

**BEKAERT**

better together

# Bezinal<sup>®</sup> coated steel wire for medical springs

The n° 1 alternative to  
stainless steel medical wires

## Benefits

1

Supports  
complex  
designs

2

Easy to  
process

3

Prolongs  
shelf-life

## Why choose Bekaert?

### The wire drawing and coating specialist

Bekaert has the flexibility, the historical background, and the technical skills to create the product you need no matter what construction, shape, composition or mechanical characteristic. We have been in business for over 130 years and are available in over 120 countries.

### Your strategic partner

Our global experience means that your products meet strict international standards in terms of safety and quality. Our local presence means that we are at your service at all times. In the event of a question or concern, a trained professional will answer your call as soon as possible.

Whatever your application, we will work closely with you. Together, we will create a lasting solution that answers your needs.

Discover the n° 1 alternative to stainless steel medical wires. Bezinal<sup>®</sup> XP and Bezinal<sup>®</sup> XC are high carbon steel wires with an advanced zinc aluminum coating for smooth processability and a prolonged shelf life. Meeting FDA and EFSA quality standards, these wires are suitable for the production of medical springs.

## Made for medical devices

**Bezinal<sup>®</sup> XP's superior corrosion and cathodic resistance, and Bezinal<sup>®</sup> XC's stable coating integrity means the wires provide excellent performance in various medical applications, where they can be used as high-performing alternatives to stainless steel wire.**

The coatings' excellent material properties and good processability meet the growing need for smaller, lighter and more complex medical springs.

Bezinal<sup>®</sup> XP and Bezinal<sup>®</sup> XC are not susceptible to pitting corrosion and are capable of protecting defects for a prolonged time. Compared to galvanized or phosphated wires, Bezinal<sup>®</sup> XC coated wires last about 10x longer and Bezinal<sup>®</sup> XP wires up to 20x longer, without additional post-coating.



## Ideal for small, light and complex medical tools

Compared to traditional high carbon wires, Bezinal® XP and Bezinal® XC coated steel wires demonstrate improved material properties including a 17% higher e-modulus, higher maximum solid stress (+6% for non-stressed and up to +9% for pre-stressed springs) when applied to standard designs. Moreover, (pre-coated) high carbon wire solutions exhibit better fatigue performance than stainless alternatives.

As a result, these wires allow you to:

- Meet tight tolerances
- Produce smaller spring dimensions with higher spring rates
- Maintain high accuracy and repeatability

## Easy to process, with low production costs

Unlike galvanized wires, Bezinal® XP and Bezinal® XC wires have very stable coatings layers. They create less flaking and dust during coiling and deformation, leading to a much more cost-efficient production process:

- Creates a cleaner working environment
- Reduces frequency of machine cleaning
- Allows production at higher coiling speeds
- Eliminates the need for expensive post-coating processes

## Product range

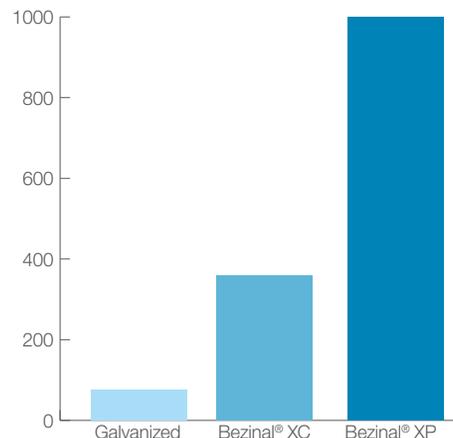
	Static applications	Dynamic applications
Specifications	DS-01-0013-BCQA	DS-01-0013-BCQA
EN-norm	10270-1 (SL/SM/SH)	10270-1 (DM/DH)
JIS-norm	G3521 (SWA/SWB/SWC)	G3522 (SWP-A/SWP-B)
ASTM-norm	A227 (class I, II)	A228
Diameter	0.6 - 4.5 mm*	0.6 - 4.5 mm*

\* Smaller diameters are available upon request.

## Packaging

- Conical spools for trouble-free unwinding  
KZ 2ES (150 kg), KZ 2 S (250 kg), KZ 2 (400 kg)
- Large metal spools
- DIN 355E plastic spools

Salt spray test according to ASTM B117  
on wire diameters of > 1.50 mm (hours until 5% DBR)



### Contact us

More  
Information?

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Responsible editor:  
Vincent Vermeersch - 04 2018