

# Bronze Premixes

As a pioneer in metal powder technology since 1916, **ACuPowder** has been at the forefront of material and application development.

Over the years **ACuPowder** has developed a full range of Bronze (90 Copper/ 10 Tin) premixes. Each series has been a logical stepping stone in developing the qualities for the next generation. The results are exceptional and exciting.

As compared to each other our **5092**, **KP** and **NB** premixes are differentiated by the following features:

## 5092 Series

- Lowest Cost
- Greatest Compressibility
- Peak Growth at 1500°F
- Standard Bronze Color

## KP Series

- Most Uniform Pore Size
- Peak Growth at 1520°F
- Widest Sintering Latitude
- Improved K factor & Ductility
- Improved Oil Retention
- Improved Machining
- Darker Bronze Color
- Reduced Segregation

## NB Series

- Fastest Uniform Sintering
- Peak Growth at 1480°F
- Highest K factor & Ductility
- Greatest Oil Retention
- Lowest Hour Glassing
- Improved Machining
- Brightest Bronze Color
- Least prone to Segregation

When sintered properly all of **ACuPowder's** Premix Bronzes will conform to MPIF Standard 35.

Refer to the back of this flyer for data regarding :

- Dimensional Change V. Green Density
- Dimensional Change V. Temperature V. Green Density
- Dimensional Change V. Temperature for a range of Bronze Premix Powders.

**ACuPowder's** vast knowledge and manufacturing capability enables us to tailor your premix to maximize your process capability.

All mixes are available with Graphite additions up to and including 4.0%. Contact our Technical Staff for information regarding our **Diluted Bronze Premixes**.

The information contained herein is presented as a guide for your investigation and verification. Products mentioned are sold without warranty, expressed or implied, that the goods shall be fit for any particular purpose of or use by the purchaser. Purchasers must conduct their own tests to determine the suitability for their intended purpose. We assume no liability for infringement of any patent resulting from the application of this information. By reason of lack of knowledge as to specific uses, no representation or warranty is made regarding the safety of these products or materials under the Federal Food, Drug and Cosmetics Act.

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X521 Technical Service  
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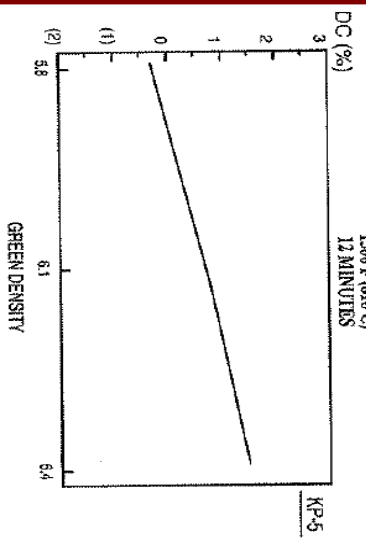
**ACuPowder**

6621 Highway 411 S, Greenback, TN 37742  
Phone: (865) 856-3021 x112  
Fax: (865) 856-3083

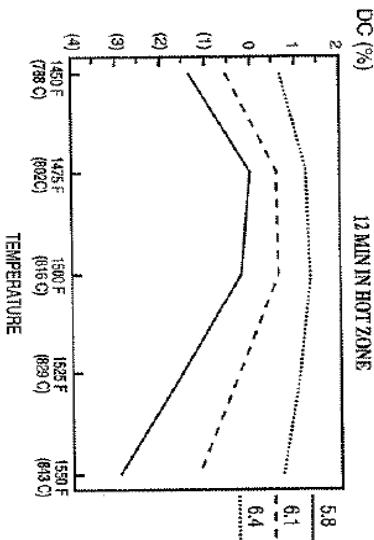
[www.acupowder.com](http://www.acupowder.com)

*We have been part of your lives for over 90 years*

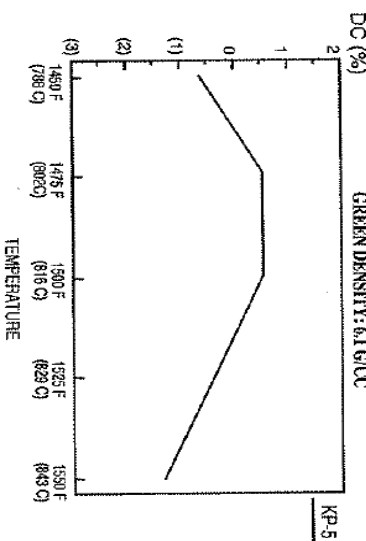
**DIMENSIONAL CHANGE V. GREEN DENSITY**  
 1500 F (816 C)  
 12 MINUTES



