



DuraKapp™#2 Babbitt

Description

DuraKapp™#2 is the most popular Lead-free, Tin-based Babbitt in bearing refurbishment today. Kapp Alloy's unique processes combine high purity virgin raw materials and our proprietary Precision Microcasting™ to create the world's strongest, most ductile Tin-based Babbitt. **DuraKapp™#2** Babbitt meets or exceeds the specifications for ASTM #2 Babbitt (also known as #2 Babbitt, High Tin Babbitt, and Bearing Babbitt). We back all of our products with a 100% satisfaction guarantee or your money back.

Benefits & Features

- Cleaner, stronger coating
- Faster, better flow
- Less waste
- Fewer rejects and higher quality finished products
- No laminations that would cause deposition problems
- Non-splitting, virtually weld-free wire with a non-flaking surface to prevent machine feeding problems
- Lead-free composition for environmental safety
- Produces a soft, pliable wire for easier machine feeding
- Homogenous structure and tight wire diameter provide even feeding and flame deposition

Applications

- Sleeve Bearings in motors, engines, turbines, compressors, pumps, marine and steam engines, electrical machinery
- Corrosion resistant coatings
- Electro-magnetic interference (EMI) resistant coatings
- Spray coating on wear surfaces of high speed compressors, pumps, and mills
- High speed, moderate pressure equipment
- Paired with KappaTinning™ Compound and Kapp CopperBond™ Flux

Properties

Specification	
ASTM B23:	Grade 2
QQ-T-90A:	No. 2
Composition	
Sn (Tin):	89%
Sb (Antimony):	7.5%
Cu (Copper):	3.5%
Chemical Composition Limits: 88-90% Tin, 7-8% Antimony, 3-4% Copper	
Trace Elements (maximum allowable):	
Iron (Fe):	0.0800%
Lead (Pb):	0.1000%
Arsenic (As):	0.1000%
Bismuth (Bi):	0.0800%
Zinc (Zn):	0.0050%
Aluminum (Al):	0.0050%



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Technical Data	Metric	English	Comments
Density:	7.39 g/cc	0.267 lb/in ³	
Hardness, Brinell:	24.5	24.5	10 mm ball/500 kg load-30 sec.
Tensile Strength, Ultimate:	77.0 MPa	11,200 psi	Chill cast
	87.0 MPa	12,600 psi	Diecast
Elongation at Break:	18 %	18 %	Chill Cast. Gage length = 4 x (area) ^{1/2}
Compressive Yield Strength:	42.1 MPa	6,110 psi	
Ultimate Compressive Strength:	102.7 MPa	14,900 psi	
Fatigue Strength:	33.0 MPa at 2 x 10 ⁷ cycles	4790 psi at 2 x 10 ⁷ cycles	chill cast, R.R. Moore Test
Melting Range:	466-669°F (241-354°C)		
Fabrication:	Chill Cast at 600°F (315°C) into mold at 302°F (150°C)		

Product Variants

***Available in standard forms and diameters:** 35 lb. (15.9 kg) ingots, 6 lb. (2.7 kg) notch bars, and nominal 1 lb. (0.5 kg) bars. Available in spray wire diameters: 1/8" (0.125") (3.2mm), 0.098" (2.5mm), 0.079" (2mm), and 0.062" (1.6mm) on 25 lb spools, 50 lb coils, or 250 lb Payout Paks. Custom alloys and forms are our specialty. Call Kapp Alloy to discuss your specific project.