BANDO

BANDO V-BELT CATALOG

PT. BANDO INDONESIA

Table of content :

Profile

Profile

PT. Bando Indonesia is one of the leading automotive and industrial power transmission belt and conveyor belt manufacturer in Indonesia. The plant located in Tangerang and its marketing office located in central Jakarta, the company was established in 1987 a joint venture by an Indonesian company, PT. Kreasi Utama Investama and Bando Chemical Industries, Ltd. of Japan which is one of the world's leading manufacturer of rubber belts since 1906.

Bando Power transmission belt has been accepted by local and foreign market for the quality product, thus enabling company to dominated the market and fulfill the export to Singapore (for re-export to Middle East, Asia, Australia and Africa), Japan, Europe and United State of America. Our OEM (Original Equipment Manufacturing) automotive belts are used in a number of automobiles manufacturers such as Honda, Toyota, Nissan, Mitsubishi, Suzuki, Mazda, Isuzu, Daihatsu and General Motor Indonesia. PT. Bando Industrial belts are used in agriculture field, industrial machinery and many other industrial sector. Our fabric conveyor belts are used in various important industries in Indonesia mainly in mining, fertilizer, pulp & paper, power plant and cement.

On 2013 PT. Bando Indonesia had maximum installed capacity up to 1,800,000 pcs/month for Power Transmission Belt and 35,000 meter/month for Fabric Conveyor Belt.

Along with our commitment towards quality services and continuous improvement, we also provide technical support to assist our customers in optimizing their belts reliability and performance, such commitment making BANDO power transmition belt the most trusted name in Indonesia.

PT. BANDO Indonesia received the ISO 9001:2000 in Sept 1996, the ISO 14001:2004 in March 2002, the ISO/TS 16949:2002 in March 2006 and the OHSAS 18001 - Safety in October 2013. These awards certify the company with the highest standard of management and product quality.

BANDO

History

1987
PT. Bando Indonesia was established on November 25th, 1987 and begun produce industrial and automotive power transmission belt.

1988
OEM (Original Equipment Manufacturing) automotive belts accepted and genuine parts by Japanese Automotive manufacturer.
Begun exporting to Japan and Singapore.

1989
Begun exporting to United State and Europe.

1995
Relocated power transmission belt production and facility to the new factory and expanded its production to the conveyor line.

1996
Received the ISO 9002 certification from SGS in September 1996 for power transmission belt.

1999
Automotive accepted and used by American Car Manufacture – General Motor Indonesia.
Begun to produce national brand "V-Power".

2000
Received the QS 9000 certification from SGS in March 2000 for automotive belts.
Received ISO 9002 from SGS in September 2000 for Conveyor belts.

2002
Received the ISO 14001 from SGS in March 2002.
Received the ISO 9001:2000 in March 2002.
Relocated conveyor production line and facility to the new factory.

2006
Received the ISO/TS 16949 from SGS in March 2006

2013
Received the OHSAS 18001-Safety in October 2013

BANDO

Certification

Certification

SGS

Certificate GB02/55088

The management system of

PT. BANDO INDONESIA

Komplek Industri Gajah Tunggal,
Tangerang, Indonesia

has been assessed and certified as meeting the requirements of

ISO 14001:2004

For the following activities

Manufacturing of transmission belt and conveyor belt.

This certificate is valid from 28 March 2008 until 28 March 2011 and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 28 March 2011
Issue 3. Certified since 28 March 2002

Authorised by

SGS United Kingdom Ltd Systems & Services Certification
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
t +44 (0)151 350-6666 f +44 (0)151 350-6600 www.sgs.com

SGS EMS 04 0306

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SGS

Certificate ID05/0680

The management system of

PT. BANDO INDONESIA

Jl. Gajah Tunggal, Kelurahan Pasir Jaya
Kecamatan Jati Uwung, Tangerang 15135
Indonesia

has been assessed and certified as meeting the requirements of

ISO 9001:2008

For the following activities

Manufacture of Power Transmission Belts for Industrial and Automotive Use including Conveyor Belts.

Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2008 requirements may be obtained by consulting the organization

This certificate is valid from 01 September 2009 until 26 September 2011 and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 26 August 2011
Issue 06. Certified since 26 September 1996

Authorised by

SGS United Kingdom Ltd Systems & Services Certification
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
t +44 (0)151 350-6666 f +44 (0)151 350-6600 www.sgs.com

SGS 9001-B 01 1108

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SGS

Certificate IATF 0080570
Certificate SGS ID09/0731

The management system of

PT. Bando Indonesia

Jl. Gajah Tunggal, Desa Pasir Jaya
Kec. Jatiuwung, Tangerang 15135
Indonesia

has been assessed and certified as meeting the requirements of

ISO/TS 16949:2002

For the following activities

Design and Manufacture of Power Transmission Belt for Automotive use

This certificate is valid from 18 March 2009 until 17 March 2012 and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 09 January 2012
Issue no 02 / Certified Since 20 March 2006

Authorised by

Volvo Power Authority

Contracted Office SGS UK Ltd 8 Bridgend Business Centre Bennett Steel, Bridgend Industrial Estate, Bridgend CF31 3SH. Telephone 01656 646464. Fax 01656 647937. E-mail jim.weaver@sgs.com

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SGS

Certificate AU13/02539

The management system of

PT BANDO INDONESIA

Jl. Gajah Tunggal, Kel. Pasir Jaya, Kec. Jatiuwung,
Tangerang, 15135, Indonesia

has been assessed and certified as meeting the requirements of

OHSAS 18001:2007

For the following activities

Manufacturing of Power Transmission Belt for Industrial and Automotive Use including Conveyor Belt

This certificate is valid from 08/11/2013 until 08/11/2016 and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 04/10/2016
Issue 1. Certified since 8 November 2013

Authorised by

SGS Systems & Services Certification Pty Ltd
480 Princes Highway Noble Park Vic 3174 Australia
t +61 3 9790 3400 f +61 3 9701 0988 www.au.sgs.com

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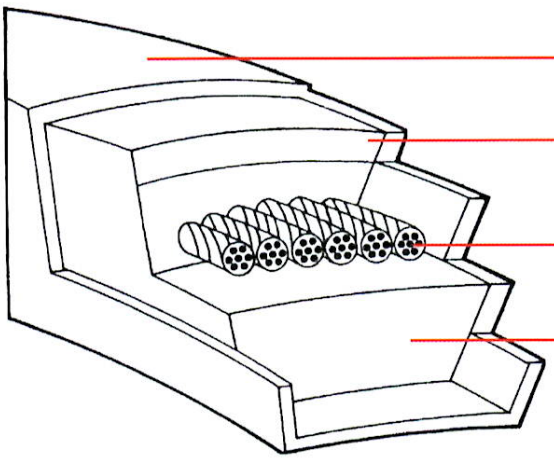
JAS-ANZ

www.jas-anz.org/register

BANDO

Belt Construction

Belt Construction

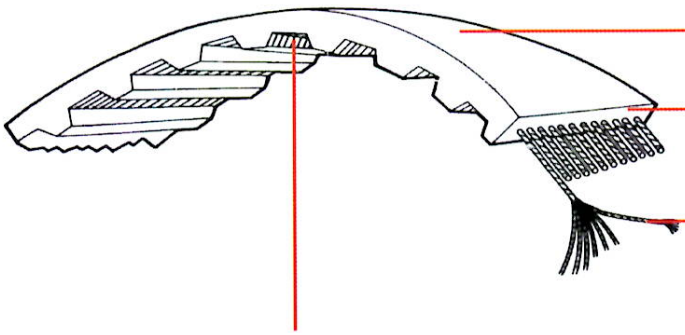


Rubber Impregmanted Canvas

Chloroprene Insulating Rubber

Polyester Tensile Members

Chloroprene Compression Rubber



Chloroprene Rubber Baking

Chloroprene Rubber Tooth

Glass Fiber Tensile Member

Nylon Canvas

BANDO

Type of V- Belt

Type of V- Belt

Multiple V-Belt

- *Wrapped (Red Seal And Green Seal)*
  M,A,B,C,D,E
- *Raw Edge (cogged belt)*
  AX,BX,CX
- *Hexagonal (Double)*
  AA,BB,CC
- *Banded/Power Scrum*
  B,C,D

Narrow V-Belt

- *Wrapped*
  a. Power Ace : 3V,5V,8V
  b. SP type : SPZ,SPA,SPB,SPC
- *Raw Edge(cogged belt)*
  3VX,5VX,XPZ,XPA,XPB
- *Power Scrum Belt*
  3V,5V,8V

