Cleated Belts

Over 100 Custom Patterns Available!

Chevron Designs

Fully molded chevrons of various cross sections enable the conveying of wet and/or loose materials up steep inclines. Chevrons can be made closed in the center or open for drainage. Chevrons also increase the amount of material moved by quick pick-up at the loading point.

Construction

All chevron cleat patterns utilize a patented, permanent heat-cured bonding process. Along with the high-grade rubber compounds used to create the cleats, this produces a truly rugged and long-wearing belt.

Applications

Popular applications include: sand and gravel, wood chip handling, minerals – such as coal and iron, heavy-duty scrap metal, road construction, waste management, and barge and railroad car unloading.

Basic cleat shapes that can be altered or modified to fit your specific conveying requirements.
Cleated Belts - Custom Patterns

TEN MOST POPULAR CUSTOM CLEAT PATTERNS

\[\frac{1}{2}" \times \frac{1}{2}" \text{ Square Cleats for } 14" \text{ or Wider Belts} \]
Template #58

\[\frac{1}{2}" \times \frac{1}{2}" \text{ Square Cleats for } 18" \text{ or Wider Belts} \]
Template #28

\[\frac{1}{2}" \times \frac{1}{2}" \text{ Square Cleats for } 20" \text{ or Wider Belts} \]
Template #55

\[\frac{3}{8}" \times \frac{3}{8}" \text{ Square Cleats for } 22" \text{ or Wider Belts} \]
Template #13

\[\frac{1}{2}" \times \frac{1}{2}" \text{ Square Cleats for } 24" \text{ or Wider Belts} \]
Template #23

\[\frac{3}{4}" \text{ High} \times \frac{1}{2}" \text{ Wide Cleats for } 24" \text{ or Wider Belts} \]
Template #31

\[1" \text{ High} \times 2" \text{ Wide Rect. Cleats for } 24" \text{ or Wider Belts} \]
Template #105

\[\frac{1}{2}" \times \frac{1}{2}" \text{ Square Chevron for } 30" \text{ or Wider Belts} \]
Template #16

\[\frac{1}{2}" \times \frac{1}{2}" \text{ Square Cleats for } 38" \text{ or Wider Belts} \]
Template #35

\[\frac{1}{4}" \times \frac{1}{2}" \text{ Rect. Cleats for } 44" \text{ or Wider Belts} \]
Template #60

All Cleated Belts Can Be Furnished As Follows:

A  Indented from edge
B  Notched for troughing idlers or curved pans
C  Cut-outs or voids
D  Cut down to intermediate heights

Urethane cleats are also available. See page 9.
Food Grade FABSYN In-Stock Cleated Belts

Fabsyn FDA approved food belts are conveniently stocked in five standard specifications. Two working tensions are available: (1) FABSYN 100, integrally molded 1-1/2" or 2-1/2" molded cleats, 3/8" thick, on 6" or 12" centers; and (2) FABSYN 150, with either 1-1/2" or 2-1/2" molded cleats, 3/8" thick, on 6" or 12" centers. The 150 also is offered with a 3" cleat, 1/2" thick, on 12" centers. Cover, cleats, and belt are molded in one operation, 48" wide, and cut to desired widths. In-stock Fabsyn cleated belts are manufactured with synthetic fabric and oil-resistant covers. Temperature range is from 0° to 220° F.

Food Grade FABSYN In-Stock Profile Belts

FABSYN profile belts are molded and cured in one operation. Four in-stock patterns are available for immediate shipment. These include: (1) the CORRUGATED pattern, rounded ribs 1/16" high, on 1/4" spacing, center to center; (2) the ASENDOR pattern, ribs 1/8" high on 1" spacing, designed for incline conveying of small and medium sized food products; (3) the TOP FLIGHT pattern, lateral cleats 3/16" high on 6" centers, and longitudinal cleats 3/16" high on 4" centers; raised buttons at the corners of the pattern allow for drainage of wet product; and (4) the CROSSTOP pattern, cleats 3/8" x 3/8" taper down to 1/4"; an open 8" x 8" pattern allows water drainage and ease of cleaning. All four patterns have a working strength PIW of 100 lbs.

