Get in the groove with Eagle Pd Acculinear™
When it comes to performance, Eagle Pd Acculinear™ belts and sprockets from Goodyear Engineered Products are right on track. The key to success lies in the system’s patented tooth geometry – Helical Offset Tooth (HOT). With this self-tracking configuration, the sprocket’s left and right helix guide the thermoplastic polyurethane belt to the center of the Eagle Pd sprocket. And there it remains: no waste, no wander, just improved efficiency and wear resistance in a compact design.

**Self-tracking design provides smooth operation**

In addition to its self-centering capabilities, the continuous rolling tooth engagement of the HOT design also results in reduced noise and drive vibration. The patented system provides maximum performance in a minimum of space. Sprocket width is dramatically reduced because flanges are unnecessary. Eagle Pd can accommodate any drive and belt length. A standard roll is 100 meters (328 feet) and this can be used for open-end belts. Clamping plates are available to mechanically join the ends of the belt, or open-end belts can be thermetically spliced to form endless belts.

With Eagle Pd Acculinear, you’ll find excellent dimensional stability and a high level of reliability. Steel cord reinforcement limits elongation of the belt, resulting in less maintenance. Plus, the belt is durable in high temperature environments – up to 230°F. Get in the groove with a self-tracking belt that can make a difference in your application – Eagle Pd Acculinear.
Self-tracking sprocket
The HOT geometry eliminates belt wander and the need for flanges. As a result, Eagle Pd™ sprockets can be used on slider bed applications where flanges would normally protrude above the bed surface.

High tooth shear capacity
The nylon facing on the Helical Offset Tooth increases the load carrying capacity of the belt, allowing the teeth to transmit more torque for greater durability.

Introducing a quiet revolution
Eagle Pd belts with HOT design minimize belt vibration on flat pulleys used on the entry and exit of slider beds. The belt moves progressively over straight edges, reducing noise and vibration. The tooth geometry eliminates the chordal effect that occurs around the tooth sprocket and reduces drive vibration.

Eagle Pd Acculinear™ turns up the performance... and turns down the volume. This innovative polyurethane belt and sprocket system uses proprietary Goodyear EP technology to deliver noise levels that are far below the industry standard.

The unique design of Eagle Pd belts and sprockets is the reason for the system’s superior noise reduction. The self-tracking belt is guided to the center of the sprocket – delivery that smooths out tooth engagement unlike any other tooth geometry.
Eagle Pd Acculinear™ standard belt constructions

Eagle Pd Acculinear™ combines the advantages of polyurethane with the unique Helical Offset Tooth geometry for a low-maintenance belt that resists wear. Polyurethane belts resist flaking, offer high resistance to oils, fats and greases and are more abrasion-resistant than rubber products. With high flexibility and long life, Eagle Pd Acculinear is a revolutionary choice for a wide range of applications.

Open-end belt

Eagle Pd Acculinear belts are manufactured in open-end rolls with a standard roll length of 100 meters (328 feet). The belt is manufactured with the tension members lying parallel to the belt edge so that the load is equally distributed across all tension members. A common application of open-end belts is in linear motion drives.

Clamps

Clamping plates are available for open-end Eagle Pd Acculinear belts to mechanically join the belt ends.

Spliced belt

Lengths of open-end Eagle Pd Acculinear can be thermetically finger-spliced to obtain any continuous length of endless belting. These spliced Eagle Pd Acculinear belts are primarily used in light conveyor applications, where long endless belts are required.
Durability from the inside out

**Tooth and backing material**
Thermoplastic polyurethane provides superior wear and abrasion resistance. It's an ideal choice in applications where cleanliness is critical. The precise manufacturing process, coupled with the polyurethane belt material, ensures a reliable and dimensionally stable product.

**Tension members**
Tension members of high tensile steel offer excellent dimensional stability for accurate positioning and less maintenance.

**Tooth facing**
The durable white nylon facing fabric, a standard feature on Eagle Pd Acculinear, offers a reduced coefficient of friction with the sprocket and also provides wear and abrasion protection.

Performance that’s in the details

<table>
<thead>
<tr>
<th>Chemical Features</th>
<th>Mechanical Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Good resistance to aging, hydrolysis, UVA rays, ozone</td>
<td>• Consistent dimensional stability</td>
</tr>
<tr>
<td>• Working temperature range: 22°F to 176°F (up to 230°F for short periods): -30°C to +80°C (up to 110°C for short periods)</td>
<td>• Low pre-tension</td>
</tr>
<tr>
<td>• High resistance to oils, fats and greases</td>
<td>• Low noise</td>
</tr>
<tr>
<td>• Good resistance to most acids and alkalis</td>
<td>• High abrasion resistance</td>
</tr>
<tr>
<td>• Compatible for fabrication with other thermoplastic materials</td>
<td>• Low maintenance</td>
</tr>
<tr>
<td></td>
<td>• High flexibility</td>
</tr>
<tr>
<td></td>
<td>• High precision linear positioning</td>
</tr>
</tbody>
</table>
Special constructions for special applications

In addition to the standard belt construction (polyurethane backing material), Eagle Pd Acculinear™ is available in a variety of special constructions. Several materials can be applied to the back of the Eagle Pd Acculinear belt to enhance its performance in specific drive environments.

**TECNOGUM**
Tecnogum is our unique alternative to Linatex™ and features a red thermoplastic rubber coating with a 50º, 60º and 70º Shore A hardness. The coextruded, virtually seamless surface provides a high coefficient of friction, good wear, water resistance and can be used for conveying abrasive materials.

