# SPECIALTY ALLOYS FOR CONNECTORS ELECTRONIC & DIGITAL APPLICATIONS













### **READY FOR IMMEDIATE SHIPMENT!**

- C17300 CuBe2Pb CW102C Beryllium Copper
- C14500 CuTeP C42 CW118C Tellurium Copper (Deoxidized Grades)
- C19160 CuNi1Pb1P Leaded Nickel Copper
- C35300 CuZn37Pb2 CW606N High Leaded Brass "62%"
- C36000 CuZn36Pb3 CW603N Free Machining Brass
- C51000 CuSn5 CW451K Phosphor Bronze "5% A"

- C54400 CuSn4Pb4Zn4 BZ4 CW456K Phosphor Bronze "B-2, Free Cutting"
- Aviva Model 3<sup>™</sup>
  Free Machining D.Z.R. "Lead Free" Brass



## SPECIALTY ALLOYS FOR CONNECTORS ELECTRONIC & DIGITAL APPLICATIONS

#### C17300 - CuBe2Pb - CW102C

#### Beryllium Copper

Available in tight tolerance wire (\*other sizes avialable upon request)

This alloy is an age-hardened alloy having developed higher strengths while maintaining acceptable levels of toughness for many industrial applications. The age-hardening response of this alloy depends on the factors of time, temperature, and cold work applied to the metal. Toughness, fatigue strength, corrosion resistance, etc., can be modified and controlled by either under-aging or over-aging during the precipitation hardening process of the alloy.

#### C14500 - CuTeP - C42 - CW118C

#### Tellurium Copper (Deoxidized Grades)

Available in tight tolerance wire (\*other sizes avialable upon request)

This alloy has applications in screw machine products and parts requiring high conductivity, extensive machining, corrosion resistance, copper color, or a combination of these; electrical connectors, motor and switch parts, plumbing fittings, welding torch tips, transistor bases and furnace brazed articles. Plates can also be forged and machined from this alloy.

#### C19160 - CuNi1Pb1P

#### **Leaded Nickel Copper**

Available in tight tolerance wire (\*other sizes avialable upon request)

This alloy is a free-cutting bronze alloy developed for the manufacture of connectors, primarily in the electronics industry. This highly machinable alloy must meet several requirements such as high strength, high electrical conductivity, and excellent corrosion resistance.

#### C35300 - CuZn37Pb2 - CW606N

#### High Leaded Brass "62%"

Available in tight tolerance wire (\*other sizes avialable upon request)

This material contains lower lead and less impurities than C36000 Free Machining Brass. This alloy has excellent thread rolling and knurling capability. In addition to outstanding free machining properties, C35300 is typically used in components where severe cold working is required.

#### C36000 - CuZn36Pb3 - CW603N

#### **Free Machining Brass**

Available in tight tolerance wire (\*other sizes avialable upon request)

This alloy is the most versatile and commonly used brass alloy bar stock used in both the North and South American Markets. It is used excessively to make a huge variety of screw machine products. It's 100% machinability stems from a favorable interaction between the material's basic structure and three percent lead. The result is an alloy with good engineering properties and the ability to be machined at an extremely low cost.

#### C51000 - CuSn5 - CW451K

#### Phosphor Bronze "5% A"

Available in tight tolerance wire (\*other sizes avialable upon request)

This alloy is a cold worked bronze which possess a higher yield strength, good memory and fatigue corrosion resistance. C51000 Phosphor bronze can be readily brazed or soldered. Capacity for being cold worked is good.

#### C54400 - CuSn4Pb4Zn4 - BZ4 - CW456K

#### Phosphor Bronze "B-2, Free Cutting"

Available in tight tolerance wire (\*other sizes avialable upon request) C54400, is the finest bearing alloy that the industry has to offer. It is an extremely machinable alloy that is equaled by few in the wrought metal industry as a bearing alloy. This alloy has good mechanical properties and excellent corrosion resistance.

#### Aviva Model 3™

Free Machining D.Z.R. "Lead Free" Brass

**Available in tight tolerance wire (\*other sizes avialable upon request)** Aviva Model 3, Ruby Red Brass, a Free Machining D.Z.R.

(Dezincification-Resistant) "Lead Free" Brass has patents pending for North America and has already received patents in several European and Asian countries. We have been involved with R&D on this Free Machining and "true" D.Z.R. Lead Free Brass alternative, and now we have the solution that we believe is far superior to any other lead free brass being offered anywhere in the world!

Aviva Model 3, Ruby Red Brass, Free Machining D.Z.R. "Lead Free" Brass proves to meet manufacturer's expectations in numerous ways inclusive of the fact that it is readily and easily recyclable, as it will not contaminate leaded brasses. Aviva Model 3, Ruby Red Brass, Free Machining D.Z.R. "Lead Free" Brass has excellent machinability, 90% min (when compared to C360 Brass), and has mechanical properties similar to traditional free cutting brasses. It also has outstanding conductivity 37% IACS min (45% higher than C360 Brass) and does not contain Silicon, Bismuth, or Arsenic. It has excellent cold working abilities, thread rolls very well and can be electroplated like copper.





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