



**MODEL YEAR 22/23
NEW PRODUCTS INTRO**

25 May 2021





PRODUCT LINE POSITIONING

	NEW SIDETRACK (ST)	CDN	NEW CDC	CDX	EXPANDED CDX:EXP
WHO'S IT FOR?	Seasonal, recreational cyclists looking for their first belt-driven bike	Seasonal, recreational cyclists who commute occasionally	Cyclists who bike or eBike for many kinds of urban & suburban trips	Cyclists who ride pavement or dirt throughout the entire year	Strong cyclists up for toughest, grittiest pavement or dirt adventures
PRODUCT DIFFERENTIATOR	Entry-level performance & price vs. chain; few gears	Balance between performance & value for pedal bikes	Balance between performance & value for e-bikes	High-performance & versatile	Ultra-high performance & longevity
FOR WHAT BIKE? (MSRP RANGE)	€300-700	€700-1,500	€1,500-3,000	€1500-5000	>€4000
BELT TRACKING	SideTrack	CenterTrack	CenterTrack	CenterTrack	CenterTrack
LIFE / MILEAGE*	★★	★★	★★★	★★★★	★★★★★
DEBRIS-SHEDDING RATING	2	3	4	5	5
E-BIKE MOTOR COMPATIBILITY					
GEAR COMPATIBILITY	SS, 3-speed IGH **	SS, 3-11 speed IGH	SS, all IGH, Pinion	SS, all IGH, Pinion	SS, all IGH, Pinion



SPROCKET TECHNICAL COMPARISON

	SIDETRACK		CDN	CDC		CDX		CDX:EXP	
SPROCKET LOCATION	Front	Rear	Front	Front	Rear	Front	Rear	Front	Rear
MATERIAL	6061 T6 Alum.	Hardened, chromoly steel	Glass-filled nylon composite	6061 T6 Alum.	Hardened Steel	6061 T6 Alum.	Stainless steel	7075 T6 Alum.	Stainless / Hardened Steel
COATING	Standard	Zinc		Standard	Zinc	Premium		Premium	None / Black Zinc
CENTERTRACK™	-	-	Full	Fin	Full	Full	Full	Full	Full
DEBRIS PORTS	Undercut		Wide, angled	Narrow, straight		Wide, angled		Wide, angled	
COLOR	Black/Silver	Silver	Black	Black	Silver	Black/Silver		Black/Silver	
TOOTH RANGE	46, 50, 60	22	46,50,55	46,50,55, 57,60	22-28	22-70	19-39	32-55	19 - 39
WEIGHT (G) *	753**	142	48	82	104	61	78	90	96
EBIKE SPIDER ASSEMBLIES	n/a		n/a	Bosch Gen3, Shimano E5000		Bosch Gen3, Gen4, Shimano E5000/6100, FAZUA			



MATERIAL, COATING, & TOOTH PROFILE DESIGN IMPROVEMENTS FOR COST & PERFORMANCE OPTIMIZATION

* Sprocket weight assumes @ 46TFront, 22TRear.

** Sidetrack front weight includes crank, sprocket, guards, & guard hardware.



CRANKSET COMPARISON CHART

	S050	S150	S250	S300	S550
SPROCKET COMPATIBILITY	SIDETRACK	CDX, CDN	CDX, CDN	CDX	CDX, CDX:EXP
CRANK ARM LENGTH	160, 170	170, 175	170, 175	170, 175	170, 175
TOOTH COUNT	46, 50, 60	46, 50, 55, 60, 70	46, 50, 55	46, 50, 55, 60	46, 50, 55
ISO COMPLIANT GUARD	INCLUDED	AVAILABLE	INCLUDED	AVAILABLE	AVAILABLE
MOUNTING TYPE	N/A	5-BOLT 130MM BCD	5-BOLT 130MM BCD	5-BOLT 130MM BCD	2-PIECE, DIRECT MOUNT
MATERIAL	ALUMINUM	FORGED ALLOY	FORGED ALLOY	FORGED ALLOY – POLISHED	FORGED ALLOY – POLISHED
CRANK FINISH / COLOR	BLACK MATTE SILVER	MATTE BLACK OR MATTE SILVER	BLACK OR SILVER; MATTE WITH POLISHED FACE	POLISHED BLACK OR MATTE SILVER	MATTE BLACK
LEAD TIME	30 weeks	30 weeks	30 weeks	12 months	12 months