**VITON**
Black synthetic rubber with a 75º Shore A hardness is vulcanized endlessly to the back of the belt. The coating offers good wear and oil resistance and can be used to convey abrasive material with a high coefficient of friction resistance and offers a very high temperature (250º C) rating.

**R 85**
A transparent polyurethane coating of 85º Shore A hardness with a standard thickness of 2mm or 3mm. With a high coefficient of friction and very good resistance to oils, this coating can be used for conveying abrasive materials.

**POROL**
A black, open cellular neoprene (rubber) coating with a 10º Shore A hardness. The coating offers medium resistance to oils and can be used to convey fragile materials with a high coefficient of friction.

**YELLOW PU**
A foamed polyurethane coating with a 55º Shore A hardness. The coating can be used for vacuum conveying systems and offers good abrasion and oil resistance.

**SUPERGRIP**
A green, PVC coating with a 4mm standard thickness. This coating offers good resilience, a high coefficient of friction and can be used in the packaging industry.

**LINATEX**
A red, natural rubber coating with a 38º Shore A hardness is joined and glued to the back. The coating offers a very high coefficient of friction, making it excellent for conveying and packaging applications.

**OTHERS**
Many different backings in both synthetic and natural rubber are available. Contact Goodyear Engineered Products for more information on our complete line of offerings.
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Pitch and Belt Width</th>
<th>Uses Eagle Pd Pulley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y-8-PU-16</td>
<td>8mm pitch x 16mm wide</td>
<td>Yellow</td>
</tr>
<tr>
<td>M-8-PU-25</td>
<td>8mm pitch x 25mm wide</td>
<td>Special</td>
</tr>
<tr>
<td>W-8-PU-32</td>
<td>8mm pitch x 32mm wide</td>
<td>White</td>
</tr>
<tr>
<td>L-8-PU-50</td>
<td>8mm pitch x 50mm wide</td>
<td>Special</td>
</tr>
<tr>
<td>B-14-PU-35</td>
<td>14mm pitch x 35mm wide</td>
<td>Blue</td>
</tr>
<tr>
<td>G-14-PU-52.5</td>
<td>14mm pitch x 52.5mm wide</td>
<td>Green</td>
</tr>
<tr>
<td>O-14-PU-70</td>
<td>14mm pitch x 70mm wide</td>
<td>Orange</td>
</tr>
<tr>
<td>R-14-PU-105</td>
<td>14mm pitch x 105mm wide</td>
<td>Red</td>
</tr>
</tbody>
</table>

Above available in 100 meter roll lots, cut lengths or spliced lengths.

Technical information on Eagle Pd Acculinear™

For comprehensive technical data on Eagle Pd Acculinear™, visit our web site at [www.goodyearep.com/ptp](http://www.goodyearep.com/ptp). There you’ll find specific information about technical composition, capabilities and usage.
This form is designed to obtain sufficient information from you so that a Goodyear Engineered Products engineer can design the belt and sprocket requirements for your drive.

The form is meant for the Eagle Pd Acculinear™ product (Goodyear EP's polyurethane open-ended and spliced belt line). Please fill out all pertinent sections of this 2-page form, and fax or mail the form to the address listed on this page. Remember to make any additional attachments such as prints, sketches, etc.

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web: www.goodyearep.com/ptp

Name: 
Title: 
Company: 
Address: 
Phone: 
Fax: 
Email: 

No. of Pages: 
Date: 
Comments: 

Any resultant belt and sprocket recommendation will be based solely on the information provided and is not guaranteed. Goodyear EP warrants its products to be free from defects in material and workmanship. No other warranty of any kind whatsoever, either oral or written, including any implied warranty of merchantability or fitness for a particular purpose, or other warranty, express or implied, applies to the product. See Goodyear EP’s Terms and Conditions of Sale.
1 (circle one):
   a Open-end Belt (linear motion device)
   b Spliced Belt (conveyor application)
   c Truly endless-AccuFlex™ (power transmission application)

2 Service Factor
   Load (circle one)  Service (circle one)
   a Low  a Normal Service
   b Average  b Continuous Service
   c High

3 Drive Center Distance
   maximum = _________ inches  minimum = _________ inches

4 RPM of driveR sprocket = _________  RPM of driveN sprocket = _________
   OR
   Belt Speed = _________ feet/second  OR
   Drive Ratio = _________
   Drive Ratio +/- range = _________ %

   OR
   OD of drive sprocket that results in
   above belt speed = _________ inches
   OR
   Drive Ratio = _________
   Drive Ratio +/- range = _________ %

5 How many sprockets does the drive have? _________
   How many idlers does the drive have? _________
   (If drive has more than 2 sprockets/idlers, please attach a schematic of the layout.)

   Number  Sprocket or Idler?  Max.OD ("*) optional  Min.OD ("*) optional  Shaft OD (*)  Mounting preference?
           (MPB, QD, FSB, BTS)
   1
   2
   3
   4
   (attach separate sheet for additional sprockets)

6 Drive Width (optional)
   maximum = _________ inches  minimum = _________ inches

7 Design Power = _________ HP
   OR
   Total Mass in Motion = _________ lbs.  Acceleration = _________ feet/sec^2
   (circle one):
   a Vertical Drive
   b Horizontal Drive
   If drive is Horizontal, specify friction coefficient (circle one):
   a Polyurethane with Steel  b Polyurethane with Nylon  c Polyurethane NFT with Steel  d Polyurethane NFT with Nylon  e Bearing
   OR
   Torque = _________ lbf-in

8 Schematic / drawings attached?
   Yes
   No