

When Conveyor System
Service Life and
Performance Are Critical,
Do It Right The First Time With Gates



THE DRIVING FORCE IN POWER TRANSMISSION™

The Right Tools and Expertise For Performance Design

Gates, the world's leader in synchronous belt technology, meets the needs of the materials handling industry with information and design tools to make building the right drive system fast and easy.

Design Flex II,™ *Design View*,™ *Design OHL*™ (Over Hung Load), and *Design IQ*™ provide invaluable assistance in product selection, CAD drawings, OHL calculations, serpentine drive design and layouts, tensioning and installation, and system cost savings. Integrating Gates into your process gives you unmatched design and problem-solving expertise in every aspect of synchronous design operation so you can *do it right the first time.*

The Right Products For Maximum Performance

Stop hassling with the lost time and cost of maintenance downtime. The key to building or maintaining a reliable, high-performing conveyor system is in the quality of the products used and the service life they provide. When you choose Gates, you choose products that work as hard as your conveyor systems... day after day, year after year.

Poly Chain® GT² Belt — The Workhorse

Gates Poly Chain GT2 belt is the world's most powerful synchronous belt, ideally suited for low-speed (below 500 rpm), high-torque industrial applications. The powerful polyurethane belt drive system features a robust nylon tooth facing with aramid tensile cords that provides increased load-carrying capacity. Size for size, space for space, the Poly Chain GT2 belt transmits over **50 percent more** power than the closest competitive rubber belt drive system. It permits design of more compact, lighter weight drives that deliver more power in less space than any other belt drive system available.

Advantages over roller chain:

- Contain no "hidden costs" in lost productivity or ongoing maintenance
- Operate at reduced costs and pay for themselves *in less than one year*
- Outlast roller chain 3 to 1
- Quiet
- Long, maintenance-free life
- Virtually eliminate downtime
- Ease of installation
- No retensioning or lubrication
- Virtually no elongation
- Clean running system
- No environmental pollution or contamination from lubricants
- No expensive oil baths
- Resistant to chemicals and contaminants
- Excellent shock load resistance
- Minimal vibration
- Close mounting for minimum over hung load



PowerGrip® GT² Belt — The Racehorse



Gates PowerGrip GT2 belt is the performance choice for a wide variety of drive applications. Combining an innovative rubber compound with Gates' industry-leading belt engineering technology results in a belt that delivers high load-carrying capacity. Because of the increase in load capacity, size for size, the PowerGrip GT2 belt allows for drive systems designs that are smaller and more compact than conventional rubber belt systems.

Advantages over conventional rubber belt drives:

- Enable smaller, more compact drives
- Long, trouble-free service life, width for width
- More belt and sprocket combinations
- Easy installation
- Higher capacity
- Improved registration
- Reduced noise
- No lubrication
- Virtually no elongation
- Compact, clean operation
- Corrosion and abrasion resistant
- Low vibration
- No product contamination from lubricants

Long-Length Belts — Uniquely suited to continuous length industrial conveyor applications requiring roll-to-roll or lifting systems.

Advantages:

- Length stability
- Quiet
- Accurate positioning
- Linear motion
- Reversing drives
- Low maintenance
- No lubrication
- No environmental pollution due to lubricants

Power Curve™ Belts — New flexible V-belt eliminates the weak link at key power turn points.

Advantages:

- Outlast standard "B" section
- Reduced downtime
- Greater transverse flexibility
- Longer service life
- Wear resistant

PowerPainT™ Belts — Synchronous belt designed specifically for applications in painting areas where silicone contamination of the painted product is unacceptable.

Advantages:

- Ensures excellent performance
- Ideal for skid and roller conveyor systems
- Meet automotive industry standards
- Longer service life

Round Belts — Belts designed for ¼ turn or twisted drives where more than an "O" ring is required.

Advantages:

- Minimal stretch
- Minimum take-up
- No splice

The Right Combination Means Greater Cost Savings

How do you calculate the cost of downtime?

