Introducing SilentSync
A Powerful Innovation in Synchronous Drive Systems
Benefits that Add Up

- Up to 19dB quieter than straight-tooth belts
- Over 1,500 possible sprocket combinations
- Up to 25% more power capacity*
- Rated for continuous service at 200°F (93.3°C)
- Up to 98% energy efficiency

*When compared to SilentSync. **Drive conditions and service variables in combination with time in operation can result in loss of static conductivity. It is recommended that a conductivity check be added to drive prevention maintenance programs where belt static conductivity is a requirement. For more information on static conductivity, visit us at www.contitech.us.
Engineered for Energy Efficiency

The construction of SilentSync® belts and sprockets makes them extremely adaptable to the needs of design engineers and cost-efficient for the end user

1. **Aramid Tensile Member**
   - Pound for pound, stronger and more flexible than steel to handle today’s drive designs
   - Resists fatigue, elongation and shock loads, even in high-torque conditions, so there’s no need to retension belts once properly installed

2. **Plioguard® Facing**
   - New proprietary treatment strengthens the tooth, increasing rigidity and load carrying capacity
   - Reduces tooth engagement friction, allowing for prolonged belt life and minimal wear
   - More tolerant of debris, high temperature, oil and chemical permeation, allowing the belts to operate in a wide variety of environments

3. **HiBreX® Rubber Compound**
   - Resists tooth deformity while increasing tooth rigidity to ensure precise synchronization over prolonged use
   - Resists the effects of oils, coolants, heat and ozone for maximum service life

4. **SilentSync Sprockets**
   - Continuous rolling tooth engagement allows belt to enter sprocket with minimal impact, wear and operating noise, thus creating longer-lasting, quieter drives
   - Does not require flanges; helical offset tooth design allows belt to self-track
   - Over 1,500 sprocket combinations available, making it easier to match the desired design speed
   - Available in ductile iron, steel, aluminum or stainless steel constructions to meet a variety of design criteria

A Full Spectrum of Sizes

<table>
<thead>
<tr>
<th>Color</th>
<th>Yellow</th>
<th>White</th>
<th>Purple</th>
<th>Blue</th>
<th>Green</th>
<th>Orange</th>
<th>Red</th>
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</thead>
<tbody>
<tr>
<td>Pitch</td>
<td>8mm</td>
<td>8mm</td>
<td>8mm</td>
<td>14mm</td>
<td>14mm</td>
<td>14mm</td>
<td>14mm</td>
</tr>
<tr>
<td>Width</td>
<td>16mm</td>
<td>32mm</td>
<td>64mm</td>
<td>35mm</td>
<td>52.5mm</td>
<td>70mm</td>
<td>105mm</td>
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</table>

The SilentSync Color Spectrum System makes it the easiest synchronous drive system to sell, purchase and install. The part numbering system for SilentSync includes a letter that corresponds to the color of the branding on the belt (“Y” for Yellow, “W” for White, etc.). Each color defines a particular tooth pitch and belt width. Match the colors, and you have matched the correct belt and sprocket.
SilentSync® is more than just a synchronous drive system. With up to 25% more power capacity* and static conductivity,** it is a powerful upgrade to the original SilentSync – and even more advanced than standard round-tooth belts and chain drives.

Operating up to 19db quieter than straight-tooth belts, SilentSync’s patented Helical Offset Tooth (H.O.T.) design merges belt and sprocket into the quietest, smoothest and one of the most durable systems on the market.

**Performance Benefits**

- **Less Vibration:** SilentSync reduces vibration by up to 19% compared to standard round-tooth belts, ensuring a smoother operation.
- **Lower Noise:** The patented H.O.T. design reduces noise by as much as 19 decibels vs. other synchronous systems.

**Operational Advantages**

- **Improved Workforce Conditions:** SilentSync belts and sprockets meet OSHA regulations, improving workplace safety and eliminating extra costs associated with compliance.
- **Smooth Power Transmission:** SilentSync’s continuous rolling tooth engagement ensures precise power transmission without the vibrations typically associated with synchronous drives.

**Performance Chart**

<table>
<thead>
<tr>
<th>Feet per Minute in Hundreds</th>
<th>12</th>
<th>26</th>
<th>39</th>
<th>52</th>
<th>68</th>
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<tbody>
<tr>
<td>SilentSync</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Standard Round Tooth</td>
<td>65</td>
<td>75</td>
<td>85</td>
<td>95</td>
<td>105</td>
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</table>

<table>
<thead>
<tr>
<th>RPMs</th>
<th>1000</th>
<th>3000</th>
</tr>
</thead>
<tbody>
<tr>
<td>SilentSync</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Standard Round Tooth</td>
<td>65</td>
<td>75</td>
</tr>
</tbody>
</table>

High Performance with Measurable Results

Improve workforce conditions and eliminate the extra costs associated with making drives meet OSHA regulations. The SilentSync belt and sprocket reduce noise by as much as 19 decibels vs. other synchronous systems.
of the most compact synchronous drive packages available. The result is a continuous rolling tooth engagement that reduces vibration and improves the overall efficiency of your drive system.

By employing circular arc geometry, SilentSync belts and sprockets are able to provide better ratcheting resistance, precise movement, increased horsepower rating and improved stress distribution — all to better withstand the shearing action of high torque loads. In addition, SilentSync sprockets are available in over 1,500 combinations, making it easy to match the range of sizes that are required by your system. More speed ratio options allow for more design flexibility and smaller, lighter drives.

The specialized materials that make up SilentSync belts allow you to reduce overall face width and weight without compromising belt strength and durability. The belt’s self-tracking feature eliminates the need for flanges, thus allowing for further width and weight reduction.

SilentSync produces a powerful 98% efficiency rating — an impressive 5% higher than typical V-belt drives. That translates into immediate energy savings. But the savings really add up when SilentSync is applied to high-energy consuming drives that run 24 hours a day.

Under high-torque conditions, SilentSync’s high-strength aramid tensile member provides optimal resistance to flex fatigue, elongation and shock loads.

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As a division of the Continental Group, ContiTech is a recognized innovation and technology leader in natural rubber and plastics. As an industry partner with a firm future ahead of us, we engineer solutions both with and for our customers around the world. Our bespoke solutions are specially tailored to meet the needs of the market. With extensive expertise in materials and processes, we are able to develop cutting-edge technologies while ensuring we make responsible use of resources. We are quick to respond to important technological trends, such as function integration, lightweight engineering and the reduction of complexity, and offer a range of relevant products and services. That way, when you need us, you’ll find we’re already there.