Synchronous Belt

- *Synchro Belt*
  MXL,XL,L,H,XH,XXH
- *Super Torque Synch(STS)*
  S2M,S3M,S4.5M,S5M,S8M,S14M
- *High Perfomance STS Belt (HP-STS)*
  HP-S5M,S8M,S14M
- *High Torque Synchronous Belts (HTS)*
  H8M,H14M

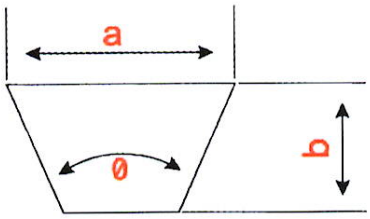
BANDO

MULTIPLE V-BELT

Wrapped (Red Seal & Green Seal)

Classical section belt to cut operation cost and reduce maintenance on multiple belt industrial drives.

Contruction :
1. Rubber impragnated Special Woven.
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Chloroprene compression rubber.



Size mark :

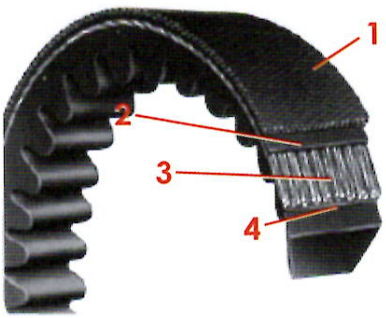
B 100

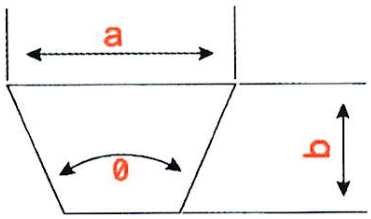
Effective pitch length (Inch)
Belt Type

Type	Width(a)	Thickness(b)	Angle	Size (inch)	Min. pulley diameter
M	10 mm	5.5 mm	40	14-60	50 mm
A	12.5 mm	8.0 mm	40	17-590	75 mm
B	16.7 mm	10.3 mm	40	20-810	125 mm
C	22.2 mm	13.5 mm	40	35-810	230 mm
D	31.7 mm	19.0 mm	40	85-810	330 mm
E	38.0 mm	23 mm	40	110-810	530 mm

Raw Edge(Cogged Belt)

Heat dissipanting cogs, designed to make belts run cooler and last longer, permit the use of smaller sheaves and more efficient, higher rpm motors.





Size mark :

AX 100

Effective pitch length (Inch)
Belt Type

Contruction :
1. Rubber impragnated Special Woven.
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Chloroprene compression rubber.

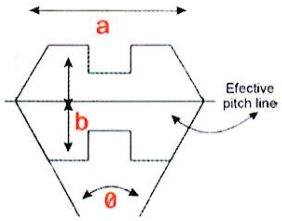
Type	Width(a)	Thickness(b)	Angle	Size (inch)	Min. pulley diameter
AX	13.0 mm	8.0 mm	38	21-120	60 mm
BX	17.0 mm	11.0mm	38	20-120	90 mm
CX	22 mm	14.0 mm	38	19-120	140 mm

BANDO

Double(Hexagonal)

Designed for reverse-bend serpentine drives by covering belt with special woven fabric. New cross section for maintaining proper belt position in pulley groove even in the case of extreme reverse-bend drive.
Due to greater flexibility created by special woven fabric as well as to the new Cross Section, service line has increased by about 40 over that of traditional double V-Belts.

Contruction :
1. Rubber impragnated Special Woven.
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Chloropene compression rubber.



Size mark :

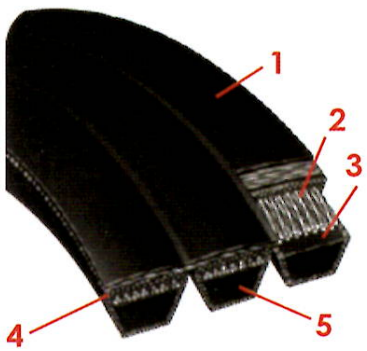
BB 100

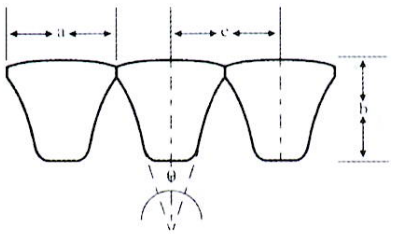
Effective pitch length
Belt Type

Type	Width(a)	Thickness(b)	Angle	Size (inch)
AA	13.0 mm	10.3 mm	40	46-158
BB	17.0 mm	13.5 mm	40	60-550
CC	22 mm	18.0 mm	40	80-196

Banded (Power Scrum)

Permanent matched set, no lateral, spin or turn over. Deep pulley grooves are not required even on horizontal drives.
Heat and oil resistant.