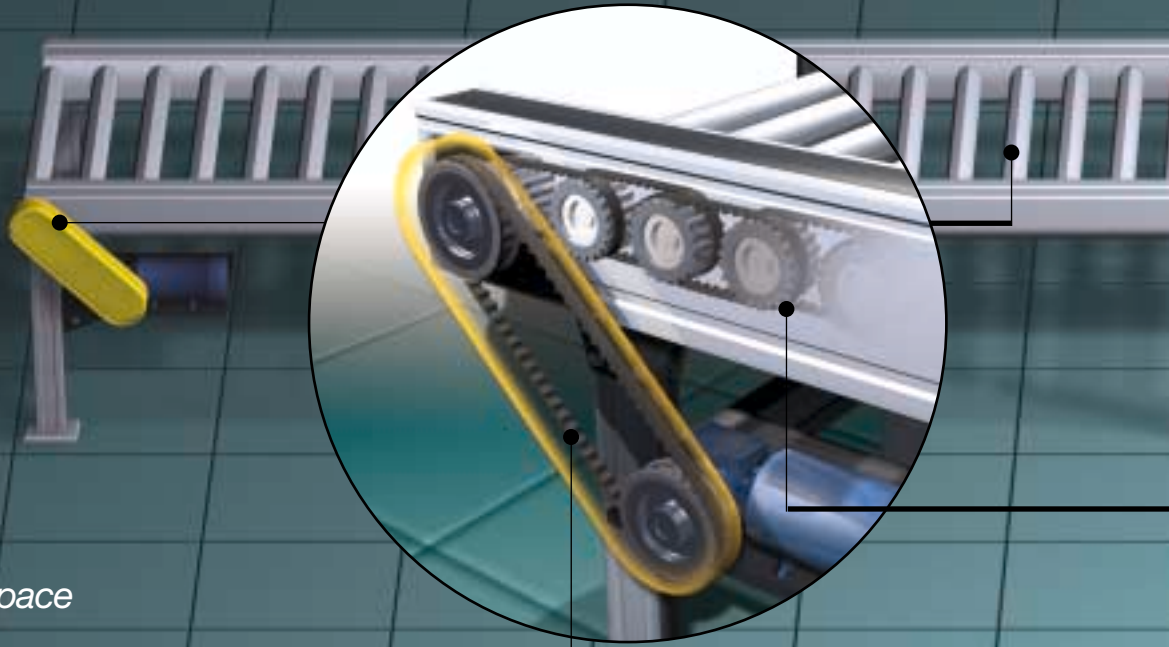
The "normal" downtime costs resulting from maintenance and chain replacement could add up to hundreds — if not thousands — of dollars per drive per year in lost productivity.

ANNUAL COSTS	Roller Chain	Poly Chain® GT2®
Unit Cost of New Drive System	\$ 110.21	\$ 186.34
Yearly Costs To Maintain Roller Chain:		
Replacement cost — Chain/Belt	\$ 33.96	\$ *
Labor	\$ 13.00	\$ *
Replacement cost — Sprockets	\$ 28.58	\$ *
Labor	\$ 13.00	\$ *
Lubrication cost — Labor	\$ 6.50	\$
Disposal	\$?	\$
Production Downtime	\$ 100.00	\$
Employee Complaints (noise/lost production)	\$?	\$
Safety costs (lube on lube, etc.)	\$?	\$
Annual Total Cost to Maintain System:	\$ 195.04	\$ 0.00
Annual Total Cost of New System:	\$ 305.25	\$ 186.34
Annual Total Cost to Maintain System: Pay Back: Poly Chain GT2		0.61 Years
Cost of Systems in Three Years	\$ 695.33	\$ 186.34
Savings in Dollars — First Three Years:	\$ 508.99	Per Drive
Cost of Systems in Five Years	\$ 1,085.41	\$ 266.34
Savings in Dollars — First Five Years:	\$ 819.07	Per Drive

*NOTE: Worksheet assumes that roller chain drives are replaced once per year on the average and that a properly designed Poly Chain GT2 belt (only) should have to be replaced only once every 3 years; hence the yearly replacement costs are calculated at 1/3 of the component cost.

Gates Products in the Right Places Equal Powerful Perform

Drives designed with Gates power transmission products outlast, outperform and outmuscle roller chain and other high-performance rubber synchronous drives. What that means for your conveyor system is more horsepower capacity in less space for less cost...plus greater flexibility in design. Nothing beats Gates power transmission products and engineering support for the ultimate in drive design, performance and service life.