Refer to Product Guide for further details



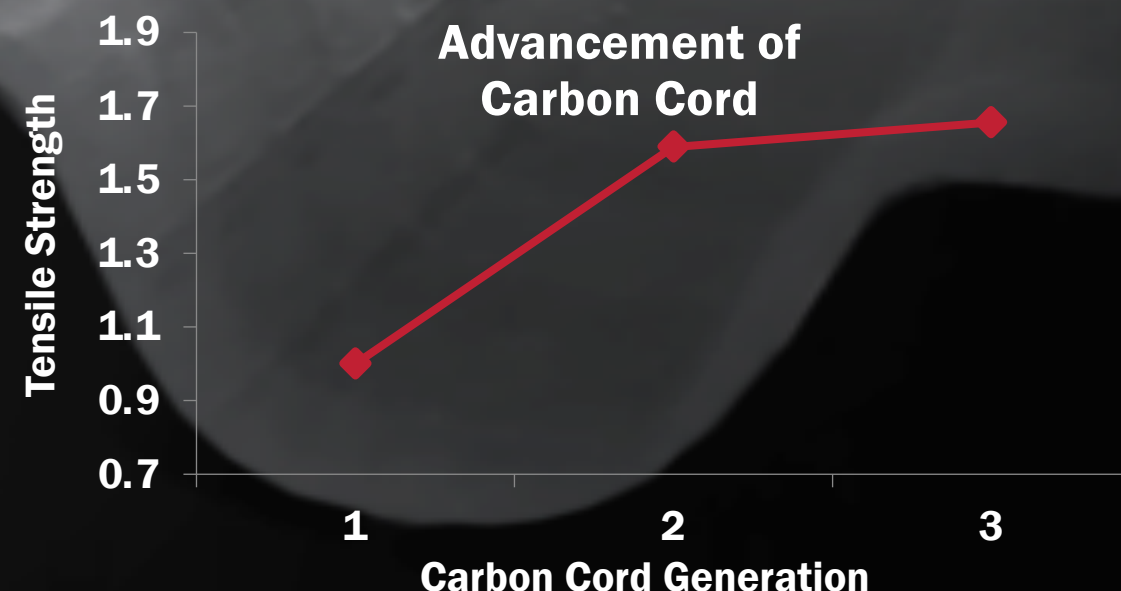


BELT TECHNICAL COMPARISON

PRODUCT LINE	ST	CDN	CDX
COMPOUND	Engineered Polymer	Engineered Polymer	Polyurethane
CENTERTRACK™ GROOVE	No	Yes	Yes
TENSILE CORD	Carbon	Carbon	Carbon
PITCH	11mm	11mm	11mm
BELT LENGTHS	111-132	111-132	108-174
BELT/JACKET COLOR	Black/Black	Black/Black	Black/Blue

RECENT GATES ADVANCEMENTS

- **Carbon cord combines advancements in fiber, treatments and processing**
 - **70% increase in tensile strength since Gen 1**
 - **Increasing belt durability and power density**



CARBON CORD TECH CONTINUES TO IMPROVE – MAKING BELTS MORE DURABLE



WHAT'S NEW

PRODUCT LINE	SIDETRACK		CDN		CDC		CDX		CDX:EXP	
	Front	Rear	Front	Rear	Front	Rear	Front	Rear	Front	Rear
EBIKE-SPECIFIC COMPONENTS:							- Bafang M200, M420 spider compatibility* - Fazua spider	- Revonte - Sturmey- TDCM		
SPROCKET		22T Thread-On			48, 57, 60 with DI2 offset PSE: 32T, 39T	VSE: 22T, 24T. 26T, 28T SSE: 28T, 39T	5AA-D: 46T, 48T	YMN-U: 30T, 34T, 36T XMN-U: 28T		RSSB: 19T, 20T, 22T
BELT	125, 128, 130, 132		125, 128, 130, 132				160, 177, 178, 181, 183			
OTHER	UT LASER ALIGNMENT TOOL									

