

## **Poly Chain® GT<sup>2</sup> belt drive systems outperform and outlast standard roller chain – at a lower overall cost.**

Gates exclusive Poly Chain GT2 belt drive system is the optimal choice for high performance and life cycle value in a wide variety of high-torque drive applications, from fractional horsepower drives and up. When compared to standard roller chain, this powerful belt drive system provides important performance advantages and significantly reduces overall costs for end-users. And you'll find proof at [www.gates.com/polychain](http://www.gates.com/polychain)

## **Replaces roller chain – virtually size for size.**

The addition of new sizes of belts and sprockets along with increased power ratings (up to 40 percent higher) allow Poly Chain GT2 drive system designs in widths narrower and more compact than ever before. Many Poly Chain GT2 sprocket hub sizes are identical to standard roller chain sprockets. With over 118,000 drive combinations to choose from, you can take advantage of Poly Chain GT2 benefits in replacing even more roller chain drives, particularly in, but not limited to, the #35 to #120 pitch range.



### **Increased power ratings**

Earlier Poly Chain GT2 low-speed power ratings were extrapolated from high-speed testing. However, due to the extraordinary performance of Poly Chain GT2 belts, extensive new tests were run at low speeds. Results clearly demonstrated that the belt had been underrated by 30 to 40 percent.

**Many Poly Chain GT2 belt drive systems now have equivalent capacity to roller chain drives in the same width.**



Patented tooth facing delivers high horsepower, exceptional tooth shear strength, reduced friction and eliminates the need for lubrication.

Aramid fiber tensile cords provide extraordinary load carrying capability, incredible strength, and virtually zero elongation.

Tough polyurethane compound resists oils, chemicals, pollutants and abrasion.

## Tough enough to outlast standard roller chain 3-to-1.

The body and teeth of Poly Chain GT2 belts are made of a durable polyurethane compound, specially blended for uncompromising adhesion to the tensile cords, and the teeth are reinforced with a heavy wear-resistant nylon facing. This allows for exceptional tooth shear strength and excellent flex life. The belt gets its muscle from aramid fiber tensile cords. It performs flawlessly under the harshest operating conditions, virtually immune to abrasion and chemical attack. The cords provide high impact strength to handle shock and surge loading. It's the strongest, toughest belt on the market by far! And with no metal-to-metal contact between belt and sprockets, sprocket life increases over roller chain sprockets by an even higher ratio – 10-to-1 or more.

### Poly Chain GT2 advantages over roller chain:

- Belts outlast roller chain 3-to-1
- Sprockets outlast roller chain sprockets 10-to-1 or more
- Maintenance free system
- Minimal or no downtime
- No lubrication
- No expensive oil baths
- No retensioning
- Accurate and precise – no chain slop
- Quieter operation
- Minimal vibration due to chordal action
- Resistant to chemicals and contaminants
- Excellent shock load resistance

### The not-so-hidden costs of roller chain add up fast:

- Lubrication system equipment & maintenance
- Lubricant cost and disposal
- Lubrication contamination of product
- Frequent retensioning of "stretched" chain
- Expensive drive enclosures/ noise guards
- Broken chain replacement
- Worn sprocket replacement
- Regular maintenance downtime
- Safety issues
- Environmental noise and lubrication concerns

### Taper-Lock® sprockets & bushings

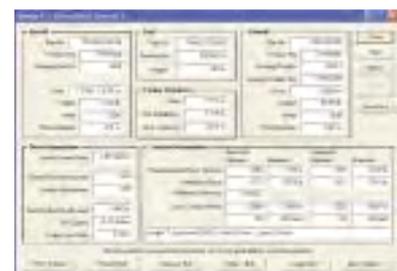
Poly Chain GT2 sprockets are designed to carry hefty belt power loads utilizing the robust, industry-proven Taper-Lock bushing system. This keeps the sprocket hubs narrow so the length-thru-bore dimension is less than ever before. Sprockets will fit on short shafts, with room to spare. The left-justified hub design allows shaft mounting close to bearings, keeping the center of load dimension small preventing issues with high overhung loads.

Taper-Lock® is a registered trademark of Reliance Electric.



### Free drive design tools

Gates powerful software tools – Design Flex® and Design View® – make designing and choosing the right drive system fast and easy. Now do in seconds what used to take hours or days using complex manual calculations. Quickly identify optimal drive design solutions, design drives for multiple shafts, download drawings, calculate potential energy savings, total system cost savings, and more. Go to [www.gates.com/designflex](http://www.gates.com/designflex)



Design Flex – free downloadable program for fast, easy belt drive designs.



Design View – downloadable drawings and 3D solid models of Gates hardware.