Head Pulley Drive

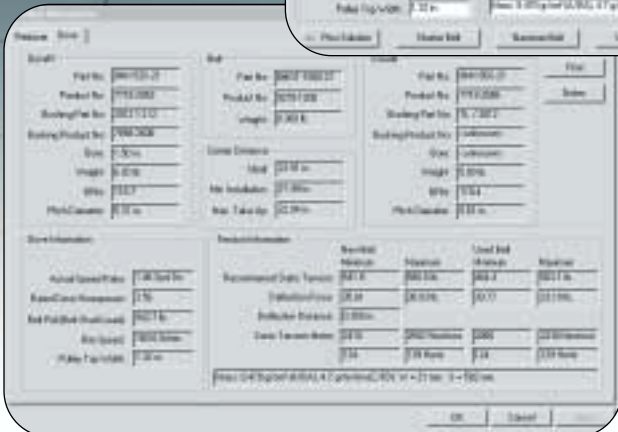
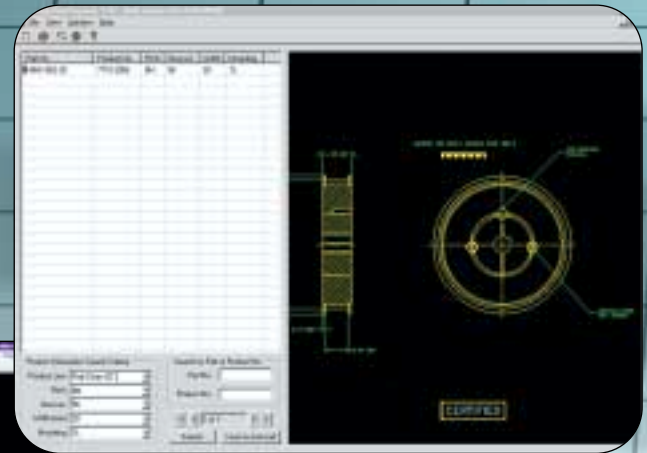
Applications: Poly Chain GT2 and Power Grip GT2 Belts

Design View™

Complete engineering views are downloadable into CAD programs.

Design Flex™

Precise design specifications reduce development time.



Design OHL™

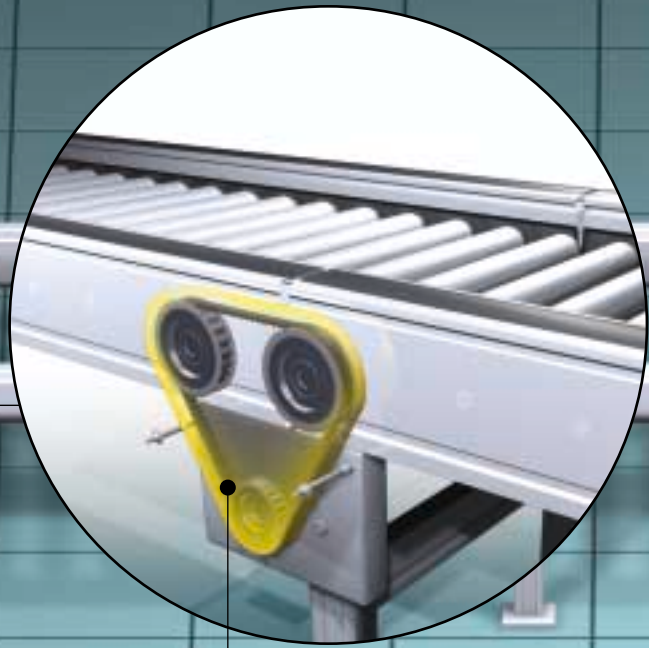
Comprehensive technical data to eliminate manual calculations.



Design IQ™

Comprehensive specification design of multi-point serpentine drives.

