



# TPU BELTS

THERMOPLASTIC POLYURETHANE

A photograph of a blue TPU conveyor belt in a food processing plant. The belt is moving several yellow, cylindrical food items, possibly sausages or small loaves of bread, from left to right. The belt is flanked by metal guides with white plastic rollers. The background shows industrial machinery.

# FOOD BELTING



# FOOD CONVEYOR BELTING REPLACES PLASTIC MODULAR BELTING

## FDA APPROVED

Meets material requirements for wet food contact

## USDA ACCEPTED

For meat, poultry and dairy processing equipment

## EU COMPLIANT

Meets material requirements for wet food contact

## MODERN GATES TECHNOLOGY SOLVES FOOD PROCESSING CHALLENGES

With decades of experience developing synchronous timing belt systems, Gates TPU Food Belting is the next generation for food processing belts.

- Embedded tension cords virtually eliminate stretch
- Robust pin splice speeds belt fastening and removal
- Special extrusion process improves cleanability and limits contamination areas
- Split-tooth weld delivers greater strength

Gates TPU Food Belting is high-performance, high-quality, easy-to-clean, and allows customisation options to meet your specific food processing needs.

## IMPROVED BELT CLEANING

The Centers for Disease Control and Prevention (CDC) estimates that one in six Americans (or 48 million people) will get sick, 128,000 will be hospitalized and 3,000 will die annually from foodborne illnesses. Primary contributors to this common yet preventable problem include pathogenic bacteria introduced during food processing. Uniquely hygienic Gates TPU Food Belting reduces food contamination risk and water consumption to protect both you and your customers.

## ADVANTAGES OVER MONOLITHIC URETHANE BELTS

- Embedded aramid tension members stabilise belt properties
- Minimizes stretch, no excess length trimming needed
- Clean-in-place (CIP) appropriate
- Smaller minimum pulley diameter
- No snubber at drive pulley required

## ADVANTAGES OVER PLASTIC MODULAR BELTING

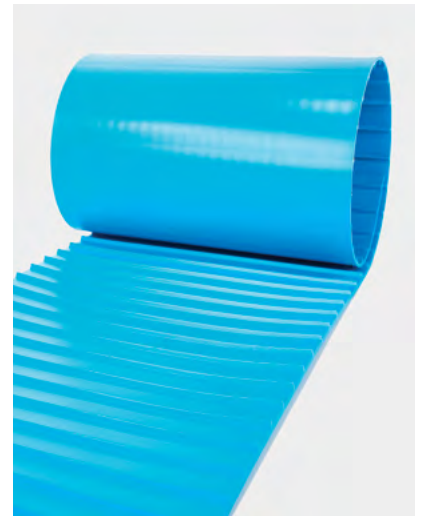
- 43% less surface area to clean, no crevices to harbor contaminants
- 35% less cleaning water and 54% less cleaning labor
- No risk of food contamination from broken pins or hinges
- 30% less weight translates into longer motor and bearing life

# SPECIALTY APPLICATION FOOD BELTING

## POSICLEAN™

An easy-to-clean, positive drive replacement for plastic modular belting. Full-width drive tooth distributes torque evenly over entire belt width.

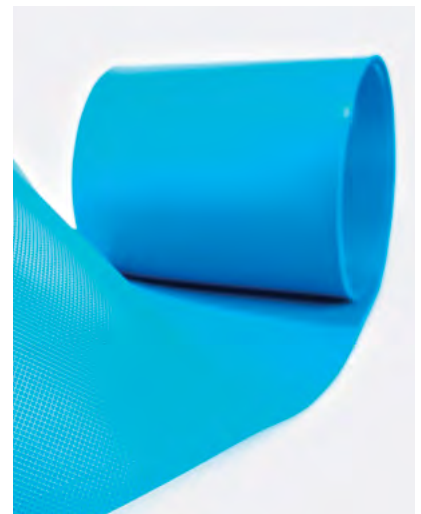
- Direct replacement for most 25.4mm and 50.8mm plastic modular belt
  - Can drop in to most PMB pulleys
- PC20 is a general purpose 50.8mm pitch belt
  - Available in two-cord-per-inch for light to medium applications and four-cord-per-inch for high-torque applications
  - Direct drop-in replacement for most 50.8 plastic modular belt (180° wrap around for most 8, 10, and 12 tooth modular pulleys)
  - 101.6mm minimum pulley diameter
  - Can be used with the PosiLace™ pin fastening system
- PC10 is a 25.4 pitch belt for use with smaller pulley diameters for improved transfer between conveyors
  - 50.8mm minimum pulley diameter, typically used for better handoffs
  - Direct drop-in replacement for most 25.4mm plastic modular belting