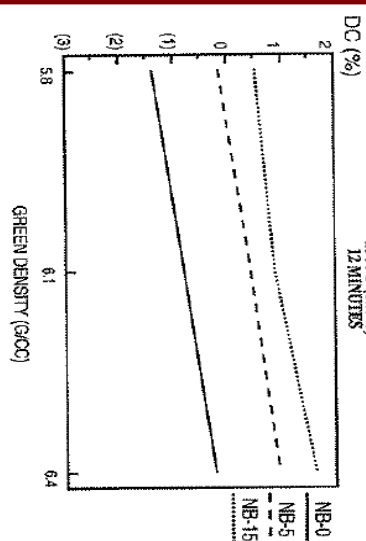
**DIMENSIONAL CHANGE V. TEMPERATURE**  
 KP-5 PREMIX  
 12 MIN IN HOT ZONE



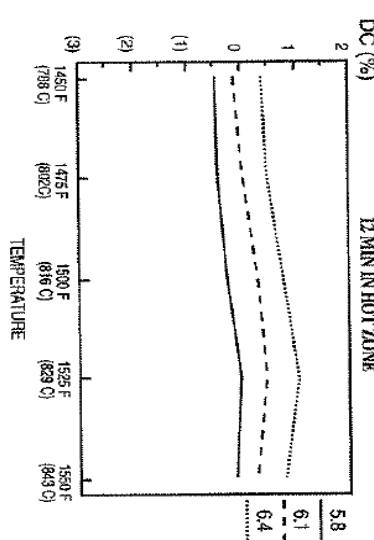
**DIMENSIONAL CHANGE V. TEMPERATURE**  
 12 MIN IN HOT ZONE  
 GREEN DENSITY: 6.1 G/CC



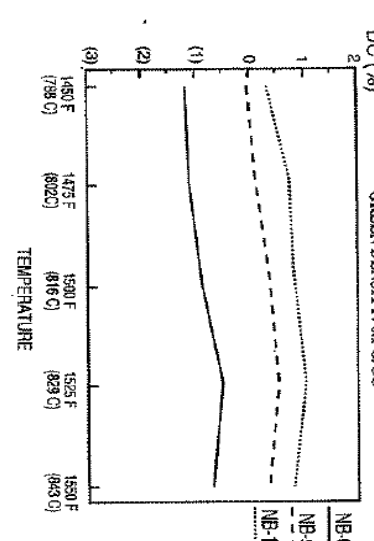
**DIMENSIONAL CHANGE V. GREEN DENSITY**  
 1500 F (816 C)  
 12 MINUTES



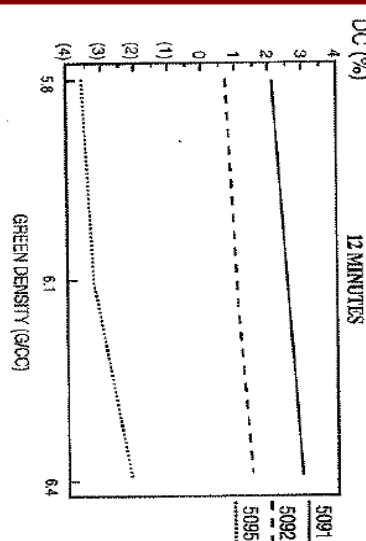
**DIMENSIONAL CHANGE V. TEMPERATURE**  
 NB-5 PREMIX  
 12 MIN IN HOT ZONE



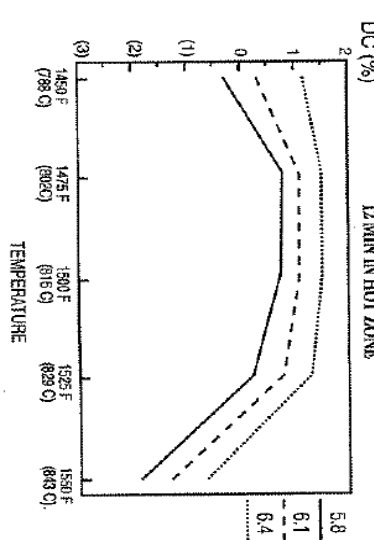
**DIMENSIONAL CHANGE V. TEMPERATURE**  
 12 MIN IN HOT ZONE  
 GREEN DENSITY: 6.1 G/CC



**DIMENSIONAL CHANGE V. GREEN DENSITY**  
 1500 F (816 C)  
 12 MINUTES



**DIMENSIONAL CHANGE V. TEMPERATURE**  
 5092 PREMIX  
 12 MIN IN HOT ZONE



**DIMENSIONAL CHANGE V. TEMPERATURE**  
 GREEN DENSITY: 6.1 G/CC  
 12 MIN

