

QT Power Chain® II Carbon Overview

Features and Benefits

HEAVY-DUTY BELTS COMBINED WITH TAPER-LOCK™ SPROCKETS AND BUSHINGS MAKE **QT POWER CHAIN® II CARBON BELT DRIVE SYSTEMS** THE OPTIMAL CHOICE FOR HIGH-PERFORMANCE IN HIGH-TORQUE DRIVE APPLICATIONS.

TB Wood's QT Power Chain II Carbon belt drive systems are designed for use in a variety of industries

- Lumber
- Pulp & Paper
- Packaging
- Food Processing
- Bottling
- Aluminum & Steel
- Petrochemical
- Sand, Gravel & Concrete
- Glass

These high performance drive systems are specifically designed for tough applications such as:

- Belt Conveyors
- De-barkers
- Dough Mixers
- Scrap Cutters
- Compressors
- Bucket Conveyors
- Grinders
- Carton Sealers
- Dryers
- Screw Conveyors
- Pumps
- Palletizers

The QT Power Chain II Carbon belt drive system from TB Wood's consists of a synchronous belt, sprockets, bushings and idlers that are all designed to work together to deliver the best value in power transmission – whether the application is low-speed or high-speed. When compared with standard roller chain, this powerful belt drive system provides important performance advantages and significantly reduces overall costs. The new sizes of belts and sprockets along with increased power ratings (up to 46% higher than its predecessor) allow QT Power Chain II Carbon drive systems to be designed in widths narrower and more compact than ever before.

QT Power Chain II Carbon System advantages compared to ROLLER CHAIN:

- Longer drive life
- No lubrication required
- Less noise
- Identical hub sizes

QT Power Chain II Carbon System advantages compared to QT POWER CHAIN:

- Increased power ratings
- Narrower sprocket profiles
- Taper-Lock bushing system

Belts built for maximum strength

The result of state-of-the-art design and engineering, the body and teeth of QT Power Chain II Carbon belts are made of a durable polyurethane compound, specially blended for uncompromising adhesion to the tensile cords and heavy nylon tooth facing. The result is a belt that is virtually immune to abrasion and chemical attack.

QT Power Chain II Carbon belts get their muscle from carbon-fiber tensile cords and perform flawlessly under the harshest operating conditions. The cords provide exceptional flex fatigue life and high impact strength to handle shock and surge loading. These belts are tough enough to outlast standard roller chain 3-1. With no metal-to-metal contact between belt and sprocket, sprocket life increases significantly over roller chain sprockets by a ratio of 10 to 1.

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

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

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



Taper-Lock™ is a trademark of Baldor Electric Company

GET THE MOST FROM YOUR DRIVE SYSTEM WITH TB WOOD'S TAPER-LOCK SPROCKETS AND BUSHINGS

QT Power Chain II sprockets are designed to carry hefty belt power loads utilizing the robust, industry-proven Taper-Lock bushing system. Taper-Lock bushings are split completely through the bore and taper to provide a true clamp fit on the shaft that is the equivalent of a shrink fit.

The Taper-Lock bushing system keeps the sprocket hubs narrow so the length-thru-bore dimension is less than ever before. The left-justified hub design allows shaft mounting close to bearings, keeping the center of load dimension small while preventing issues with high overhung loads.

QT Power Chain II Sprocket advantages include:

- GT2 tooth profile 8mm and 14mm pitch
- Taper-Lock bushing interface
- Left justified hub
- Industry-proven robustness
- True running, concentric
- Easy installation and removal
- Installs with less axial sprocket movement than other bushing systems

QT Power Chain II Carbon design flexibility:

- 8mm Pitch
Drive combinations: 66,600+
Speed Ratios: 462
- 14mm Pitch
Drive combinations: 51,500+
Speed Ratios: 391
- Operating Temperature Range:
-65°F to +185°F (-54°C to +85°C)

Custom sprockets available

For made-to-order (MTO) or special sprocket requirements, TB Wood's can design and manufacture custom sprockets in our on-site foundry. Typically, Request for Quote (RFQs) are processed within 48 hours.

Call 888-829-6637 (press 7).