Other Additions

- Expanded Dual-sourcing with Specified Country of Origin
- New Tensioning App
- Sanity Check Update
- New Training Materials (Tech Service Kit)

* Spiders manufactured by Bafang



SIDETRACK™ COMPONENTS

NEW for 2021

S050 CRANKSET	
Sprocket Series	SIDETRACK
Mounting Type	INTEGRATED
Crank Arm Length	170, 160
Crank Finish/Color	BLACK / SILVER*
Tooth Count	46, 50, 60
ISO Compliant Guard	INCLUDED
Bottom Bracket	JIS SQUARE TAPER, NOT INCLUDED
Available	NOW
Lead Time	30 weeks



SIDETRACK BELTS	
Tooth Count	
111	122
113	125
115	128
118	130
120	132

Lead Time: 30-weeks
 Belt part numbers format:
 11M-113T-12 SIDETRACK BLACK

SIDETRACK REAR SPROCKETS					
Type	Application	Material	Finish/Color	Tooth Count	Available*
XSE	SHIMANO 3 or 6-LOBE	Hardened and zinc-coated rear chromoly steel	SILVER	22	NOW
SSE	9-SPLINE			22	NOW
FSE	ISO THREADED, FIXED			22	July 2021

*30-week lead time

*Guard/Flange is black
 Contact Gates for additional configuration options.

NOTE: Due to China Country of Origin, SideTrack sprockets may be subject to Anti-dumping duties.



NEW SIDETRACK™ HUB COMPATIBILITY



SHIMANO	STURMEY-ARCHER
SG-3D55	S1C
SG-3R40	S2C
SG-3C41	XL-RD3, X-RD3
SG-C3001-7D & 7R	SX-RK3, SX-RB3
	S-RC3, S-RF3, S-RK3

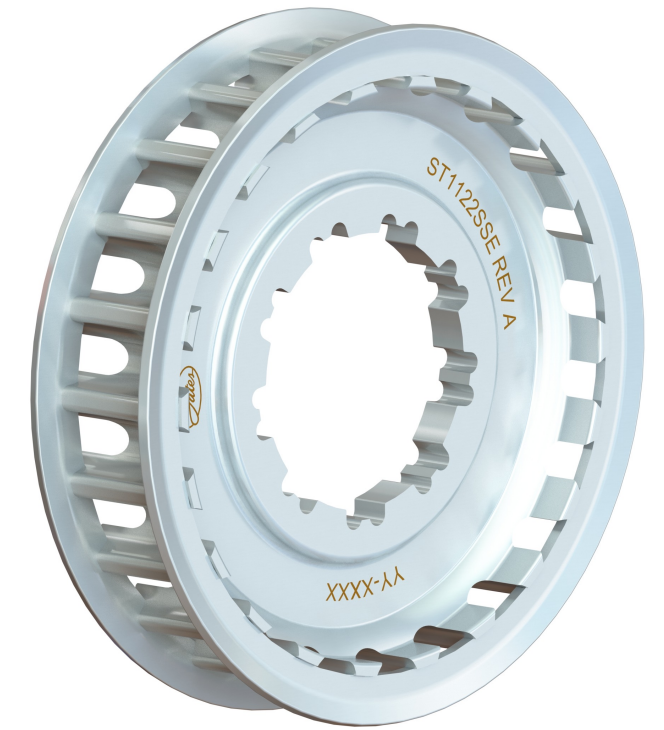


FSE

Compatible with 1.37" x 24 TPI



XSE



SSE

Exact fitment subject to change.
SideTrack is compatible with 3, 5 and 7-speed internal gear and 9-spline single speed hubs



NEW FAZUA CDX CENTERTRACK™ SPIDER



FAZUA MOTOR ASSEMBLIES

Item	SPIDER ASSEMBLY
Mounting Type	5-BOLT 130MM BCD
Sprockets	CDX CENTERTRACK
Sprocket Material	ALUMINUM 6061
Color	BLACK
Tooth Count	50T, 55T, 60T
ISO Compliant Guard	AVAILABLE
Available	Q4 2021
Lead Time	30+ weeks