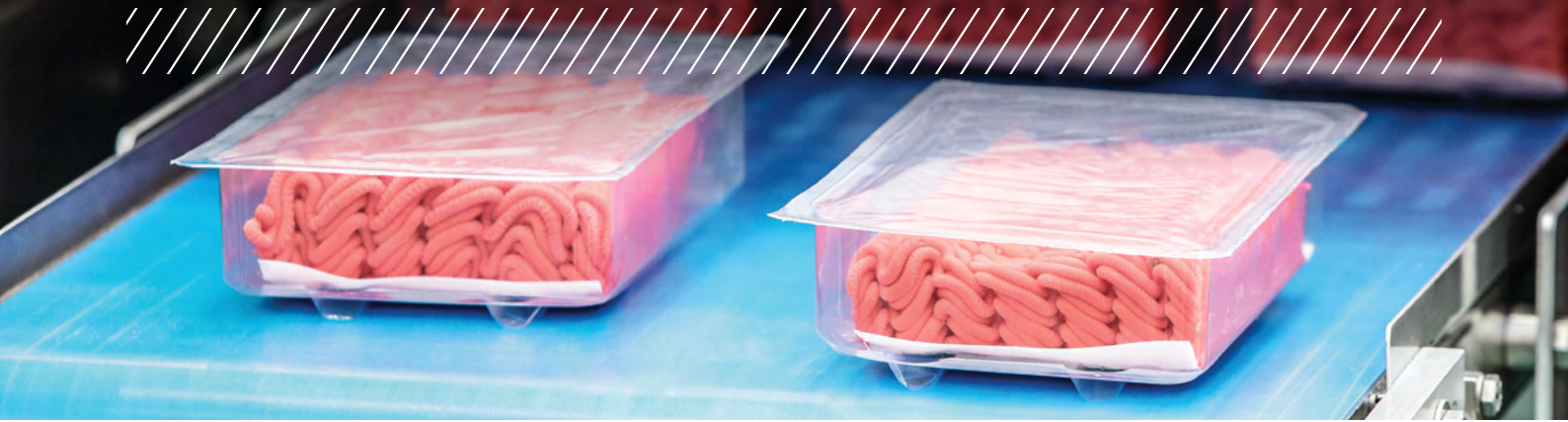


## FLATCLEAN™

An all-purpose polyurethane flat belt reinforced with aramid tension members. The combination of a non-fraying urethane jacket and sealed tension members eliminates edge fray, minimizes stretch, and extends belt life.

- FC12 belt is for standard to high loads, particularly well-suited for cleated belts
- The FC9 series for a 25.4mm minimum pulley diameter
  - Two color appearance assures correct textured surface positioning for small pulley applications
- Oil resistant
- Fabricators can easily slit roll stock without striking tensile member





## CENTERCLEAN™

A self-tracking belt designed with sealed aramid tension members to limit belt stretch and smooth surfaces to facilitate cleaning at a microbiological level.

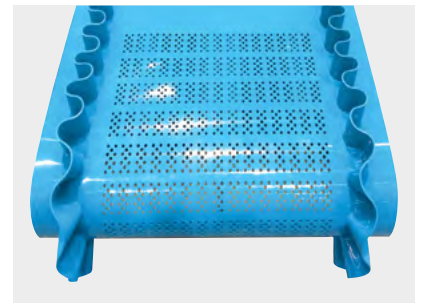
- A direct drop-in to monolithic center drive belt constructions
- 76.2mm wide tooth in belt center, 40mm pitch
- Self-centering design
- Appropriate for troughing applications
- Sealed edges and tension members prevent ingress of microbes
- Can be welded endless or spliced with PosiLace pin system or other mechanical fastener
- Longer belt life due to minimal belt stretch



## DEWATERING BELT

Designed for produce processing applications such as fruits and vegetables.

- Embedded aramid cord prevents belt stretch
- Longer life than mesh belting
- 63.5mm solid-edge border for enhanced belt integrity
- Option to have holes punched to belt edge for maximum drainage



## METAL DETECTABLE

Enhance your food belt safety program.

- All of the features, benefits and geometry of our standard food belts
- USDA certified and EU 10/2011 compliant
- 3.175mm cubic sample has mild steel equivalent of a 1.8mm FE ball
- Endless belt options via weld or mechanical lacing
- Sealed edges and tension members provide high strength with low stretch
- Tough polyurethane construction

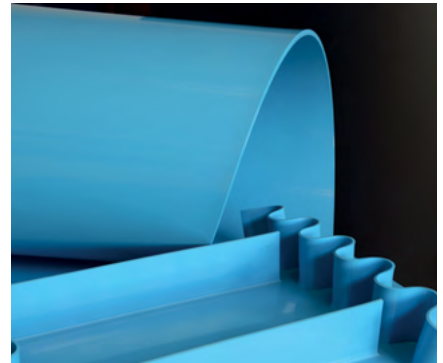
**PosiClean, FlatClean and CenterClean food-grade belts are now available with a metal detectable additive in 5mm and 7mm profiles—including sidewalls and cleats.**

# FABRICATION, JOINING AND SPROCKETS

## FABRICATION

We provide a wide range of secondary fabrication possibilities to meet your application needs. Whether grinding edges and surfaces to tight tolerances, punching and machining holes and slots, or CNC machining of three dimensional contours, we can provide a complete solution.