Food Grade FABSYN Custom Belts

Cleat thicknesses of 3/8"(SD), 1/2"(MD), 5/8"(HD), or more, are available on Fabsyn 100 or 150 belts in any height from 1/4" to 3" (straight or scoop). Cleat centerlines available are 4", 4-3/4", 6", 8", 9", 12", 16", 18", 24", and larger. Custom scoop cleats are fabricated with a typical forward pitch of 30°, with heights of 2" to 2-7/8". V-Guides in A, B, C, or D sections are available. Straight or sloped vanner edges are applied in heights of 1/2" to 1-1/2". Belts can be made with prepared ends for field splicing or manufactured endless. Custom cleats are applied to 2-Ply Fabsyn 100 3/64" x FS, or 3-Ply Fabsyn 150 3/64" x FS. If other fabrics, compounds, or splicing methods are required, call Maine Industrial at 800-540-1846.

Heavy Duty FABLON In-Stock Cleated and Custom Belts

Seven heavy duty Fablon cleated belts are stocked in two series: (1) the FABLON 150 series; two covers are stocked, 1/32" x 1/32" and 1/16" x FS, with 3 different cleat heights & thicknesses, including 1" x 3/8", 2" x 1/2", and 3" x 1/2"; and (2) the FABLON 220 series; two covers are stocked, 1/8" x 1/16" and 1/8" x FS, with 2 different cleat heights & thicknesses, including 3" x 5/8" and 2" x 1/2". In-stock Fablon heavy duty belts have cleats on 12" centers, are 48" wide, and are cut to desired width. The optimum temperature range for Fablon cleated belts is -20° to 180° F.

Heavy Duty FABLON Custom Belts

Cleat thicknesses of 3/8"(SD), 1/2"(MD), 5/8"(HD), or more, are available on Fablon 150 or 220 belts in any height from 1/4" to 3" (straight or scoop). Integrimally molded scoop cleats are fabricated to customer's specifications. Typical forward scoop pitch is 30° with heights of 2" to 2-7/8". V-Guides in A, B, C, or D sections are available. Straight or sloped vanner edges are applied in heights of 1/2" to 1-1/2". Belts can be made with prepared ends for field splicing or manufactured endless. Custom cleats are applied to Fablon 150 1/16" x FS, 150 1/32" x 1/32", 220 1/8" x 1/16", 220 3/16" x 1/16", and 220 1/8" x FS. If other fabrics, compounds, or splicing methods are required for special orders, call the Maine Industrial at 800-540-1846.

FOR ASSISTANCE WITH FABFLEX BELTS CALL 800-540-1846
FABLON HEAVY DUTY INTEGRALLY MOLDED CLEAT PATTERNS

FABLON heavy duty belts are designed to handle the aggressive transfer and elevation of materials such as sand, stone, gravel, recycled asphalt product (RAP) and other construction materials. Fablon's unique cleat patterns are designed to lock free flowing materials to the belt surface, preventing "slip-back." The cleats are nested in an overlapping pattern to maintain a smooth running surface on the return idlers.

Fablon heavy duty belts are different from other heavy duty cleated belts for these reasons:

- Cleats are integrally molded and become part of the belt cover. This feature eliminates cleat separation and allows the belt to navigate smaller pulleys.
- Advanced splicing techniques assure maximum strength and flexibility. High strength rubber compounds are used for superior impact resistance to both the belt and the cleats.
- Fablon offers 1/2", 3/4" and 1" tall heavy duty molded cleat profiles on various center lines.
- Most popular Fablon heavy duty sizes are in stock, ready for immediate delivery.
- Different base belt constructions are available, including 2 ply 220, 3 ply 240, 3 ply 330, and 2 ply 400, along with various cover gauges and compounds.

BULLHORN has a 1/2" x 1/2" low profile cleat molded on a 6" center line that offers smooth delivery of planed asphalt, gravel, wood chips, and is frequently used on stone slingers. Available in belt widths from 12" to 60" and cleat widths from 12" to 48".

BIGHORN offers a 3/4" high x 3/4" thick rounded cleat on 9" centers. Used frequently for planed asphalt, sand, rock, and heavy materials, Bighorn is easily troughed. Available in belt widths from 12" to 60" and cleat widths from 12" to 48".

