



# Power Transmission Belt

V-Belt | Wedge | Banded | V-Ribbed |  
Timing | Automotive | Specialty

## DRB Power Transmission Belt

DRB power transmission belt, essential for transferring power of all automotive, industrial and agricultural machines all over the world, have been accepted by customers as a pronoun for quality and reliability for over half a century. DRB power transmission belt are used as essential tools to transfer power of all machines and equipment used on a wide range of products in all heavy and light industries, including automotive, home and office appliances and equipment, chemicals, machinery, ships and farming equipment.

DRB has steadily improved the product quality and developed products for diverse applications through development of various synthetic rubber, fiber, chemicals and their processing techniques.



### V - Belt

- Wrapped Belt
- Raw Edge Cogged Belt

### Wedge Belt

- Wrapped Belt
- Raw Edge Cogged Belt

### Banded Belt

- Raw Edge Cogged Belt
- Classical Belt
- Wedge Belt

### V - Ribbed Belt

### Timing Belt

### Automotive Belt

- Raw Edge Cogged Belt
- Raw Edge Laminated Belt
- V - Ribbed Belt
- Timing Belt

### Specialty Belt

- Variable Speed Belt
- Round Belt
- Open-ended Belt
- FHP V-Belt
- Double V - Belt

03

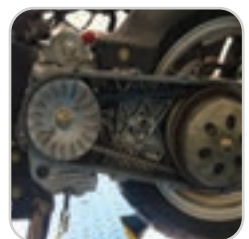
04

04

05

06

07

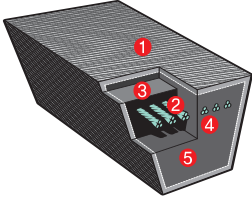




## V-Belt

### Wrapped Belt

V-shape belt with surface covered with fabrics.



#### Features

- Cover fabrics enhance durability by protecting the inner parts.
- Specially designed cords enhance durability and length stability.
- Excellent in resistance against heat, oil and wear.
- Safe use is ensured by preventing static electricity.
- Enhances power transmission efficiency by reducing slip.

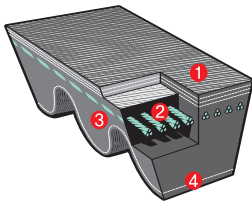


Construction	Functions	Materials
① Cover fabric	Protects the inner parts of the belt from strong abrasion on the pulley groove	Cotton / Synthetic fabric
② Tension member	Primary material for transferring power	Polyester, Aramid
③ Top compression rubber	Maintains belt shape (upper)	NR, CR
④ Adhesive rubber	Supports and protects tension member adhesion	NR, CR
⑤ Bottom compression rubber	Maintains belt shape (lower)	NR, CR

NR : Natural Rubber / CR : Chloroprene Rubber

### Raw Edge Cogged Belt

V-belt with cog-shaped grooves on the bottom to enhance flexibility while top and bottom parts are covered with rubber fabric and exposed on sides.



#### Features

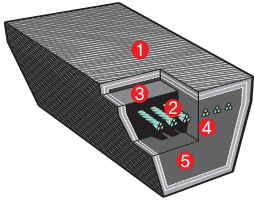
- Excellent durability and flexibility in driving.
- Specially designed cords enhance durability and length stability.
- Excellent in resistance against heat, oil and wear.
- High power transmission efficiency.
- Can be used on small pulleys.
- No decrease in performance during high speed rotation.

Construction	Functions	Materials
① Top fabric	Protects internal tension member	Cotton / Synthetic fabric
② Tension member	Primary material for transferring power	Polyester, Aramid
③ Compression rubber	Maintains sectional shape by side pressure	Fiber loaded CR
④ Bottom rubber	Absorbs shock and prevents cracking on compression rubber	CR

CR : Chloroprene Rubber

## Wedge Belt

### Wrapped Belt



#### Features

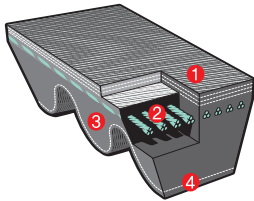
- Designed to enhance power transmission efficiency by providing even stress over tension member with a special sectional shape of narrower top width and taller height, special raw materials and production technique.