Size mark :

3-5V 100

Effective outside length in inches multiple by 10 (125"x10 = 1250)(3,175mm)
Belt Type
Number of belt in band

Contruction :
1. Tie Band
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Rubber Impregnated Canvas
5. Chloroprene compression rubber.

Type	Width(a)	Thickness(b)	Angle	Pitch (e)	Size (inch)	Min. pulley diameter
B	17.0 mm	13.0 mm	40	19.0 mm	45-810	125 mm
C	22.2 mm	16.0 mm	40	25.5 mm	80-810	230 mm
D	21.5 mm	21.5 mm	40	37.0 mm	105-810	330 mm

BANDO

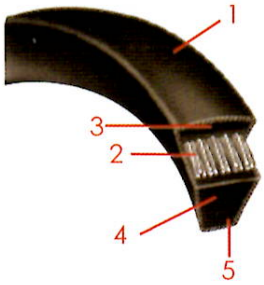
NARROW BELT

Wrapped

Power Ace Belts

High horsepower rating, required about 1/3 of the space needed by traditonal multiple V-belt drive. Long life, high heat and oil resistance. length stability, a match set of Bando Power Ace for multiple belt drives retains superior uniformity under tension. A Bando matched set remains perfectly matched even after long period of storage.

Power Ace raised crookedness nature by making texture of canvas into 120 degrees instead of 90 degrees of conventional V-belts.

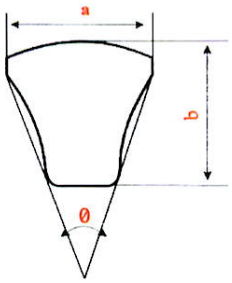


1. Rubber impregnated Canvas
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Rubber Impregnated Canvas
5. Chloroprene compression rubber.

Size mark :

5V 1250

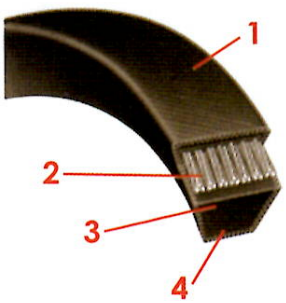
- 1250 — *Effective pitch length (Inch):10*
- 5V — *Belt Type*



Type	Width(a)	Thickness(b)	Angle	Size (inch)	Min. pulley diameter
3 V	9.5 mm	8.0 mm	40	25-156	70 mm
5 V	15.9 mm	13.5 mm	40	50-810	180 mm
8 V	25.4 mm	22.2 mm	40	100-810	300 mm

SP-type belts

Narrow wedges design permit higher speed ratio, shorter distance and more economical compact drives.



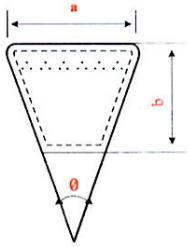
Contruction :

1. Rubber impr agnated Special Woven.
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Chloroprene compression rubber.

Size mark :

SPZ 3500

- 3500 — *Effective pitch length*
- SPZ — *Belt type*



Type	Width(a)	Thickness(b)	Angle	Size (mm)	Min. Pulley Diameter
SPZ	9.5 mm	8.0 mm	40	582-3550	65 mm
SPA	12.5 mm	10.0 mm	40	707-15000	90 mm
SPB	16.0 mm	13.5 mm	40	1250-20500	140 mm
SPC	22.0 mm	18.0 mm	40	2032-20500	225 mm

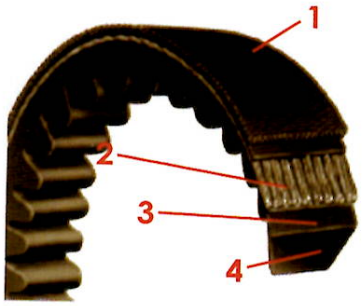
SPZ = Lw + 13 mm = La
SPA = Lw + 18 mm = La
SPB = Lw + 22 mm = La
SPC = Lw + 30 mm = La

BANDO

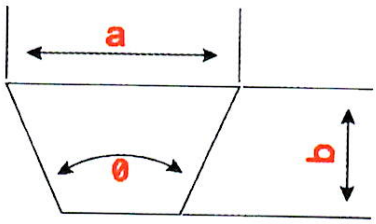
NARROW BELT

Raw Edge(cogged)

Heat dissipating cogs, designed to make belts run cooler and last longer, permit the use of smaller sheaves and more efficient, higher rpm motors.