FABCLIMB is made with abrasion resistant 1-1/4" high tapered cleats with a "Y" cleat center pattern that increases production capacity. Two cleat widths are available: 31" on 13" centers, and 23" on 12" centers. Applications include cold palners, wood chips, coal & salt, grain, and construction materials.

LONGHORN is made with a 1" high tapered "gum drop" cleat using a staggered chevron pattern on 12" centers. The offset overlap pattern is designed for easy handling of heavy, wet materials such as sand. Available in belt and cleat widths up to 48".

Heavy Duty FABLON In-Stock Profile Belts

FABLON heavy duty profile belts are manufactured from heavy duty synthetic fabric with high-grade MOR covers and cleats. Two heavy duty patterns are in stock and available for immediate delivery. These are: (1) the TOP FLIGHT pattern; lateral cleats 3/16" high on 6" centers; longitudinal cleats 3/16" high on 4" centers; raised buttons at the corners of the pattern allow for drainage of wet product; patented design runs on all types of conveyors without special idlers; and (2) the CROSSTOP pattern; cleats 3/8" x 3/8" taper to 1/4"; open 8" x 8" pattern allows water drainage and ease of cleaning. Both belts operate like a flat belt, with constant support from the conveyor return idlers. These belts have a working strength PIW of 150 lbs.

Heavy Duty FABTOUGH Street Sweeper Belts

FABTOUGH street sweeper belts are designed for longer performance and extended service life, versus the standard replacement belts currently on the market. FabTough incorporates two layers of heavy duty blended fabric that is less prone to stretch and punctures, with a thicker top cover that increases belt life. A custom blended cleat compound is integrally molded to the top surface providing excellent durability in all operating conditions. Two styles of the FabTough sweeper belt are available: (1) the E-212, 160 lbs. PIW, 1/16" x 1/32" SBR, 18'-3" length, with 2" x 3/8" cleats on 18" centers; and (2) the P-164, 160 lbs. PIW, 1/16" x 1/32" SBR, 13'-8" length, with 2" x 3/8" cleats on 18" centers. Both styles are 48" wide and 1/4" thick, with a temperature range of -20° to 180° F.

FOR ASSISTANCE WITH FABFLEX BELTS CALL 800-540-1846
**CLEAT TYPES – AT A GLANCE**

Cleats are available in white FDA or black oil-resisting nitrile, black SBR rubber, as well as black and white butyl. Two part cleats (page 9) consist of a rubber “foot” hot molded to the base belt and a bolted-in urethane blade that is used for heavy-duty applications. For more information about custom cleats, call 800-540-1846.

**RUBBER, NITRILE, BUTYL, AND PVC CLEATS**

**STANDARD I CLEATS**
- For conveying up steep inclines
- Available in white FDA or black oil-resisting nitrile, black SBR rubber, black and white butyl
- Cleats are hot molded into the belt surface (not cold bonded or cemented on)
- Smooth merging of cleat and belt cover for easy cleaning
Cleats can be molded to the belt surface on any center, to fit a wide variety of applications. Cleats come in heights from 1/2” to 5” (Beefy Cleats to 6”). [For taller cleats, a two-part construction is used -- see page 3.]

**MINI CLEATS**
Mini-cleats are low-profile cleats ideal for moving products up inclines in light-duty applications. Unique shape allows for standard idler support on returns. Dimensions are 3/16” high, 3/16” wide at base and 1/8” radius.

**STEEL-REINFORCED CLEATS**
Super-strong cleat for the most rugged applications. Each cleat features a steel reinforcement oriented to best counter the forces encountered in a particular application.

**CURVED PVC CLEATS**
Ideal cleat for many incline applications requiring food-grade belting. Cleats up to 3” tall are available in 45° and 30° configurations. Cleats can be applied to belts 6” to 48” wide and on centers as close as 4-1/2” at 30° and 9” at 45°.

**PVC SCOOP CLEATS**
White PVC cleats in an angled scoop form to improve capacity up steep inclines. Acceptable for food-handling applications. Available in 2”, 2-1/2”, and 3” heights, the cleats are hot welded into the belt surface for a smooth, seamless finish.