Performance

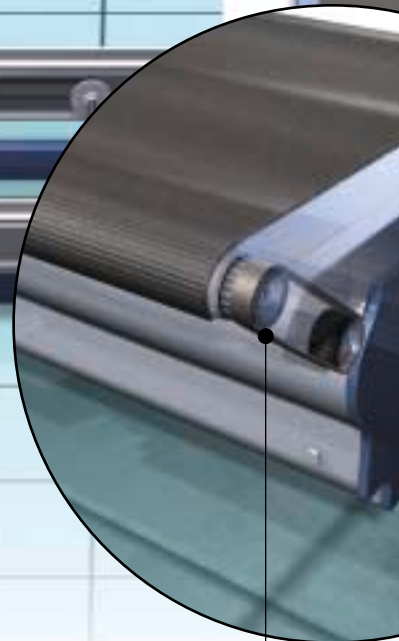
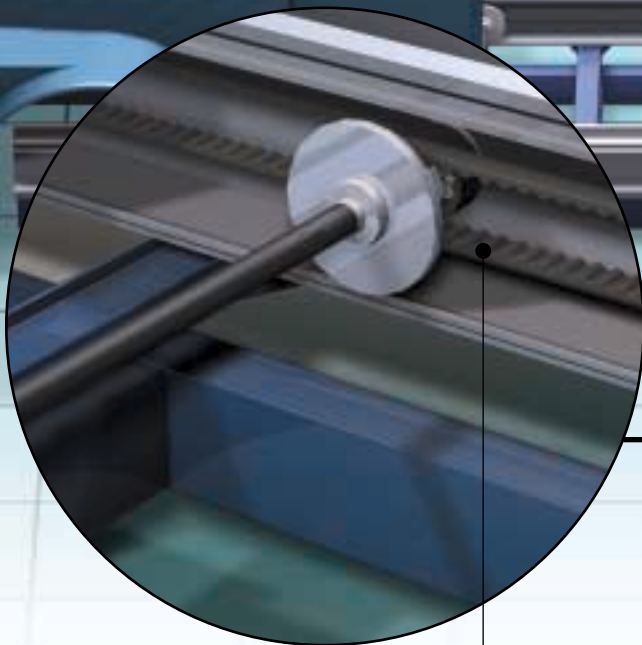


