BRUSH WELLMAN
ENGINEERED MATERIALS

MATERIAL CERTIFICATION

Customer: General Services Administration
Stockpile Acquisitions Div.
Room 5207, Attn: R. A. Talbott
18th & F Streets, N.W., Washington, DC 20405

Date: August 26, 1985
S.O.#: EMB-113
P.O.#: GS0083DXXC0006 P-001
Specification: P110A-R1, dated 5/9/84. Type I

Material Description:

Lot No. 3546, One (1) Beryllium Metal Hot Pressed Block.

Net weight = 2628 lbs. Gross weight = 3142 lbs.

CHEMICAL COMPOSITION: (WT. %)					MECHANICAL PROPERTIES (K087)					
ELEMENT	3546 Top	3546 Bot.		Direct.	Y.P. 0.2% ksi	FTU ksi	FTY 0.2% ksi	% EL	Yld./Ult.	Temp
Be	99.4	99.3		Top:						
BeO	.7	.9		Long.	---	48.7	31.7	3.8	.65	Room
Fe	.07	.07		Long.	---	48.4	31.3	3.8	.65	Room
C	.06	.07		Trans.	---	51.5	32.4	4.7	.63	Room
Al	.03	.03		Trans	31.6	51.3	31.5	5.5	.62	Room
Mg	-.01	-.01		Trans.	---	15.2	---	15.0	---	1200°
Si	.03	.02								
S	-.01	-.01		Bot.						
U	-.01	-.01		Long.	34.1	50.1	33.8	3.5	.68	Room
Ni	.01	.01		Long.	---	49.4	33.9	3.0	.69	Room
Cr	-.01	-.01		Trans.	---	54.6	34.6	6.0	.63	Room
Mn	.01	.01		Trans.	---	53.7	34.0	5.1	.63	Room
Cu	-.01	-.01		Trans.	---	14.6	---	14.9	---	1200°
Ti	-.01	-.01								
BATCH NO.										
OTHER ELEM.EA.										
OTHERS TOTAL										

DENSITY: Theoretical 99.96%

AVG GRAIN SIZE: (Microns)

	Avg.	Max.
Top	10.9	33
Bot.	10.6	33

RADIOGRAPHIC INSP. PER: P110A-R1

PENETRANT INSP. PER: P110A-R1

ADDITIONAL INFORMATION:

Ultrasonic inspection in accordance with P110A-R1.

X-ray No. G-6754

This is to certify that the above material satisfies the requirements of Specification see above
Drawing _____ Purchase Order see above and was removed from Pressing No. 3546.

BRUSH WELLMAN INC.
QUALITY CONTROL
R. P. Garner

cc:
Shipping (3) Sales (1) File (1)

53677-218 5/73

QUALITY ASSURED PRODUCTS