Contruction :
1. Rubber impragnated Special Woven.
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Chloroprene compression rubber.



Size mark :

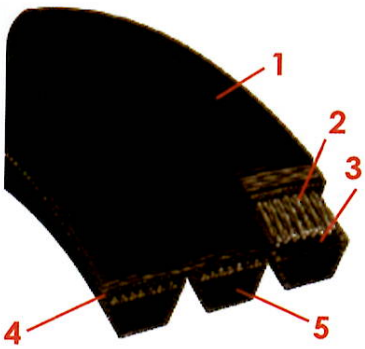
XPZ 3500

- XPZ — *Belt type*
- 3500 — *Effective pitch length (mm)*

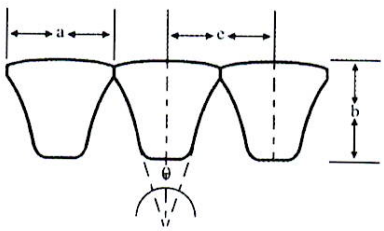
Type	Width(a)	Thickness(b)	Angle	Size	Min. pulley diameter
3VX	9.5 mm	8.0 mm	38	23-125	56
5VX	15.7 mm	13.0 mm	38	23-125	112
XPZ	9.7 mm	8.0 mm	38	587-3160	60
XPA	13 mm	8.8 mm	39	592-3150	65
XPB	16.3 mm	12.5 mm	38	950-3150	80

Power Scrum (banded)

Permanent matched set, no lateral, spin or turn over. Deep pulley grooves are required even on horizontal drives.
Heat and oil resistant.



Contruction :
1. Tie Band
2. Polyester tensile members
3. Chloroprene insulating rubber
4. Rubber Impregnated Canvas
5. Chloroprene compression rubber.



Size mark :

3-5V 100

- 3 — *Number of belt in band*
- 5V — *Belt Type*
- 100 — *Effective outside length in inches multiple by 10 (125"x10 = 1250)(3,175mm)*

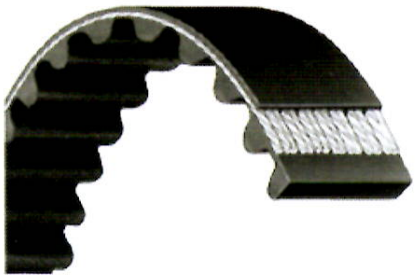
Type	Width(a)	Thickness(b)	Angle	Pitch (e)	Size (inch)
3 V	9.5 mm	8 mm	40	10.3 mm	40-150
5 V	15.9 mm	15.5 mm	40	17.5 mm	60-810
8 V	25.4 mm	22.2 mm	40	28.6 mm	106-810

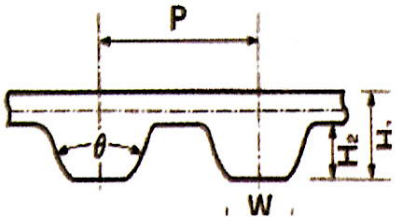
BANDO

SYNCRHONOUS BELT

Synchronous Belt

Precise design and manufacturing tolerance assure belt teeth mesh smoothly with pulley grooves for non-slip, positive performance on synchronous drives.





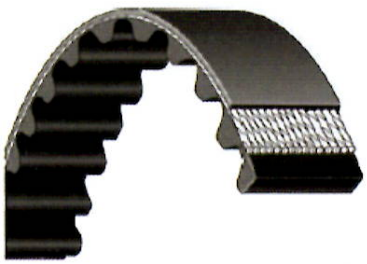
Type	P	W	H1	H2	Θ
MXL Mini Synchro	2.032mm (0.080")	0.75mm (0.030")	1.1mm (0.043")	0.51mm (0.020")	40
XL Extra Light	5.08mm (0.200")	1.35mm (0.054")	2.3mm (0.09")	1.27mm (0.050")	40
L Light	90525mm (0.375")	3.2mm (0.128")	3.6mm (0.14")	1.91mm (0.075")	40
H Heavy	12.7mm (0.500")	4.4mm (0.175")	4.3mm (0.17")	2.29mm (0.090")	40
XH Extra Heavy	22.225mm (0.875")	8.0mm (0.313")	11.2mm (0.44")	6.35mm (0.250")	40
XXH Double Extra Heavy	31.75mm (1.250")	12.2mm (0.477")	15.7mm (0.62")	9.53mm (0.375")	40

