

Brammer Standard Company, Inc.

Certificate of Analysis

GRAY IRONS

analysis listed as percent by weight

BS No.	20A	20B	20F	20G	BS No.
C	3.33	2.98	3.15	3.34	C
Mn	0.75	0.84	0.61	0.58	Mn
P	0.040	0.080	0.035	0.028	P
S	0.029	0.029	0.024	0.029	S
Si	2.80	1.79	2.50	3.02	Si
Cu	0.54	0.10	0.32	0.53	Cu
Ni	0.06	0.22	0.42	0.38	Ni
Cr	0.034	0.075	0.125	0.086	Cr
Mo	0.18	0.035	0.035	0.19	Mo
Sn	0.10	<0.005	0.095	0.11	Sn
Ti	0.033	0.042	0.014	0.012	Ti
V	----	----	0.020	0.017	V

COOPERATING LABORATORY ANALYSIS was provided by:

Analytical Consulting Services, Houston, TX
Analytical Process Labs, Milwaukee, WI
Anderson Laboratories, Milwaukee, WI
Charles C. Kawin Co., Maywood, IL
Chicago Spectro Service Labs, Chicago, IL
Midstates Analytical Labs, Tulsa, OK
Spectrochemical Labs, Pittsburgh, PA
Taussig Associates, Chicago, IL

CHEMICAL ANALYSES were made on millings from the cross-section of the bars. The values listed are the average of wet chemical analyses and have been checked by spectrographic analyses. Avoid the outer 1/16" rim on all standards.

Certificate No. 20A-20B-20F-20G-052087

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