To achieve 51.7 beltline



NEW CDX CENTERTRACK™ BOSCH GEN4 SPIDERS



BOSCH GEN4	
Item	SPIDER ASSEMBLY
Mounting Type	5-BOLT 130MM BCD
Sprockets	CDX CENTERTRACK
Sprocket Material	ALUMINUM 6061
Color	BLACK
Tooth Count	55, 60, 63
ISO Compliant Guard	AVAILABLE
Available	Q3 2021
Lead Time	30+ weeks

NEW BOSCH GEN4 ASSEMBLIES – TO ACHIEVE 51.7 BELTLINE FOR ROHLOFF EQUIPPED MODELS



NEW CDC CENTERTRACK™ COMPONENTS



CDC CENTERTRACK REAR SPROCKETS

CDC	Type	Application	Material	Finish/Color	Tooth Count				Available*
					22	24	26	28	
	VSE	ENVILOLO	COATED STEEL	SILVER					Q4 2021

*30-week lead time



VSE

CDC FRONT SPROCKETS

CDC	Type	Application	Material	Finish/Color	Tooth Count			Available*
					32	39		
	PSE	PINION	STAINLESS	SILVER				Q4 2021
	5AT-D**	5-BOLT, 130MM BCD	6061 ALUM	BLACK			48 57 60	

*30-week lead time

**3.85mm dish offset (compared to 3.10mm on standard front sprockets)





PSE





CDC E-BIKE MOTOR & IGH COMPATIBILITY

- CDC front and rear sprockets are rated for 50Nm or less mid-drive eBike systems only.
- CDC front and rear sprockets are rated for any level of front/rear-hub motor e-bike systems (electric power does not go through the drivetrain) and non-electric bicycles.



MOTOR MANUFACTURER	MODELS
	Active Line, Active Line Plus
	E5000, E6100*

*when program-limited to 50Nm of torque or less

IGH MANUFACTURER	MODELS
	3 (6-lobe excluded) 7/8/11 speed hubs
	All



NEW SHIMANO DI2-COMPATIBLE CDX REAR SPROCKETS

SHIMANO MU-UR510 COMPATIBILITY CHART

Teeth	Part Number	Hub	Beltline
22	CT1122XMN-U	Alfine 8/11	45.5mm
24	CT1124XMN-U		
26	CT1126XMN-U		
28	CT1128XMN-U		
28	CT1128XMN-D		
28	CT1128YMN-D	Inter-5E	41.7mm
28	CT1128YMN-U		
30	CT1130YMN-U		
32	CT1132YMN-U		
34	CT1134YMN-U		
36	CT1136YMN-U		
			45.5mm

SHIMANO MU-UR500 COMPATIBILITY CHART

Part Number	Hub	Beltline
CT1128DMN*	All Shimano 8/11-Speed Di2 Rear Hubs	39.8mm
CT1128XMN-D		41.7mm
Gates "YMN-D" Series	All Shimano Inter-5E Di2 Rear Hubs	41.7mm

*Note: Gates CT1128DMN is replaced with CT1128XMN-D as of MY2021



XMN-D



YMN-D



XMN-U



YMN-U



NEW CDX COMPONENTS

Expansion of CDX:EXP line – new high hardness, high-strength sprocket for exceptional durability

CDX REAR SPROCKETS

	Type	Application	Material	Finish/Color	Tooth Count							Available*		
					19	20	22				34		39	
CDX:EXP	RSSB	ROHLOFF SPLINE	COATED STEEL	BLACK	19	20	22							China COO: NOW TW COO: JULY 2021
CDX:EXP	SMN	SHIMANO 9-SPLINE	STAINLESS	SILVER							34		39	NOW
CDX	SMB	SHIMANO 9-SPLINE	COATED STEEL	BLACK		20								NOW
CDX	YMN-U	SHIMANO INTER-5E 6-LOBE, UNIFIED	STAINLESS	SILVER				28	30	32	34		36	28T, 30T, 32T, 36T: NOW 34T: TBD
CDX	AFMN	STURMEY-ARCHER RX-RF5 THREADED	STAINLESS	SILVER			22							NOW