**BEEFY CLEATS**
Beefy Cleats feature an extra-heavy cross section designed for heavy-duty, rugged applications. Thickness is double that of a standard I cleat. Available in heights from 1” to 6”, with backup braces available with 2” and 3” heights.

**HIGH INCLINE CLEATS**
Aggressive scoop cleats for high-capacity conveying on steep inclines. C cleats are available in heights from 1” to 5”, and S cleats come in heights of 4-1/2” and 5-1/2”. Rugged cleats are hot vulcanized into the belt cover for long service.

**LUG CLEATS**
Lug construction features rugged V-belt shapes for impact resistance. Available in A (1/2” W x 5/16” H), B (5/8” W x 7/16” H), and C (7/8” W x 5/8” H) cross sections.

**PVC VINYL CLEATS**
PVC cleats are welded to PVC belting to produce a rugged, economical combination ideal for wet, oily or acidic conditions. Available in black or white FDA compounds and can be spaced on any centers, indented, notched, cut down to intermediate heights and contain cut-outs.

**PVC EXTRUDED CLEATS**
Extruded PVC cleats conveniently packaged for distributors and OEMs to manufacture their own PVC cleated belt. PVC cleats are furnished in convenient 100-foot rolls.

<table>
<thead>
<tr>
<th>(H)</th>
<th>(T)</th>
<th>(W)</th>
<th>Min. Diameter</th>
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<tbody>
<tr>
<td>1”</td>
<td>1/4”</td>
<td>1-1/2”</td>
<td>4”</td>
</tr>
<tr>
<td>1-1/2”</td>
<td>1/4”</td>
<td>1-5/8”</td>
<td>5”</td>
</tr>
<tr>
<td>2”</td>
<td>3/8”</td>
<td>1-3/4”</td>
<td>6”</td>
</tr>
<tr>
<td>3”</td>
<td>3/8”</td>
<td>1-3/4”</td>
<td>10”</td>
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</table>
**SPLICING**

**Endless - Vulcanized**
A hot-vulcanized splice is stronger and more sanitary than a mechanical (laced) joint. Endless splicing eliminates fastener pull out and tearing of the belt. Ideal for food processing industries and where metal lacing could possibly mar the product.

**Endless - Prepared**
Belts are supplied with laps already prepared to desired length but not vulcanized, enabling customer to splice endless on the system. Hot or cold cements with instructions are available.

**Finger Splice**
A proven heavy-duty splice for thermoplastic belting utilizing polyurethane as the bonding agent. Lap area is the same thickness as the belt and uniformly smooth. H.D. urethane finger splice available for PVC and urethane belts over 200 PIW.

**Multiple Finger Splice**
Similar to the single Finger Splice. Staggered die cut fingers are vulcanized together to create a strong, extremely flexible splice.

**MECHANICAL FASTENERS**

**Lacing - Standard**
Types: Alligator, Clipper, Flexco, Minet and others. Mechanical fastener joints with hinge pins provide an easy, quick and secure method of joining belt ends. Avoid lacing problems by utilizing our factory lacing experts.

**Thermoplastic Soft Splice**
This custom splice incorporates vulcanized hidden lacing that derives extra strength from square-cut interlacking fingers. Two flexible connecting pins secure the joint and produce a very consistent thickness at the seam. Soft Splices are applied to thermoplastic PVC and PU material.

**Spiral Lace**
Ideal non-metallic mechanical splice for small-pulley, low-profile applications. Unique hinge design allows use on pulleys and nose bars as small as 5/8” diameter and as thick as 3/16”. Resists corrosion and heat. Lace is installed in factory by insertion between belt plies.

**Covered (Hidden) Lace**
Lacing is hidden by the cover of the belt to allow the ease of installation provided by a mechanical splice with the smooth operation of an endless belt. Product is protected from marring from the mechanical splice area. Splice can be covered with rubber or abrasion-resistant urethane. If the belt is to be cleaned by a scraper, a hidden top splice is effective. When lacing is completely hidden by top and bottom covers, both the product and the conveyor are protected.