Roll-to-Roll Drive

Applications: Poly Chain GT2 and PowerGrip GT2 Belts

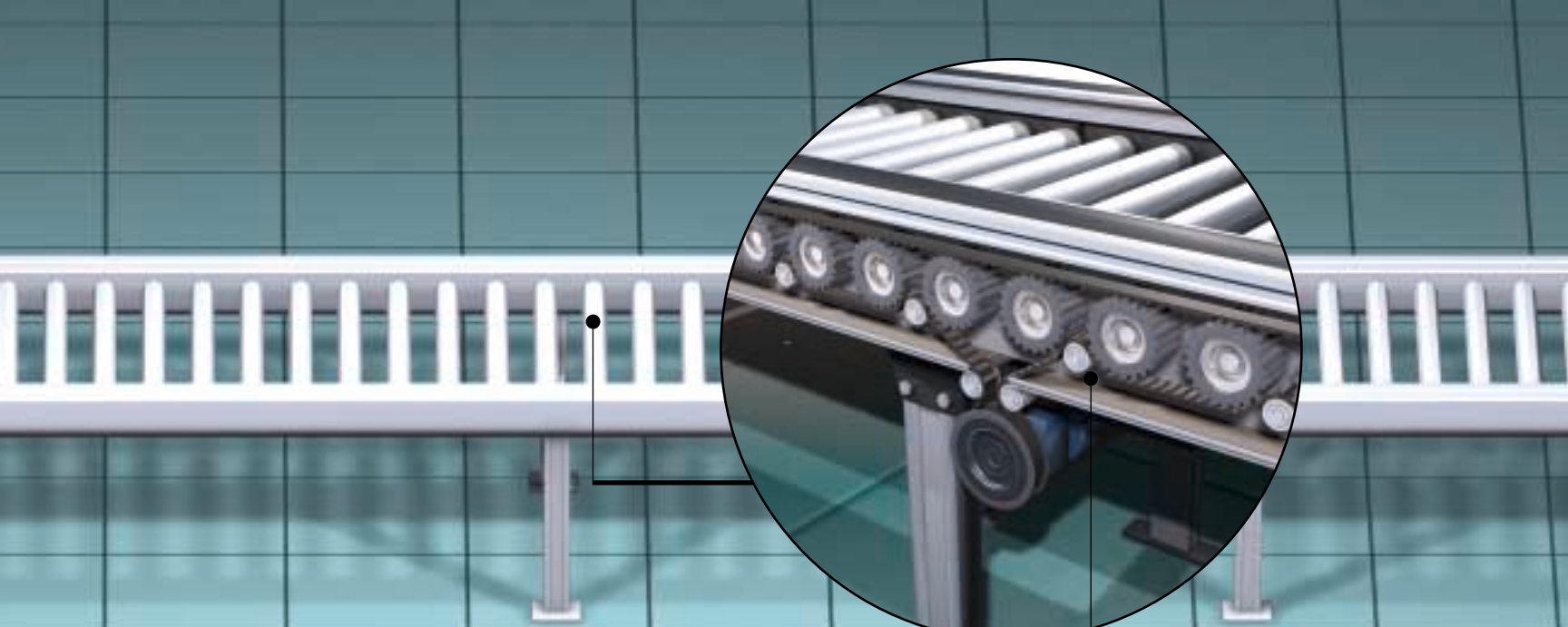
Slave Drive

Applications: Poly Chain GT2 and PowerGrip GT2 Belts



Skid Conveyor Drive

Applications: PowerPaint Belts



**Long-Length
Roll-to-Roll Drive**

*Applications: Poly Chain GT2 and
PowerGrip GT2 Long-Length Belts*



Diverter & Sorter Drive

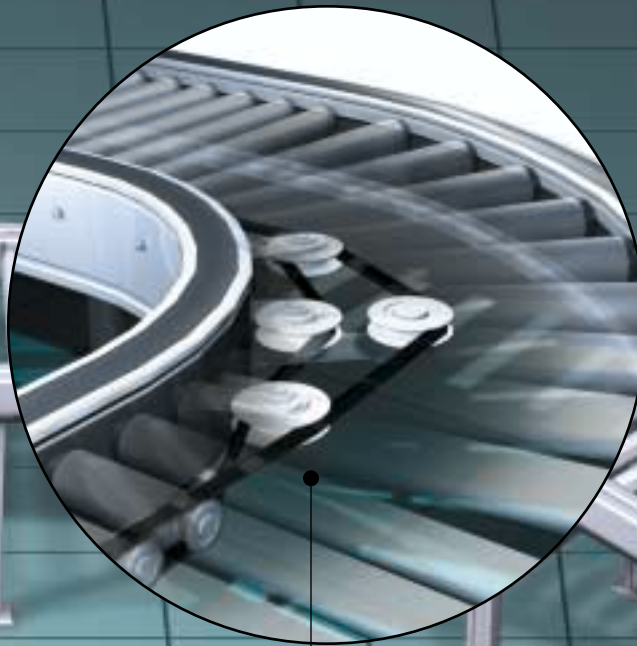
Applications: PowerGrip GT2 Belt

Lifter Drive

*Applications: PowerGrip GT2
and Poly Chain GT2 Belts,
Endless or Long-Length Belts*

