Bezinal® XC coated wire for high-end, critical springs

The ultimate spring wire for superior coilability and increased production efficiency

What can we offer you?
Bezinal® XC is a new type of zinc aluminum coated wire that has been specifically designed for high-end, critical springs. While this advanced coating offers superior corrosion and cathodic protection, its most important feature is shown during the production process. Thanks to the superior coilability you can achieve excellent production efficiencies similar to phosphate coated wires.

Bezinal® XC is suitable for extremely demanding applications, especially when dimensional stability is critical.

Benefits
- Excellent coilability - reduced dust formation and limited flaking
  - Less machine cleaning
  - No impact on sensor and measurement systems
- Higher production efficiencies - significantly lower spring rejection rates
- Retains properties even after exposure to stress-relieving temperatures
- Longer lifetime when compared to galvanized wires

Discover the excellent processing properties of Bezinal® XC
Unlike zinc coatings, the integrity of the Bezinal® XC coating remains unchanged even under heavy deformation and high stress-relieving temperatures, keeping its excellent corrosion resistance intact.

The following tests show exactly how Bezinal® XC performs compared to phosphate coated and standard Bezinal® products.

The coilability test
The graphs on the next page show the average standard deviation of the spring length for 1000 springs.

Similar to phosphated wires, Bezinal® XC significantly reduces the overall spread on spring dimensions. Its advanced properties substantially improve the dimensional stability of the manufactured springs and reduce spring rejection rates. Also, no flaking issues were encountered during coiling with Bezinal® XC.
Would you like to know more about our products and services?

Feel free to contact us.

spring.wire@bekaert.com
www.bekaert.com

Product range

<table>
<thead>
<tr>
<th>Specification</th>
<th>Static applications</th>
<th>Dynamic applications</th>
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</thead>
<tbody>
<tr>
<td>EN-norm</td>
<td>10270-1 (SL/SM/SH)</td>
<td>10270-1 (DM/DH)</td>
</tr>
<tr>
<td>JIS-norm</td>
<td>G3521 (SWA/SWB/SWC)</td>
<td>G3522 (SWP-A/SWP-B)</td>
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<tr>
<td>ASTM-norm</td>
<td>A227 (Class I, II)</td>
<td>A228</td>
</tr>
<tr>
<td>Diameter</td>
<td>1.20-4.00 mm</td>
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<tr>
<td>Salt spray resistance (ASTM B117)</td>
<td>On wire diameters &lt;1.50 mm: min. 240 hours until 5% dark brown rust</td>
<td>On wire diameters ≥ 1.50 mm: min. 360 hours until 5% dark brown rust</td>
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</tbody>
</table>

Packaging

- Conical spools for trouble-free unwinding

  KZ 2 ES (150 kg)
  KZ 2 S (250 kg)
  KZ 2 (400 kg)

- Large metal spools

Bekaert (www.bekaert.com) is a world market and technology leader in steel wire transformation and coatings. Bekaert (Euronext Brussels: BEKB) was established in 1880 and is a global company headquartered in Belgium, employing more than 25,000 people worldwide. Serving customers in 120 countries, Bekaert pursues sustainable profitable growth in all its activities.

Distribution of the spring length variation as function of coating type