FOOD CONVEYOR BELTING REPLACES PLASTIC MODULAR BELTING

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 customization options to meet your specific food processing needs.

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
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 stabilize 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
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 1” and 2” plastic modular belt
  - Can drop in to most PMB pulleys
- PC20 is a general purpose 2” 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 2” plastic modular belt (180˚ wrap around for most 8, 10, and 12 tooth modular pulleys)
  - 4” minimum pulley diameter
  - Can be used with the PosiLace™ pin fastening system
- PC10 is a 1” pitch belt for use with smaller pulley diameters for improved transfer between conveyors
  - 2” minimum pulley diameter, typically used for better handoffs
  - Direct drop-in replacement for most 1” 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 1” 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
- 3” wide tooth in belt center, 1.575” 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
- 2.5” 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
- 0.125” 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
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 customizable system components with our specialized 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

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
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 SPECIALIZED 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