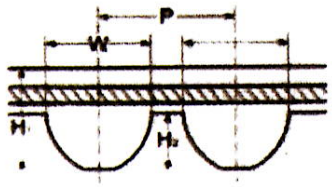
Size code :
140 XL 025 :
① ② ③

① Pitch length inch x10, / Teeth No for MXL
② BELT Pitch, / Same for MXL
③ BELT Width inch x 100, / Width mm for MXL

Super Torque (STS)

High torque capacity drive, with unique tooth profile enables the belt transmit higher power. with lower noise level, long service life, no need maintenance or lubrication and space saving.





Type	P	H1	H2	W
S2M	2.0mm (0.078")	1.31mm (0.052")	0.76mm (0.029")	1.3mm (0.051")
S3M	3.0mm (0.118")	2.1mm (0.083")	1.14mm (0.044")	1.95mm (0.076")
S4.5M	4.5mm (0.177")	2.70mm (0.0106")	1.171mm (0.067")	2.93mm (0.115")

Size code :
600 S8M 1000 :
① ② ③

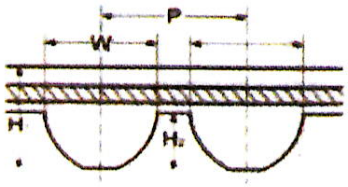
① BELT Width mm x 10
② BELT Pitch
③ BELT Length mm

BANDO

SYNCRHONOUS BELT

High Perfomance STS (HP type)

Exceptionally high power, with compact design and low noise.



Type	P	H1	H2	W
S5M	5.0mm (0.197")	3.61mm (0.142")	1.91mm (0.075")	3.25mm (0.128")
S8M	8.0mm (0.315")	5.3mm (0.202")	3.05mm (0.120")	5.20mm (0.205")
S14M	14.0mm (0.551")	10.2mm (0.402")	5.30mm (0.0209")	9.10mm (0.358")

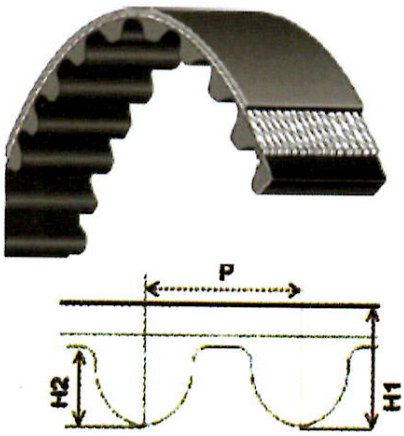
Size code :

600 S8M 1000 :
① ② ③

① BELT Width mm x 10
② BELT Pitch
③ BELT Length mm

High Torque (HTS)

BANDO HTS is curvilinear tooth (round tooth) profile, belt and pulley teeth is mesh smooth and improves stress distribution to higher power transmission capacity.



Type	P	H1	H2
H8M	8mm (0.315")	5.3mm (0.209")	35mm (0.138")
H14M	14mm (0551")	10.2mm (0.402")	6.0mm (0.236")

Size code :

