

AEROSPACE MATERIAL SPECIFICATION



AMS 5210C

Issued	JAN 1963
Revised	NOV 1970
Noncurrent	OCT 1982
Reaf. Noncur.	SEP 2001
Cancelled	JUL 2006
Superseding	AMS 4012E

Steel Castings, Investment, Electrical
Induction Melted, Annealed

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1. ACKNOWLEDGMENT:

A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. APPLICATION:

Primarily for parts used on direct current devices requiring high magnetic saturation and permeability and low magnetic retentivity.

3. COMPOSITION:

	min	max
Carbon + Manganese + Phosphorus + Sulfur	--	0.10
Silicon	0.75	1.3
Carbon	--	0.040
Sulfur	--	0.030
Phosphorus	--	0.010
Copper	--	0.12

4. CONDITION:

Annealed.

5. TECHNICAL REQUIREMENTS:

5.1 Casting:

Castings shall be poured either from remelted metal from a master heat or master heat lot or directly from a master heat. In either case, metal for casting shall be qualified as in 5.2. A master heat is refined metal of a single furnace charge. Gates, sprues, risers, and rejected castings shall be used only in preparation of master heats; they shall not be remelted directly, without refining, for pouring of castings.

- 5.1.1 Unless prohibited by purchaser, metal from two or more master heats may be blended to form a master heat lot provided that the composition of each master heat to be blended is within the limits of Section 3 above and that the total weight of metal in the master heat lot does not exceed 10,000 pounds. Ingot and pig may be blended together, shot may be blended, but shot shall not be blended with ingot or pig.