*30-week lead time

CDX FRONT SPROCKETS

	Type	Application	Material	Finish/Color	Tooth Count	Available*
CDX:EXP	PMN	PINION	STAINLESS	SILVER	39	NOW

*30-week lead time



SMB

RSSB



SMN



YMN-U



PMN

CDX BELT

Tooth Count

160

177

178

181

183



- Updated look and feel for a more streamlined user experience
- Auto average frequencies for a more accurate reading
- Improved instruction set for measuring belt tension for your bicycle, motorcycle, or scooter
- Chinese language option now available

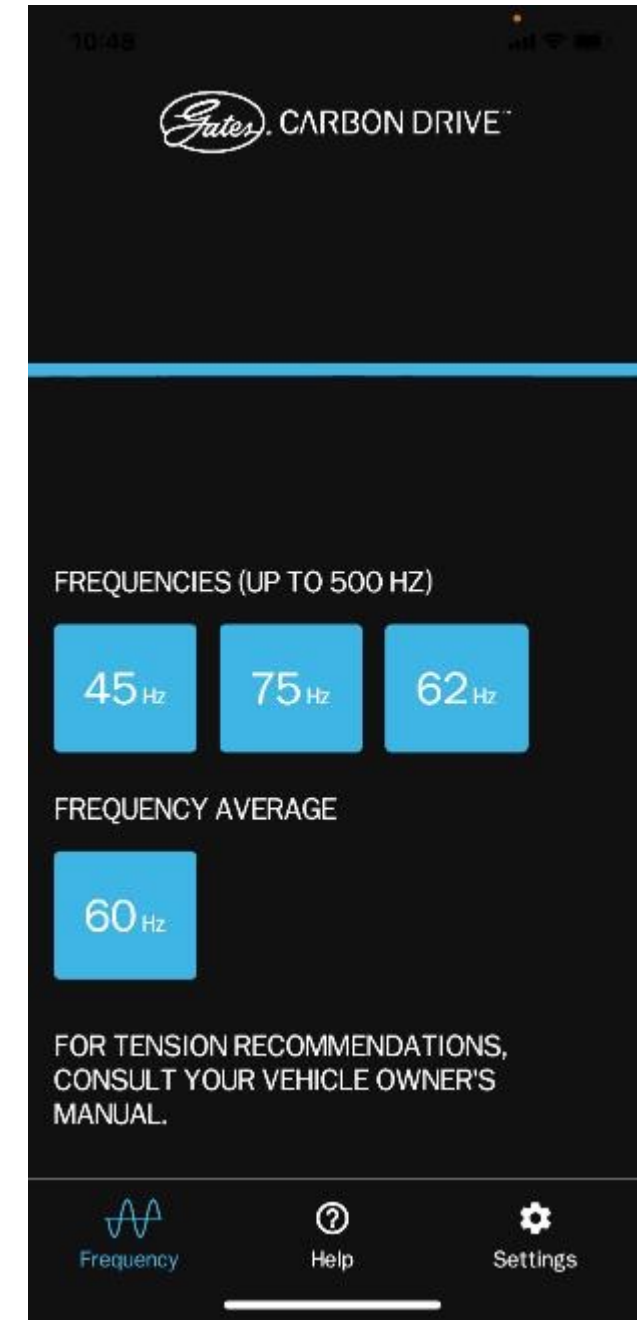
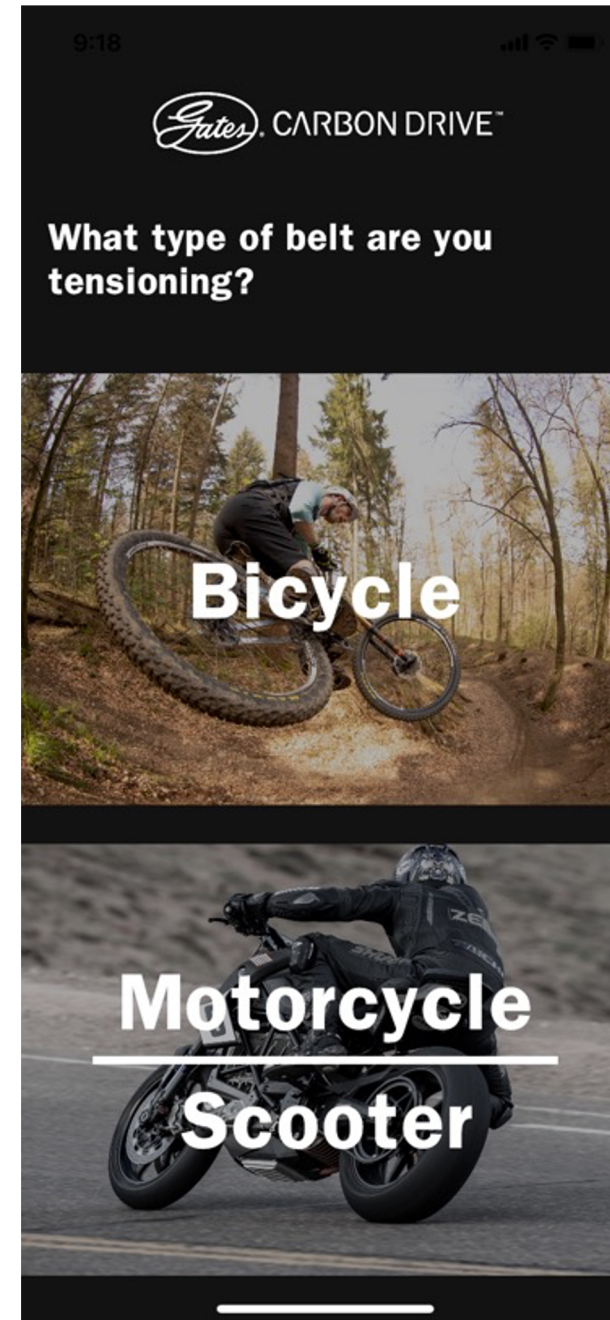


