

- › **MAINTENANCE FREE**
- › **35% REDUCED DRIVE COST**
- › **67% REDUCED DRIVE WIDTH**
- › **50% REDUCED DRIVE WEIGHT**



**PREDATOR®**

**BELT DRIVE SYSTEMS**



# PREDATOR® - DESIGNED FOR THE MOST AGGRESSIVE APPLICATIONS & ENVIRONMENTS



Predator®, the world's premium construction V-belt, devouring the number of belts required.

- > Reduce drive cost up to 35%
- > Reduce drive width up to 67%
- > Reduce drive weight up to 50%
- > Reduce drive maintenance
- > Reduce overhung loads
- > No increase in shaft load



NARROW



CLASSICAL

Predator® Cross Sections			
Belt Type	Classical	Narrow [ISO]	Narrow [RMA]
Singles	AP, BP, CP	SPBP, SPCP	5VP, 8VP
Powerbands	BP*, CP*	SPBP, SPCP, 9JP*, 15JP*	3VP, 5VP, 8VP

**NOTE:** Predator® V-belts must be ordered in matched sets.

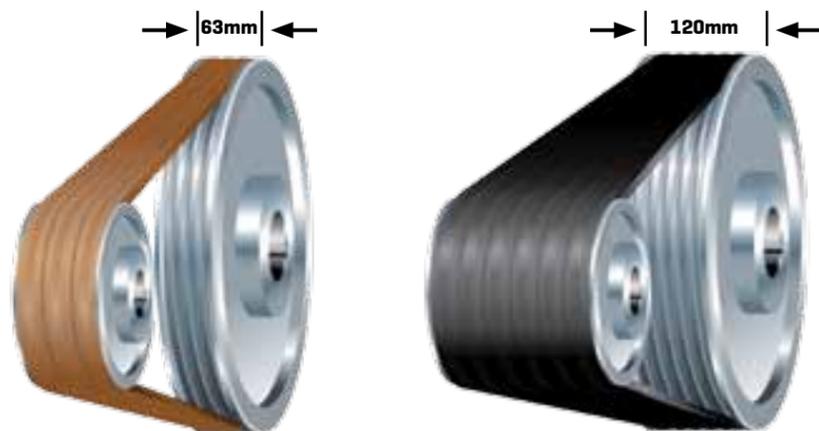
\* Available on request

## PREDATOR® BELTS IN ACTION

Predator® V-belts have already proved themselves on the most demanding applications including crushers, mulchers & shaker screens. They are the ideal belt for solving issues on poorly performing belt drives.

## COMPACT DRIVE SAVES SPACE, WEIGHT AND MONEY

Predator® V-belts can handle 1.4 to 2.2 times more power than the equivalent size standard V-belt. So you can design a more compact drive that weighs less, puts less strain on costlier components, and uses fewer belts. All of which saves you money. See the difference in the following example:



**Predator® - SPBP Belts**  
 > 3 belts required  
 > Rated kW/Strand: 53.5kW  
 > Total weight: 72.2 kg

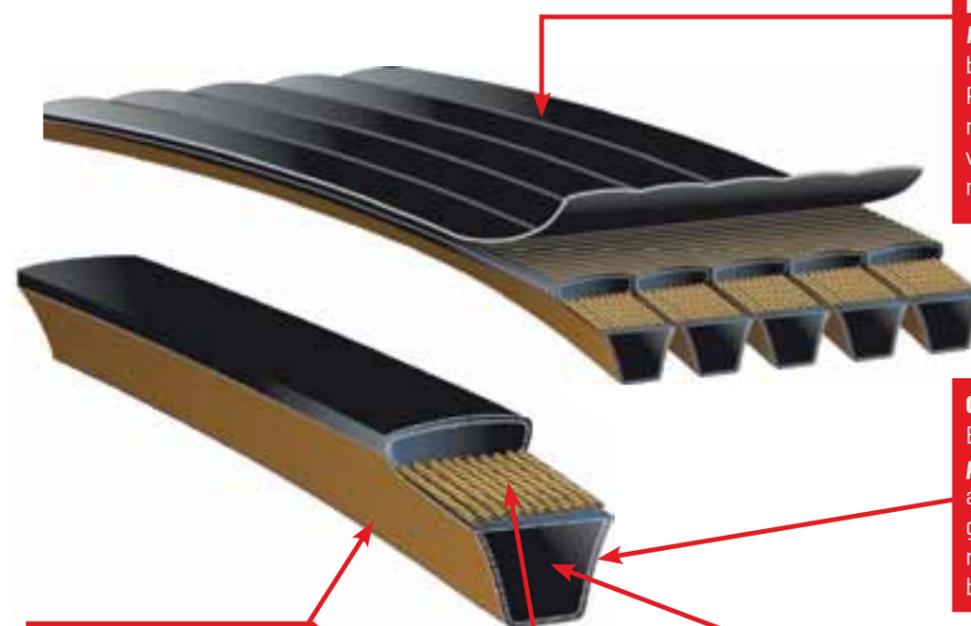
VS

**Standard - SPB Belts**  
 > 6 belts required  
 > Rated kW/Strand: 26.8kW  
 > Total Weight: 114.6 kg

Compared with a standard V-belt drive, the compact Predator® drive provides equal or greater power capacity in nearly half the width and weight, at a third less cost. The overall shaft load remains unchanged. Predator® V-belts provide the ideal solution to replace costly made to order 8V belt drive pulleys with standard SPB or SPC ones.

## TACKLE TOUGH APPLICATIONS

- High powered motors? Shock loads from sudden starts and stops?
  - Dirty operating environments? High heat? Contamination from oil or solvents?
- Predator® V-belts handle them all, here's why:



**Powerband**  
 Multiple-layer tie band joins belts together into a Predator® PowerBand® that provides lateral rigidity for protection against vibration and belt rollover on multi-groove sheaves.

**Gates Curves**  
 Extend drive life with the patented curved sidewall that allows belt to enter the sheave groove cleanly and smoothly, reducing the sidewall wear on belt and sheave.

**Bareback Cover**  
 Reduce friction and heat buildup under shock loads and slippage with abrasive and puncture-resistant bareback [non-rubber] double layer fabric cover.

**Aramid Tensile Cords**  
 Minimal need for re-tensioning due to stronger-than-steel aramid fibre or Kevlar® tensile cords that reduce belt stretch by 50% over standard V-belts.

**Premium Compound**  
 Oil and heat resistant chloroprene compound body, rated for 82°C, outperforms other rubbers in harsh operating conditions.



## DESIGN SOLUTIONS AT YOUR FINGERTIPS

Designing a new drive? Converting an existing drive? Need tensioning data for your drive? It's easy with Gates DesignFlex® Pro™ software. Simply enter the data — kW, RPM, service factor, centre distance, driveR/driveN pulley diameters — and DesignFlex® Pro™ will calculate your Predator® belt and standard pulley options. Save hours over a manual process. This free tool is available at [www.gates.com/designflex](http://www.gates.com/designflex). You may also email the Gates Product Application team at [gatestech@gates.com](mailto:gatestech@gates.com).



# POWERING PROGRESS®

**BEFORE**  
EXCESSIVE BELT WEAR



## CASE STUDY: COAL PLANT SLURRY PUMP

### END MARKET INDUSTRY

Coal Mine [Bowen Basin]

### APPLICATION

DMC Feed Pump  
450KW @ 985rpm

### ORIGINAL COMPONENTS

Belts = 14 x SPC5000 V-belts

DriveR Pulley = 14/SPC475  
[made to order]

DriveN Pulley = 14/SPC1000  
[made to order]

### SOLUTION COMPONENTS

Belts = 10 x SPC5000P Predator®  
V-belts

DriveR Pulley = 10/SPC475

DriveN Pulley = 10/SPC1000

**AFTER**



### PROBLEM

The existing V-belts were not lasting 1 month before requiring replacement even with the belts being re-tensioned. The belts were eroding within the harsh environment and debris present leading to excessive slippage and pulley groove wear.

A simple indication of the poor condition the original drive was in, is how low the belts were riding in the pulley grooves [refer before image above].

### BENEFITS OF GATES SOLUTION

The Predator® V-belts have successfully achieved 18 months service life with no maintenance required and are still showing no signs of abnormal wear. With only 10 Predator® V-belts required, 4 less than previously installed, the new belt system achieved 18 times more service life.

The new drive now allows for standard off-the-shelf pulleys, resulting in further large cost savings. The new drive results in less drive maintenance. This allows the maintenance staff to focus on other more critical issues on site. By reducing or eliminating maintenance requirements, there is the potential to increase output and productivity.

### OUR GUARANTEE

If, for any reason, the Predator® belt drive system does not meet your expectations during the first 90 days, just return all components to your Gates distributor for a full refund.\*

\* To qualify for the 90 day risk free guarantee, the belt drive system must use new Predator® V-belts, pulleys and bushings. The drive must be designed using Gates design software and installed in partnership with Gates.



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