Construction	Functions	Materials
① Cover fabric	Protects the inner parts of the belt from strong abrasion on the pulley groove	Cotton / Synthetic fabric
② Tension member	Primary material for transferring power	Polyester, Aramid
③ Top compression rubber	Maintains belt shape (upper)	NR, CR
④ Adhesive rubber	Supports and protects tension member adhesion	NR, CR
⑤ Bottom compression rubber	Maintains belt shape (lower)	NR, CR

NR : Natural Rubber / CR : Chloroprene Rubber

### Raw Edge Cogged Belt

V-belt with cog-shaped grooves on the bottom to enhance flexibility while top and bottom parts are covered with rubber fabric and exposed on sides.

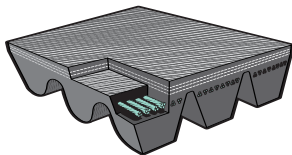


Construction	Functions	Materials
① Top fabric	Protects internal tension member	Cotton / Synthetic fabric
② Tension member	Primary material for transferring power	Polyester, Aramid
③ Compression rubber	Maintains sectional shape by side pressure	Fiber loaded CR
④ Bottom rubber	Absorbs shock and prevents cracking on compression rubber	CR

CR : Chloroprene Rubber

## Banded Belt

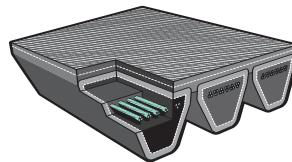
### Raw Edge Cogged Belt



#### Features

- Minimize temporary shock & vibration
- Prevent popping on the pulley & torsion of belt
- Stabilize tension
- Maintains the length stability

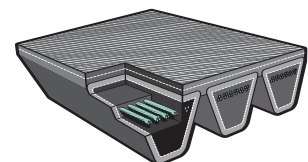
### Classical Belt



#### Features

- The belt prevents abrasion caused by length differences among v-shaped
- Belt used on pulley. It can adjust the hold based on the need.

### Wedge Belt



#### Features

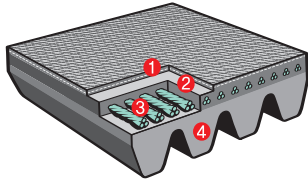
- Higher power transmission efficiency
- The use of smaller pulley
- Space saving
- Excellent resistance against heat, oil and wear





## V - Ribbed Belt

V-ribbed belt have wide top width and thin thickness, providing consistent tension while driving by connecting in each rib. It is also called Poly V-Belt or Micro V-Belt.



### Features

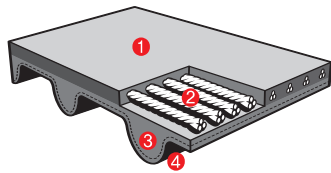
- The wide width and thin height provide excellent flexibility.
- High power transmission under operational conditions of high-speed rotation, reverse bending and a small diameter pulley.
- Maintains consistent tension during operation for cords of high modulus and low shrinkage.
- Excellent in resistance against heat, oil and wear.
- Enhances power transmission efficiency by reducing slip during operation.

Construction	Functions	Materials
① Top fabric	Protects internal tension member	Cotton / Synthetic fabric
② Adhesion rubber	Supports and protects adhesiveness of tension member	CR, EPDM
③ Tension member	Primary material for transferring power	Polyester, Nylon
④ Compression rubber	Maintains belt shape and enhances side pressure	CR, EPDM

CR: Chloroprene Rubber / EPDM: Ethylene Propylene Diene Monomer

## Timing Belt

Timing belt function by synchronous driving like a gear or chain, they are therefore referred to as synchronous belt.



### Features

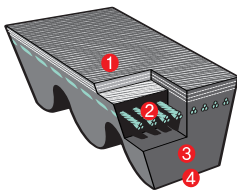
- Solves potential problems caused by using a conventional metal chain such as :
  - No decrease in horsepower at high-speed
  - Easily designed to span the distance between the drive pulleys and maintain constant tension.
- Prevents belt elasticity by using glass fibers for the tension member.
- Excellent in resistance against heat, oil and wear.
- Guarantees high-power transmission efficiency under driving conditions of high-speed and severe temperature fluctuation.
- Shows stable performance at high-speed rotation.

