



DESIGN POWER™: BICYCLE DRIVE ASSISTANT

ADVANCED DRIVETRAIN ENGINEERING SOLUTIONS FOR NEXT-GENERATION BICYCLES

The Design Power Bicycle Drive Assistant module enables precise design and optimization of belt drive systems for all bicycle categories, from urban e-commuters to high-performance mountain bikes. This platform provides drivetrain solutions for beltline, gearing, and drive system compatibility while accounting for the target bicycle application—including different classes of eBikes.

YOUR DESIGN. YOUR RIDE. TOTAL CONTROL.

ELIMINATES COSTLY SPEC ERRORS

Determine the appropriate product line, dial in sprocket ratios, and ensure compatibility with all major eBike drives, gearboxes, and internal gear systems.

OPTIMIZED BICYCLE COMPONENTS

Depending on the bike type, intended use, and drive system specifics, ensure the correct Gates Belt Drive product line and components are selected to meet customer needs at the lowest cost.

FUTURE-PROOF DESIGN FOR INDUSTRY SHIFTS

Integrated databases stay updated with new drive system specifications, gear system updates, and new Gates Belt Drive products.

PERFECTED FROM BLUEPRINT TO BIKELANE

- **Guided tool tips:** These smart prompts offer real-time validation of component compatibility for optimized belt drive designs
- **Comparison tool:** Analyze performance trade-offs between different setups
- **Compatibility ensured:** Offers immediate access to a database of Gates-compatible OEM systems to simplify the selection process for production-ready designs
- **Full product catalog:** You will also have full access to the complete Gates product catalog within the module, featuring all Gates Belt Drive system components

HOW THE BIKE MODULE WORKS



ENTER BIKE CONFIGURATION

- Select bike application
- Enter bicycle wheel and tire information
- Choose between eBike or pedal bike
- Add details about the specific eBike system



DEFINE YOUR SPECS

- Choose your gearing system type
- Select from approved Gates Belt Drive product lines
- Determine compatible sprocket sizes and the resulting belt size



VALIDATE PERFORMANCE

- Review your customized Cadence and Speed Analysis report
- Determine if your selections meet your needs or require adjustments



GET INSTANT RECOMMENDATIONS

- Generate a report with a complete Gates Belt Drive bill of materials
- Optionally, send the report to your Gates Belt Drive representative for review

CUSTOMIZED SOLUTIONS FOR:

- Urban commuter bicycles
- High-performance sportive models
- Rugged off-road and trekking bikes
- Heavy-duty cargo eBikes



FOUR UNIQUE PRODUCT LINES WHICH ONE IS RIGHT FOR YOU?

Design the perfect belt drive system for your needs with our high-performance product lines. Gates offers durable, efficient solutions tailored to your bike type and the road ahead.

ST	CDN	CDC	CDX
2x the life of chain	2x the life of chain	3x the life of chain	4x the life of chain
Pedal & Hub Motor eBikes	Pedal & Hub Motor eBikes	Mid-Motor eBikes 75 Nm or less	Mid-Motor eBikes 100 Nm or less
On-Road/Urban	On-Road/Urban	On-Road/Urban	On & Off-Road
SideTrack™ Tracking	CenterTrack™ Tracking	CenterTrack Tracking	CenterTrack Tracking

DISCOVER IDEAL COMPONENTS

BELT DRIVE
APPLICATIONS GUIDE

EXPLORE SOLUTIONS

BELT DRIVE
PRODUCT LINES

VIEW CATALOG

BELT DRIVE SYSTEMS
FOR BICYCLES

FIND YOUR FIT NOW

WE'RE HERE FOR YOU

Need help? Our engineering team specializes in finding the right solution for your application.

Get personalized support: carbondrive@gates.com



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