Bicycle Belt Tension Meter

Gates Carbon Drive

[IOS APP STORE](#) & [GOOGLE PLAY](#)

GET



UPDATED AND IMPROVED



ALWAYS USE THE PRICE LIST TO DETERMINE COUNTRY OF ORIGIN FOR CARBON DRIVE PRODUCTS

Package Type	COO (Primary/Secondary)
Bulk	TW
Bulk	TW
Bulk	TW/CN
Bulk	CN
Bulk	TW

Expanded sourcing for rear sprockets
Dual sourcing for some

EU source option currently available for select rear sprockets:

	PART #	PRODUCT #
XMN	CT1122XMN	78980338
	CT1124XMN	78980339
XMN-U	CT1122XMN-U	78980448
	CT1124XMN-U	78980450
VMN	CV1122VMN	78980475
	CT1124VMN	78980427
	CT1126VMN	78980428
	CT1128VMN	78980429

ALWAYS USE PRICE LIST TO IDENTIFY COUNTRY OF ORIGIN



DESIGN

- Website now available in 9 languages
- Technical Manual & eBike Integration manual – now online in 10 languages
- Coming soon: [NEW Sanity Check](#) for pedal and eBike
- Frame split ideas

TRAINING

- Videos on [Gates University](#)
- Webinar or Live Dealer trainings (available on request)
- Tech Service Kit



ADDED FUNCTIONALITY INCLUDING

- BOM creation tool and configurator
- Build your BOM – make selections from left to right; options update to ensure selections match product availability
- eBike Configurator, Sanity Check, and Center Distance Calculator in one place

EBIKE CONFIGURATOR

Motor	Bolts	Guard	Rear Hub	Front Sprocket	Belt Line	Motor Offset	Rear Sprocket	Part Family
Bosch Gen3	4	No	enviolo SP, CA (148mm)	48	54.7	0.0	19	CDX
Bosch Gen4	5	Yes	enviolo TR, SP, CA (135/142mm)	50			20	
Brose G1/G2			Rohloff SpeedHUB 500/14 (135/142mm)	55			22	
Panasonic GX			Shimano Nexus 7/8 Disc, Alfine 8/11 (Mechanical)	60				
Shimano STEPS E5000			Shimano Nexus 8, Alfine 8/11 (Di2)	63				
Shimano STEPS E6100								
Shimano STEPS EP8								
Yamaha PW Series ST, TE								