**Overlap Lace**
Top cover of belt is skived back and mechanical fastener installed. The overlap is spliced back over the splice area, providing a smooth conveying surface. Product being conveyed is protected from marring by the fastener. Flap must be glued down at installation.

**Recessed Lace**
Mechanical splice area of belt is recessed below the level of the belt cover. The recessed lace keeps the product being conveyed from coming in contact with the lacing.

**Plastic Rivet Fasteners**
Come in white and black, non-metallic compounds for a variety of conveying situations. Fasteners feature beveled edges and counter-sunk pockets in bottom of fastener to protect rivets. Fasteners are either installed by the factory or in the field with special tools.

**LONGITUDINAL SPLICING**

**Longitudinal Splicing**
For extra-wide belt requirements, belts can be made endless, V-Guided, and/or flanged. Any width is attainable by using multiple splices. Longitudinal splices can be made in a variety of compounds, including woven PVC, thermoplastic, roughtops, urethane covered, and black rubber in all thicknesses.
**Fabrications - Flanges, V-Guides, and Edge Finishes**

### Flanges

- **Flanges - Molded**
  Prevents product spilling off edge of belt. Free-flowing materials are contained without troughing. Flange belts can be made endless or conventionally laced. Care must be taken to operate flanged belts on the proper diameter pulleys. Consult factory for recommendations.

- **Flanges - Notched**
  Notching of the flanges enables a flanged belt to operate on smaller diameter pulleys. Also allows the belt to “back flex” in weighing applications.

- **Flanges - Heights Available**
  1/2", 3/4", 1", 1-1/2", 2"

- **Flanges - Styles Available**
  Gumdrop, Tapered One Side, Tapered Both Sides
  (all styles not available in all heights) Note: Standard flanges are 60 durometer. 40 durometer is available for special applications where smaller than average pulleys are being used.

- **Flanges - Compounds Available**
  Black SBR
  Black Nitrile
  White Nitrile
  White PVC
  Black PVC
  White Butyl High Heat
  Black Butyl High Heat

### V-Guides and V-Belt Backing

- **V-Guides**
  Used wherever conditions create a belt alignment problem. Can be molded to any belt and be made endless if desired. Bonded to cover side for flanges; bonded to underside for guide. Available in A (1/2" W x 5/16" H), B (5/8" W x 7/16" H), and C (7/8" W x 5/8" H) cross sections. Other sizes available.

- **V-Guides - Notched**
  Available in A-B-C-D sections, and more. Notching enables a V-guided belt to operate on smaller pulley diameters. The V-guide reduces tracking problems.

- **V-Belt Backing**
  Covers of pure gum, neoprene sheet rubber, urethane, roughtop belt, white non-marking belt, etc. can be bonded to the back of V-belts.

- **V-Belt Backing**
  Recommended where V-belts are used as conveyor or in tandem to pull product or cable in sandwich fashion.

### Edge Finishes

- **Folded Edges**
  Premium construction for superior edge wear and carcass protection. Chemicals and bacteria may not attack the interior plies. Folded edges provide a continuous surface from the top of the belt around the edges.

- **Molded Edges**
  Rubber edging vulcanized to cut-edge belting. Protects the belt fabric from bacteria and damaging chemicals. Ideal for food-handling applications. Also used for additional protection from edge wear.
**Fabrications - Hole Punching, Notching, Grooving, Grinding**

