



## **Brush Wellman's ToughMet® Alloy Recognized in the "Metallic Materials Properties Development & Standardization" Handbook**

### **Standardized Design Values Accepted by FAA, DoD and NASA**

Cleveland, OH - February 9, 2009-Brush Wellman Inc.'s ToughMet® family of copper-nickel-tin products exhibit high strength as well as excellent wear and corrosion resistance. ToughMet® alloys are used in many demanding aerospace, chemical, and industrial applications. Recently, two grades of ToughMet®3 AT110 rod/tube and TS160 rod/bar, were included in the Materials Properties Development & Standardization (MMPDS-05) Handbook. This handbook, formerly known as Department of Defense (DoD) MIL-HDBK-5, contains Federal Aviation Administration (FAA) approved "design allowables" for metals and alloys used in aerospace vehicles. The design limits specified in the listing for the two grades of ToughMet®3 are consistent with recently approved Aerospace Materials Specifications (AMS) 4596A and 4597.

The MMPDS ToughMet® property design limits were calculated after conducting extensive testing on multiple lots of production material. Testing included mechanical strength design properties, elastic properties, and physical properties. The property data were reviewed and the design limit values calculated by an independent contractor under the direction of the FAA.

The standardized design values in MMPDS are accepted by the FAA, all departments and agencies of the DoD and the National Aeronautics and Space Administration (NASA). The MMPDS is globally recognized as a vital tool for aircraft certification and continued airworthiness activities. The handbook is the only publicly available U.S. source that the FAA generally accepts specifying material allowables.

ToughMet® 3 has excellent tribological characteristics and is a good choice for bearing and bushing designs in demanding applications such as in aircraft landing gear and airfoil controls, and elsewhere where high strength and wear resistance is required. Several of Brush Wellman's copper beryllium alloys are also included in the MMPDS.

#### ABOUT BRUSH WELLMAN INC.

Brush Wellman Inc. is a wholly owned subsidiary of Brush Engineered Materials Inc. (NYSE: BW). Through its subsidiaries, Brush Engineered Materials supplies worldwide markets with alloy products, beryllium products, electronic products, precious metal products, and engineered material systems. Around the world, the company's engineered materials can be found in technically demanding end-use products within the telecommunications and computer, automotive electronics, appliance, industrial components, plastics tooling, optical media, oil and gas, aerospace and defense, and off-highway and mining equipment markets. Visit [www.BrushWellman.com](http://www.BrushWellman.com) for additional information.