Motor	Bolts	Guard	Rear Hub	Front Sprocket	Belt Line	Motor Offset	Rear Sprocket	Part Family	Front BOM	Front COO	Rear BOM	Rear COO
Bosch Gen4	5	Yes	Rohloff SpeedHUB 500/14 (135/142mm)	60	54.7	0.0	20	CDX	S5B4BM 60CDX -0/54.7 BG, 78700373	TW	CT1120RSMN, 78980548	TW

WWW.GATESSANITYCHECK.COM



ADDED FUNCTIONALITY INCLUDING

- BOM creation tool and configurator
 - Drive Train Sanity Check
 - Compare results to standard chain driven bicycle
 - Center Distance and belt length Calculator
 - Email results via CSV file
 - eBike Configurator, Sanity Check, and Center Distance Calculator in one place

DRIVE TRAIN SANITY CHECK

So you've designed a belt drive compatible frame?

Does your selected belt drive make sense? We developed this tool so you can "sanity check" your specifications for the bicycle design you intend to bring to market.

Input your application parameters, then choose the low and high cadence values that will be used to calculate corresponding bicycle speeds for your hub choice and it's gearing limits.

You can generate as many rows of results as you wish and use the email field below to have the data emailed to you as a convenient CSV File.

Wheel Size	Tire Size	Crank Size	Hub / Gearbox	Front Sprocket	Rear Sprocket	Low Cadence	High Cadence
36inch	20 mm	160.0	P1.18	Bosch G2 22T	19	30	43
32inch	23 mm	162.5	P1.12	Bosch G2 24T	20	31	44
28inch	25 mm	165.0	P1.9XR	Bosch G2 26T	21	32	45
27inch	26 mm	167.5	P1.9CR	Bosch G2 28T	22	33	46
700c/29er	27 mm	170.0	C1.12	Pinion 32T	23	34	47
650b/27.5	28 mm	172.5	C1.9	39T	24	35	48
650c	30 mm	175.0	C1.6	42T	26	36	49

Calculate Reset

W Size	T Size	Crank Size	Hub / Gearbox	Front S	Rear S	Cadence L	Cadence H	V low kph	V high kph	V low mph	V high mph
650c	26 mm	170.0	P1.9CR	Pinion 32T	26	30	48	3.34	19.28	2.06	11.90
650c	26 mm	170.0	P1.9CR	Pinion 32T	21	30	48	4.13	23.87	2.55	14.73

Compare your results to a standard bicycle

Center Distance Calculator


WWW.GATESSANITYCHECK.COM



1.3 Gates

AVAILABLE ON REQUEST

- Example shown from enviolo collaboration training




2020/21 Gates Webinar - EN

COMPLETED



Benutzung - UT Beltcare

COMPLETED




Bestimmen der Riemenlänge

COMPLETED




Häufige Handhabungsfehler

0%



Insights & Specials

0%



Laserbeltliner

0%



Messen der Riemenlinie mit einem Me...

0%



Messung der Riemenspannung mit Hilf...