600 H14M 100 :
① ② ③

① BELT Width mm x 10
② BELT Pitch
③ BELT Length mm

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Troubleshooting

Troubleshooting Guide

V Belts

Short Belt Life

Problem	Cause	Solution
Rapid failure with no visible reason	Worn sheave grooves (Check with groove gauge)	Replace sheaves
	Tensile cords damaged through improper installation	Replace all belts with a new set, properly installed
	Underdesigned drive	Redesign drive
	Wrong type or cross section belt	Replace all belts with correct type, properly installed
	Sheave diameter too small	Redesign drive
	Foreign substance caught between belts and sheave	Shield the drive
Soft, slick, swollen sidewalls. Low adhesion between plies	Oil or grease on belt or sheave	Clean belts and sheaves with degreasing agent or detergent and water. Remove source of oil or grease
Dry, hard sidewalls. Low adhesion between plies. Cracked belt bottom	High temperature	Remove heat source. Improve ventilation
	Worn or damaged sheaves	Replace sheaves
Deterioration of rubber	Belt dressing	Don't use belt dressing. Clean belts and sheaves with degreasing agent or detergent and water. Tension belts properly
Rapid sidewall wear	Worn or damaged sheaves	Replace sheaves
Broken belts	Foreign object in drive	Shield drive
Spin burns	Belts slip under starting or stalling load	Retension drive
	Sheave diameter too small	Redesign drive
	Load miscalculated – drive underdesigned	Redesign drive
Cracked bottom	Sheave diameter too small	Redesign drive
	Back side idler too small	Replace with an inside idler on slack side, or redesign
	Slippage	Retension drive
	High temperature	Remove heat source. Improve ventilation
Cut bottom	Belt ran off sheave	Check tension and alignment
	Foreign object in drive	Shield drive
	Improper installation	Replace all belts with a new set, properly installed

Problem	Cause	Solution
Extreme cover wear, worn corners	Belt rubs against guard or other obstruction	Remove obstruction or realign drive
	Improper tension	Retension drive
	Dirt on belt	Clean belt, shield drive
	Sheaves rusted, sharp corners or burrs on sheaves	Repair or replace sheaves
	Sheaves misaligned	Align sheaves
Belt Stretch		
Belts stretch unequally	Misaligned drive	Realign drive
	Tensile cord broken from improper installation	Replace all belts with a new set, properly installed
Belts stretch equally	Insufficient take-up allowance	Check take-up and follow guidelines
	Overloaded or underdesigned drive	Redesign drive
Belt Turnover		
	Severe vibration and shock loads	Use Bando Combo belts
	Foreign material in grooves	Shield drive
	Misaligned sheaves	Realign sheaves
	Worn sheave grooves (Check with groove gauge)	Replace sheaves
	Tensile cord broken from improper installation	Replace all belts with a new set, properly installed
	Belt undertensioned	Retension drive
	Incorrectly placed flat idler pulley	Position idler on slack side of drive, as close as possible to driveR sheave
Belt Noise		
	Belt slip	Retension
	Misaligned sheaves	Realign sheaves
	Wrong belt type	Replace cut edge with wrapped belt
Belt Vibration		
	Shock loads	Use Bando Combo belts
	Incorrectly placed flat idler pulley	Position idler on slack side of drive, as close as possible to driveR sheave
	Distance between shafts too long	Install idler
	Belt lengths uneven	Replace with Bando BAN/SET® belts
	Belts too loose	Retension drive
Severe Slippage		
	Spin burns	Retension drive
	Too few belts	Redesign drive

