

Bulletin



Praxair Surface Technologies
1555 Main Street
Indianapolis, IN 46224



Praxair Surface Technologies
TAFE Incorporated
146 Pembroke Road
Concord, NH 03301

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POWDER CHARACTERISTICS **TAFE® 1105B COPPER**

Summary:

This powder is made exclusively for thermal spraying. Spraying with TAFE 1105B produces coatings with excellent thermal and electrical conductivity. Porosity and oxide content are almost nonexistent. These coatings are recommended for conductive surfaces or solderable connections on resistors, earthing conductors and discharge electrodes. The coatings can also be used for radio frequency shielding and salvage and build-up applications on copper and copper alloy substrates. The extremely low oxide content and density make the coatings ideal for printing rollers.

CAUTION: All TAFE powders are produced to exacting specifications and have been optimized for use in the JP-5000 HP/HVOF and PlazJet plasma spray processes. Use of other powders may not produce the properties listed in this Technical Data Bulletin.

Applications:

This material when used, with TAFE's JP-5000 HP/HVOF system, does not exhibit the thickness limitations of other thermal spray processes. Coating thicknesses of up to 0.250" (6.4 mm) are sprayed on a variety of applications, including:

- Print rolls
- Electrical conductivity
 - capacitor electrical contacts
 - ground connectors
 - discharge electrodes
 - resistors
- Thermally conductive parts
 - heat sinks
- Radio frequency shielding
 - instrument cases
 - missile system components
- Mis-machined and worn parts repair

Consult your TAFE coatings application engineer for help in solving your specific coating requirements.

Typical Composition:

	<u>Weight %</u>
Copper	99.5 +
O ₂ by H ₂ loss	0.07

Particle Size: -170 mesh/D

TAFA is committed to a continuing program of product improvement. Product specifications are subject to change without notice. TAFA warrants that the equipment and powder is furnished free of defects in material and workmanship. No other warranty is expressed or implied.

Hazards:

Observe normal spraying practices. Respiratory and hearing protection is advised. For general guidelines see AWS Publication C2.1-73, and AWS TSS-85. Thermal spraying is a safe process when performed in accordance with proper safety measures.

For further information on HVOF coatings, equipment and supplies, as well as other thermal spray processes and custom automated systems, contact:

TAFA Incorporated
146 Pembroke Road, Concord, NH 03301
Phone (603) 224-9585
Fax (603) 225-4342