

AMS7912 Fatigue Supplement

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Keywords: AlBeMet® 162, HIP, Hot Isostatic Press, Density

MATERIAL PROCESS DESCRIPTION:

AlBeMet® 162H is Hot Isostatically Pressed (HIP) from prealloyed gas atomized powder and then annealed at 1100 °F for 24 hours. AMS 7911 covers this material.

SUMMARY:

Typical, minimum, and maximum density are given in Table I.

Table I - AlBeMet® 162 Density

Density	g/cm ³	lbs/inch ³	Reference
Typical	2.10	0.0776	
Minimum	2.071	0.0748	AMS7911 ¹
Maximum	2.122	0.0767	AMS7911 ¹

MATERIAL:

Specification: AMS 7911

Material: Data is from 5 standard production lot of AlBeMet® 162 HIP'ed.

TEST INFORMATION:

Test Specifications: APMI – MPIF 42 and ASTM B311

Specimen Information: Not Determined

Comments:

The density is governed by the chemistry (i.e., Be : Al ratio) and voids. All wrought forms of AlBeMet® 162 are density tested prior and post annealing to ensure quality.

DATA SOURCES:

AMS7911

Materion Beryllium & Composites internally developed data.

HEALTH AND SAFETY

Handling AlBeMet® in solid form poses no special health risk. Like many industrial materials, beryllium-containing materials may pose a health risk if recommended safe handling practices are not followed. Inhalation of airborne beryllium may cause a serious lung disorder in susceptible individuals. The Occupational Safety and Health Administration (OSHA) has set mandatory limits on occupational respiratory exposures. Read and follow the guidance in the Material Safety Data Sheet (MSDS) before working with this material. For additional information on safe handling practices or technical data on AlBeMet®, contact Materion Beryllium & Composites.

SAE AMS7911

MAAB-031

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