Construction	Functions	Materials
① Rear rubber	Protects tension member	CR, HNBR
② Tension member	Primary material for transferring power	Glass Fiber
③ Teeth rubber	Protects tension member, maintains belt shape	CR, HNBR
④ Bottom fabric	Maintains belt and teeth shape	Nylon

CR: Chloroprene Rubber / HNBR: Hydrogenated Acrylonitrile-Butadiene Rubber

## Automotive Belt - Raw Edge Cogged Belt

Made of high strength, flexible tension members and heat-resistant rubber compounds, these automotive belt are designed for high-speed and high-temperature conditions in specially designed shapes.

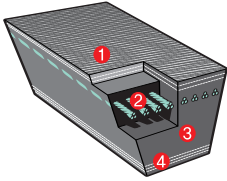


### Features

- Highly flexible and thus suitable for conditions requiring high flexibility and a small pulley diameter.
- Assures uniform performance over the entire belt length for the entire belt life.
- Resistant to heat, oil and abrasion.

Construction	Functions & Materials
① Top fabric	Features flexibility and resistance to heat, oil and abrasion.
② Tension member	Made of highly strong cords with low stretchability, gives high flexibility and length stability.
③ Compression rubber	Made of fiber-reinforced rubber compounds. / Features high durability and smooth running.
④ Base fabric	Made of flexible carcass, it functions to absorb shock and prevent rubber cracks.

## Raw Edge Laminated Belt



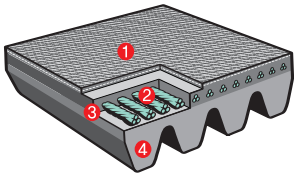
### Features

- Noise reduction
- Prevents slippage
- Resistant to shock
- Resistant to heat, oil and abrasion

Construction	Functions & Materials
① Top fabric	Features flexibility and resistance to heat, oil and abrasion.
② Tension member	Made of highly strong cords with low stretchability. Gives high flexibility and length stability.
③ Compression rubber	Made of fiber-reinforced rubber compounds. Features high durability and smooth running.
④ Base fabric	Multi-layered carcass, excellent for noise absorption and quiet running.

## V - Ribbed Belt

High flexibility due to unique belt cross-section allows long service life and compact drives. DRB V-Ribbed Belt are suited for high speed drives and high power transmission drives. V-Ribbed Belt is so-called "Poly V-Belt".



### Features

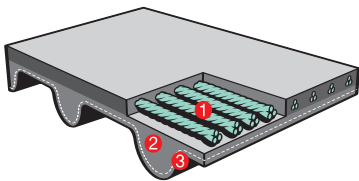
- Designed for excellent flexibility, meet the requirements of small pulley diameters and reverse bending.
- High power transmission efficiency
- Reduced noise
- Smooth running



Construction	Functions & Materials
① Top fabric	Resistant to heat, oil, wear and crack.
② Tension member	The specially heat-treated cords provide high modulus and shock load resistance.
③ Rubber adhesive	Maintains cohesion of the cords and rib rubber as well as protecting cords.
④ Rubber ribs	Fiber-reinforced rib rubber offers support for the cords and excellent wear resistance.

## Timing Belt

Timing belt have mainly been used for automotive overhead camshaft(OHC) drives and guarantee variable speed change and high temperature drive conditions. These belt offer many advantages over conventional chain and gear drives. Timing belt is so-called "Synchronous Belt".



### Features

- Quieter running
- No lubrication needed
- Non-slip engagement
- Economical operation
- Excellent mechanical efficiency



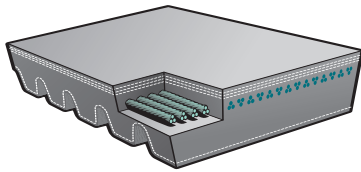
Construction	Functions & Materials
① Tension member	Fiberglass cords with high tensile strength, excellent flexibility which eliminates belt stretching.
② Rubber teeth	Excellent heat and oil resistance, adhesion both on tensile member and tooth fabric.
③ Nylon fabric	Excellent wear-resistant, low friction coefficient facing ensures long service life.