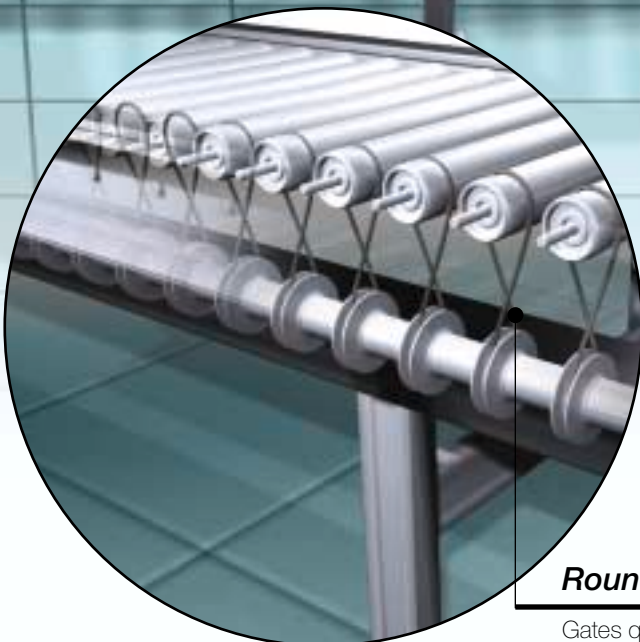
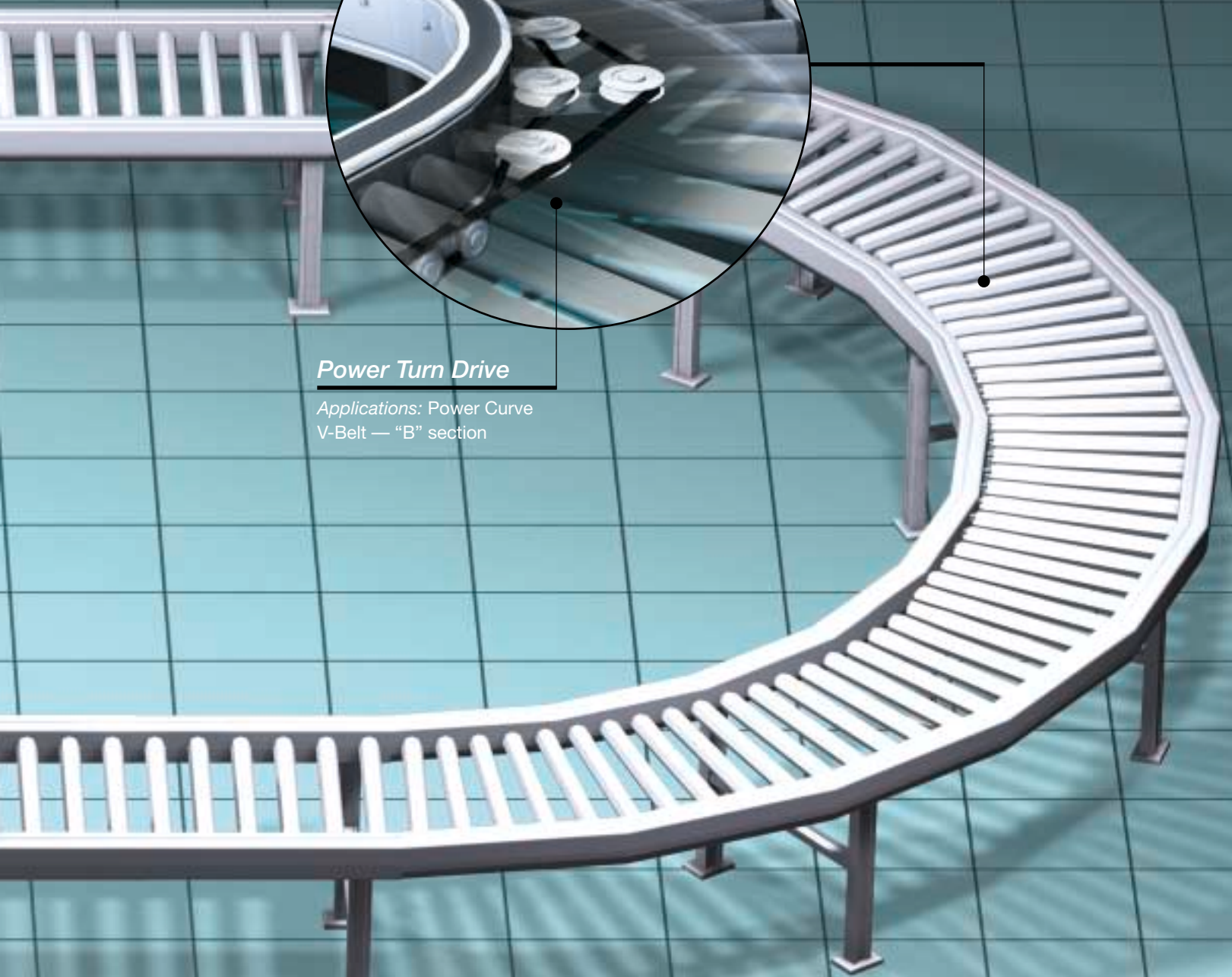


THE DRIVING FORCE IN POWER TRANSMISSION™



Power Turn Drive

Applications: Power Curve
V-Belt — “B” section



Round Belt Drive

Gates quality replacement belts

Why Choose **Gates?**

*With industry-leading technologies, a complete line of high-quality products, and unmatched support, it's easy to see that Gates is the critical link in meeting all your needs for conveyor belt drive systems. Gates is the only manufacturer to unite key design elements into one complete system for fast, efficient designs... **built right the first time.***

For more information on any of Gates Industrial

Power Transmission products, programs or

services, call 800-777-6363, contact your local

Gates representative or visit us at

www.gates.com.

For engineering design assistance,

contact Gates Power Transmission Helpline at

303-744-5800.

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