<table>
<thead>
<tr>
<th>Hole Punching</th>
<th>Perforating</th>
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<tbody>
<tr>
<td>Automatic punching assures clean-cut, tight-fitting bolt holes with accurate spacing for the buckets on elevator belting with fast deliveries.</td>
<td>For vacuum, suction or drainage applications, MIPR delivers perforated belts with a wide variety of hole sizes. Perforations are clean with no fuzz or tearing. We have over 500 dies for hole punching patterns.</td>
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<thead>
<tr>
<th>Perforated V-Guided Belt</th>
<th>Perforated Cleated Belt</th>
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<tbody>
<tr>
<td>V-guides can be placed on a perforated belt to aid in tracking. The entire belt can be perforated, leaving a small strip onto which the V-guide is fastened. Used in vacuum and in drainage applications.</td>
<td>Perforated belt can be combined with cleats to create a vacuum belt or a belt that can drain a product while conveying on an incline. Perforations can be of any size and cleats on any centers. Slots available.</td>
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<table>
<thead>
<tr>
<th>Notching - Cleats</th>
<th>Notching - V-Guides</th>
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<tbody>
<tr>
<td>Cleats can be furnished with notches for troughing idlers or curved pans.</td>
<td>Notching enables a V-guided belt to operate on smaller pulley diameters. The V-guide virtually eliminates any tracking problems.</td>
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<tr>
<th>Notching - Chevron Cleats</th>
<th>Notching/Siping - Flanges</th>
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</thead>
<tbody>
<tr>
<td>Notching chevron patterns allows the use of the belt on smaller diameter pulleys. Belts with notched chevrons are often known as “roofers’ belts.”</td>
<td>Notching of a flanged belt enables a flanged belt to operate on smaller diameter pulleys.</td>
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<tr>
<th>Grooving -- Lateral</th>
<th>Grooving -- Longitudinal</th>
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<tbody>
<tr>
<td>Grooving across the width of the belt can be used to convey liquid or other free-flowing material.</td>
<td>Grooving can create an economical self-flanging belt for carrying free-flowing material without spillage.</td>
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<tr>
<th>Precision Grinding</th>
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<tr>
<td>For applications requiring extreme thickness uniformity across the width of the belt as well as the length, we offer precision grinding. Accurate to ±.005”, precision grinding is available on rubber as well as urethane belts. Often performed on belts used on die stamping applications, precision grinding minimizes any imperfections that might be in the belt cover.</td>
</tr>
</tbody>
</table>

**Precision Ground Silicone Top Cover Belts** are used for hot wire sealing applications, balloon manufacturing, and plastic bag manufacturing. Covers are available in a variety of colors and thicknesses. Basic specifications include:
- Colors: Cover Red, White, or Aqua - other colors available; base belt: Black
- Plies: 3 (other base belts available)
- Weight: .140 Lbs./Ft.²
- Available Widths: 68” Maximum
- Cover Surface: 1/8” Precision Ground ± .005”
- Overall Gauge: .25”
**URETHANE CLEATS**

**Urethane Standard Cleat**
Available in heights from 1/2" to 6", this is a super-strong, abrasion-resistant cleat. Angled backup support enables the cleat to carry a heavier load.

**Urethane Square/Rectangular Cleat**
Strong, abrasion-resistant urethane cleat. Available in any cross section.

**Urethane Bolt-On Cleat**
Similar to Tatch-A-Cleat, only made of urethane, this strong cleat is quickly attached and just as quickly removed for replacement. Ideal for highly abrasive applications where the cleats face a high amount of wear.

**Urethane Two-Part Cleat**
For heavy-duty, high capacity applications. Unique two-part construction consists of a rubber “foot” hot molded to the base belt, and a bolted-in urethane cleat. Cleat can be replaced in high-wear applications. Heights from 5" to 15-1/4".

**Urethane Chevron Cleat**
A wide variety of custom patterns are available for durable incline conveying. Call for details.

**URETHANE SPECIALTIES**

**Urethane-Covered Belt**
Urethane covers can be applied to a wide variety of base belts for differing conveying situations. Various urethane thicknesses, hardnesses and colors are available.

**Ure-Clad**
Also known as the “Ugly Belt,” this belt features a tough interwoven carcass covered with and impregnated with abrasion-resistant urethane. Ure-Clad comes in two styles: a skim top cover and a 1/8” cover. For demanding applications requiring cut and abrasion resistance.

**Urethane-Covered Wire Mesh**
By combining the high wear and abrasion resistance of urethane with the strength of steel, MIPR has created an almost indestructable belt. Ideal for coil wrappers, stamping operations, die cutting, belt sanding units, and glass cullet.

**Urethane Sheets/Molded Parts**
Urethane sheets are available in fabric-back or metal-back and any standard size, thickness or color. Urethane’s moldable capabilities make it ideal for custom-molded part. Various durometers and colors are available for your particular application.

**Urethane V-Belt and Timing Belt Backing**
Fabricated to the desired thickness and durometer.

**Urethane Flanges**
All standard heights are available. Slitting (siping) is recommended.