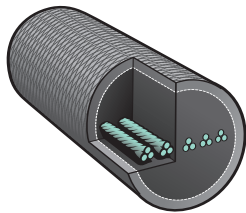
## Specialty Belt

### Variable Speed Belt



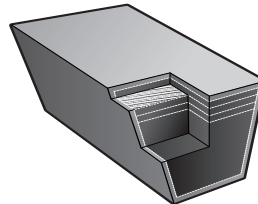
Power transmission belt for variable speed pulleys having separable parts.

### Round Belt



Round sectional shape for multiple axis power transmission.

### Open - ended Belt



Open-ended V-belt can be set without disassembling, and it can be jointed using a connector very easily.



### DONGIL SUPERSTAR (RED)

Agricultural V-belt, made of synthetic rubber with superior resistance against heat and climate changes, provides outstanding performance in reverse bending operation as the cover fabric is reinforced with specially laminated fabrics.

### DONGIL SUPERSTAR (GREEN)

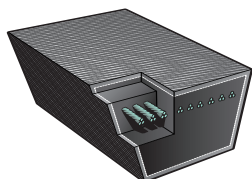
DRB Green agricultural belt are specially structured by powerful aramid cord based on the outstanding performance of RED belt, it provides the excellent tensile strength and low shrinkages at the shock load. It is ideal for driving, harvesting, transmission, cutting, and hydrostatic transmission of combines.

## Comparison of Agricultural Belt Performance

Grade	Flexibility	Strength	Elongation Rate	Applications
Classical	Good	Good	Good	Power plough, Thresher
RED	Excellent	Good	Good	Binder, Combine
GREEN	Excellent	Excellent	Excellent	Planter, Combine

### FHP V-Belt

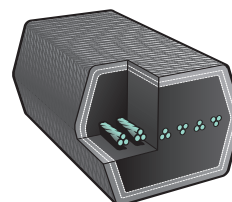
Compact design can be used on small pulleys.



#### Features

- Highly flexible and thus suitable for conditions requiring high flexibility and a small pulley diameter.
- Assures uniform performance over the entire belt length for the entire belt life.
- Resistant to heat, oil and abrasion.

### Double V-belt



Belt that enable power transmission on multiple axis by joining two general V-belt by their upper part.



www.drbworld.com

## **DRB Industrial Co., Ltd.**

### **Sales Office**

#### **DRB HQ / Overseas Sales Team**

28, Gongdandong-ro 55beon-gil, Geumjeong-gu, Busan, Korea  
Tel. +82-51-520-9104 Fax. +82-51-523-2537

#### **DRB America**

16811 Knott Ave. La Mirada, CA 90638, USA  
Tel. +1-714-739-2922 Toll Free. +1-888-860-4450 Fax. +1-714-739-2925  
Georgia Office, 159 Chestatee Industrial Park Drive, Dahlonega GA 30533, USA  
Tel/Fax. +1-706-525-7220

#### **DRB Japan**

7F, CR Hakata Bldg., 1-8-6, Hakataeki-minami, Hakata-ku, Fukuoka-city, 812-0016, Japan  
Tel. +81-92-481-7303 Fax. +81-92-481-7307

#### **DRB China**

Room 806, Laiyin Hongjing Center Block A, Wuzhong Rd, Minhang District, Shanghai, China  
+86-21-5422-5691/92 Fax. +86-21-5422-5697

#### **DRB Indonesia**

Wisma Korindo Lt.5 Jl. MT. Haryono Kav.62, Pancoran Jakarta 12780, Indonesia  
Tel. +62-21-797-6232 Fax. +62-21-797-5987

#### **DRB Vietnam**

4 Floor, No 17, 172/1 NhAN Chinh Ward, Thanh Xuan District., Hanoi, Vietnam  
Tel. +84-24-6285-4028 Fax. +84-24-6285-4029

※ No content in this catalog may be copied without our prior consent under the intellectual Property Protection Law.

※ Please be sure to check the current specifications of a product as those stated in this catalog may be changed without a prior notice.