Predator's construction is what sets it apart from any other v-belt.

Available in both PowerBand® belts and Singles, Predator belts have the highest power density of any [V belt](#), and stretch dramatically less than standard cross sections.

Predator belts are ideal for use in the following industries:

- **Wood Products** - timber, logging, pulp and paper, lumber and plywood
- Mining
- **Rock Crushing/Quarry Operations** - crushers, shaker screens, conveyors
- Oil Field



Ideal for use on problem drive applications requiring *high-impact strength and load-carrying power*, including: crushers, de-barkers, hogs, grinders, wood hogs, pallet grinders, shredders, tub grinders and car shredders.