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Problem	Cause	Solution
	Arc of contact too small	Install back side idler on slack side, or use timing belt
	Oil or water on belt	Clean belts and sheaves, shield drive
Improper DriveN Speed		
Incorrect driveR to driveN ratio	Design error	Redesign drive
Installation Problems		
Belts too long or short at installation	Design and/or belt selection error	Check design and selection
Belts mismatched at installation	Mixed used and new belts	Replace all belts with new belts
	Mixed belts from different manufacturers	Replace with belts from the same manufacturer
	Worn sheave grooves	Replace sheaves
Hot Bearings		
Drive overtensioned	Worn sheave grooves, belts bottom out	Replace sheaves
Sheave diameter too small	Design error	Redesign drive
Bad bearings	Underdesigned or poor maintenance	Check bearing design and maintenance
Drive undertensioned	Belts slip and cause heat build-up	Retension drive
Sheaves too far out on shaft	Design error or obstruction	Place sheaves as close to bearings as possible
Combo (Banded) Belts		
Tie band cut and/or separated. Belts riding out of sheave grooves	Worn sheaves (Check with groove gauge)	Replace sheaves
	Sheave misalignment	Realign sheaves
	Belts undertensioned	Retension drive
	Foreign object in drive	Shield drive
All belts separated from tie band	Damage from belt guard	Adjust guard
	Worn idler sheave	Replace idler sheave
Frayed tie band	Obstruction on machine	Remove obstruction and realign drive
Blistered tie band	Foreign material between belts	Clean and shield drive
Cracked belt bottom	Slippage	Retension drive
Timing Belts		
Broken belts	Underdesigned drive	Redesign drive
	Sharp bend damaged tensile cord	Follow proper storage and handling procedures
	Belt was pried or forced on the drive	Follow proper installation guidelines
	Foreign object in drive	Shield drive
	Belt runs onto pulley flange	Align pulleys
Apparent belt stretch	Reduction of center distance or non-rigid mounting	Replace pulleys. Install cover if drive is dusty
	Pulley teeth poorly machined or worn	Increase deceleration time or redesign drive
	Sudden equipment stops	Increase deceleration time or redesign drive
	Belt doesn't engage pulley teeth	Retension drive
Tooth shear	Less than 6 teeth-in-mesh	Redesign drive, install back side idler, or use next smaller pitch
	Excessive load	Redesign drive
Tensile or tooth shear failure	Pulley diameter too small	Increase pulley diameter or use next smaller pitch
	Exposure to acid or caustic atmosphere	Protect drive or ask Bando about special construction belt
Excessive pulley tooth wear (on pressure face and/or O.D.)	Drive overload and/or excess belt tension	Reduce installation tension and/or increase drive load carrying capacity
	Insufficient hardness of pulley material	Use harder material or surface-harden pulley
Excessive jacket wear between teeth, exposing tensile cord	Excessive installation tension	Reduce installation tension
Excessive noise	Misalignment	Realign drive
	Excessive installation tension	Reduce tension
	Excessive load	Increase drive load carrying capacity
	Pulley diameter too small	Increase pulley diameter
Cracks in belt backing	High temperatures	Improve ventilation, remove heat source, or check with Bando for special construction belt
Softening of backing	Excess heat (over 200°F) and/or oil	Lower ambient temperature, protect from oil, or ask Bando about special belt construction
Excessive edge wear	Misalignment or non-rigid centers	Realign drive and/or reinforce mounting
	Bent flange	Straighten flange
Unmounting of flange or flange wear	Incorrect flange installation	Install flange correctly
	Misalignment	Realign drive

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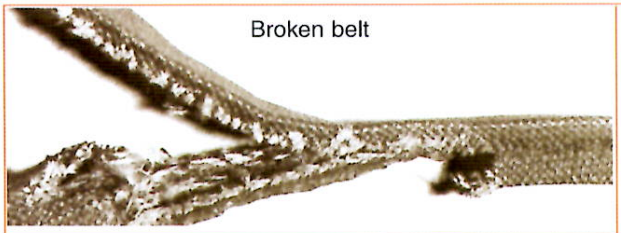
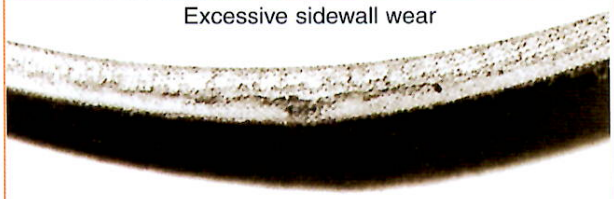
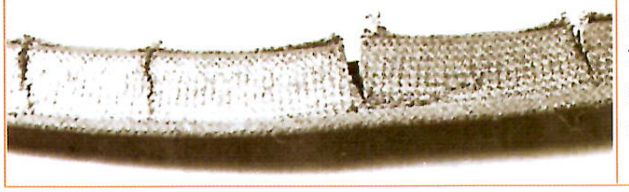
Exemple **Example**

Troubleshooting Examples

Here are some examples of belt failures described on pages 6 and 7.
If you've encountered similar problems, check below for probable causes and solutions.

V-Belts

Problem	Probable Cause	Solution
Broken belt 	Foreign object in drive	Shield drive
Excessive sidewall wear 	Worn or damaged sheaves	Replace sheaves
Cracked bottom 	Sheave diameter too small Back side idler diameter too small Slippage High temperature	Redesign drive Replace with an inside idler on slack side, or redesign Retension drive Remove heat source. Improve ventilation

Timing Belts

Broken belt 	Underdesigned drive Crimp caused tensile cord damage Belt was pried or forced on the drive Foreign object in drive Belt ran onto pulley flange	Redesign drive Follow proper storage and handling procedures Follow proper installation guidelines Shield drive Align pulleys
Excessive sidewall wear 	Misalignment or non-rigid centers Bent flange	Align drive and/or reinforce mounting Straighten flange
Cracks in belt backing 	High temperatures	Remove heat source. Improve ventilation. Check for special belt construction

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Note :