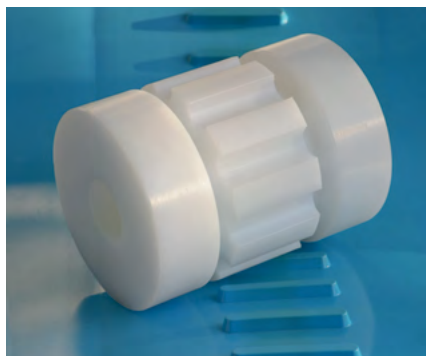
- Corrugated sidewalls can be added to any food belt to contain product during processing
- Straight cleats, scoop cleats and gusseted cleats available
- Precision grinding for tighter tolerances
- Holes, slots and any CNC-machined shape in the belt surface
- V-guides in various sizes can be applied to either side of the belt



Corrugated Sidewalls, Scoop Cleats, V-Guides

## SPROCKETS

Perfect fit, easy installation, and simple removal –that's the quality you'll find with Gates TPU sprockets. Gates TPU offers a wide variety of sprockets to fit your food processing application. Sprockets are available in metric and imperial shafts for all of our food belt products. If your application demands non-standard sprockets, Gates TPU offers customisable system components with our specialised engineering services.



Gates TPU Sprockets



## JOINING

Gates TPU belts can be spliced in a host of different ways, allowing you to choose the option that fits your needs best. Belts can be quickly spliced with our industry-leading PosiLace or other mechanical fasteners.

### POSILACE FEATURES

- Low profile for use with scrapers
- Unique, self-locking pin
- Pin can be removed without damage to belt or pin
- Designed to reduce contamination risk through hinge loop breakage
- In an overload situation, unlike plastic modular belting, the locking pin will fail first before the hinge loops break



PosiLace



Mechanical Fasteners

## THERMAL WELDING

Thermally welding two prepared ends together allows for a seamless finish that minimizes the potential for bacteria growth. Several welding techniques are available including finger splicing, split tooth and butt weld.

- **FINGER PUNCH**  
Greatest tensile strength, up to 50% greater than butt welding
- **SPLIT TOOTH**  
Easy field preparation, and greater tensile strength than a butt weld between the teeth
- **BETWEEN-THE-TEETH**  
Short weld cycle, and no shrinkage compared to finger punch and split tooth welds



Finger Punch



Split Tooth



Between-the-Teeth



DRIVEN BY POSSIBILITY™

CORPORATE OVERVIEW:

# GATES IS THERE

## AT PLAY

POWERING INDOOR AND OUTDOOR PLAY, FROM THE MOST EXTREME TO THE MORE FAMILIAR.

## IN MOTION

PROVIDING AN EXTENSIVE RANGE OF HIGH-PERFORMANCE TRANSMISSION SOLUTIONS FOR ORIGINAL EQUIPMENT AND REPLACEMENT APPLICATIONS.

## AT HOME

MAKING EVERYDAY HOME LIFE EASIER AND MORE EFFICIENT THROUGH A BROAD RANGE OF PRODUCTS AND SOLUTIONS.

## IN THE FACTORY

DELIVERING SPECIALISED INDUSTRY SOLUTIONS THAT ENABLE SUPERIOR MANUFACTURING AND AUTOMATION WHEN AND WHERE QUALITY MATTERS MOST.

## IN THE FIELD

DEVELOPING ADVANCED TECHNOLOGY THAT POWERS EVERYTHING FROM CONSTRUCTION EQUIPMENT TO WINDMILLS.

**13,500+ EMPLOYEES**  
**100+ LOCATIONS**  
**128 COUNTRIES**

### NORTH AMERICA

GLOBAL HEADQUARTERS  
DENVER, COLORADO

- 15 Manufacturing Facilities
- 12 Sales Offices
- 14 Warehouses
- 2 Major R&D Centers
- 2 Oil & Gas Service Centers

### GREATER CHINA (GC)

GC HEADQUARTERS  
SHANGHAI, CHINA

- 6 Manufacturing Facilities
- 5 Sales Offices
- 7 Warehouses
- 1 Major R&D Center
- 1 Oil & Gas Service Center

### SOUTH AMERICA

- 2 Manufacturing Facilities
- 2 Sales Offices
- 2 Warehouses

### EUROPE, MIDDLE EAST & AFRICA (EMEA)

EMEA HEADQUARTERS  
LUXEMBOURG CITY, LUXEMBOURG

- 13 Manufacturing Facilities
- 17 Sales Offices
- 9 Warehouses
- 2 Major R&D Centers
- 8 Oil & Gas Service Centers

### EAST ASIA & INDIA (EA&I)

EA&I HEADQUARTERS SINGAPORE

- 7 Manufacturing Facilities
- 17 Sales Offices
- 3 Warehouses
- 2 Major R&D Centers
- 2 Oil & Gas Service Centers

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#### NORTH AMERICA

Gates TPU  
9 Northwestern Drive  
Salem, NH 03079  
Tel. +1 (800) 394-4844  
Email: contact@gates.com

#### EMEA

Gates TPU GmbH  
Werner von Siemens Strasse 2  
64319 Pfungstadt, Germany  
Tel. +49 (0) 6157-9727-0  
Email: sales-pfungstadt@gates.com

**GATES.COM**  
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