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## Special Materials and Finishes

**Caleb Components offers a wide range of products in a variety of special materials and finishes.**

### **MATERIALS**

#### **Stainless Steel 316 (A4) Grade**

We can offer Circlips, Spring Tension Pins and some sizes of Split Cotter Pins in this grade of Stainless Steel. This material is non-magnetic, has excellent anti-corrosive properties and is widely used in chemical construction, aerospace and automotive applications

#### **Beryllium Copper (CuBe2)**

We can supply Circlips, Disc Spring (Belleville) Washers, Shim Washers and Spring Tension Pins in Beryllium Copper.

Components manufactured in this material offer anti-magnetic and corrosion resistant qualities. It is also a good material where electrical conductivity is required and works well in extremely low temperatures.

#### **Phosphor Bronze**

A popular use for this material is in the manufacturing of Circlips and Split Cotter Pins. This material is anti-magnetic and shares a lot of similarities as Beryllium Copper.

#### **Inconel 718 / X750**

This material is a high ductile alloy which offers excellent properties particularly in the use of Disc Springs (Belleville) Washers. They can be used in high temperatures, and are anti-magnetic as well as offering very good anti-corrosive properties.

### **FINISHES**

#### **Electro-Zinc Plate (De-embrittled)**

We can offer Split Cotter Pins, Circlips, Spring Tension Pins and Shim Washers in this particular finish. This is a basic plating method and offers average anti-corrosive resistance. For example, a 5 micron thickness will offer 24 hours of salt spray resistance (clear passivated).

#### **Mechanical Zinc Plate**

This finish is can be used in many applications but is widely used on Disc Spring (Belleville) Washers as there are no risks of hydrogen de-embrittlement. A 6 micron finish will offer 24 hours of salt spray resistance (clear passivated).

#### **Delta-Tone**

Although quite costly, this excellent plating can offer in excess of 480 hours of salt spray resistance and is commonly used in subsea applications where a high anti-corrosive resistance plating is required.

#### **Phosphate & Oil**

This is a common plating already applied as standard to some of our products such as Disc Springs (Belleville) Washers and Circlips. This plating is okay for indoor use only and offers a good shelf life for products without rusting.

**If you would like further information, or require a quotation for products in the above mentioned materials or finishes, please get in touch.**