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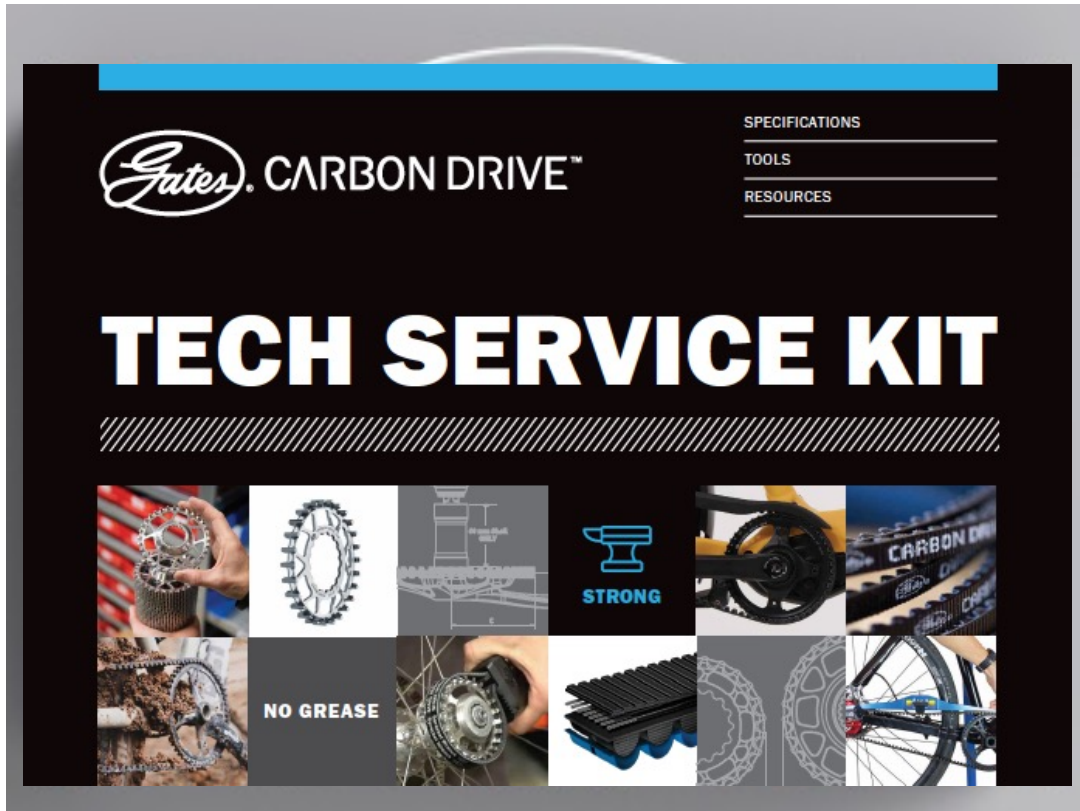


Produktreihe CDX vs CDN

0%



NEW TECH SERVICE KIT



TECH SERVICE KIT CONTENTS

GCD PRODUCT GUIDE

QR CODE MENU SHEET

GCD TECHNICAL MANUAL

UT STICKER SHEET

RED JOURNAL

TOOLS AND BELTS



WHAT'S NEW?

- Rapid growth in SUV / eMTB type bikes.
- Advancement in belt technology relaxes backend design constraints.
- Gates providing idler/tensioner development engineering support
- Design innovations with key industry partners (motor & gearing suppliers)



	IDLER	TENSIONER
WHAT'S THE DIFFERENCE?	Fixed design	Spring-loaded
FOR WHAT BIKES?	Fixed span applications (rigid frame or hard-tail)	Full suspension
MOUNTING OPTIONS	Rear axle, bottom bracket, chain-stay	Rear axle, bottom bracket
ADVANTAGES	<ul style="list-style-type: none"> • Simplified belt integration on existing frame designs (lower cost, faster development time, no dropouts) • Lower-cost, simpler design vs. tensioner 	Enables belt use on growing market of full-suspension bikes/eBikes.



Gates requires manufacturers to follow these design guidelines

- The tensioner wheel must have a minimum diameter of 50mm, a minimum width of 14mm.
- Tensioners can be mounted on the bottom bracket, or near the rear sprocket on the dropout or stay.
- The tensioner wheel must contact the flat backside of the belt, not the toothed side. Tensioners that push against the toothed side of the belt can reduce contact with the sprockets.
- The tensioner should apply pressure to the slack span of the belt, which normally rotates away from the front sprocket toward the rear. The tensioner should not apply pressure to the tight side.
- Belt tensioners may only be used with premium CDX belts.
- Tensioners must maintain proper belt tension through the entire range of suspension travel.

Designs must be submitted for approval to ensure the tensioners function properly and do not damage the belt's carbon cords.



- Launched May 2021, availability Q42021
- Designed for use with Gates CDX and CDN belts
- For bikes with or without an electric motor in the rear hub.
- Compatible with all P- and C-line gearboxes
- Specifications
 - Material body black anodized aluminum
 - Material pulley POM with 2 rubber rings
 - Weight ca. 190g
 - Gates gearbox sprocket compatibility max. 39T
 - Chain stay lengthening 35mm
- For belt installation the tensioner can be simply locked
- Contact sales@pinion.eu

