

Department of Commerce and Labor

Bureau of Standards
Certificate

SS#16

OF
ANALYSES OF STANDARDIZED STEEL
BASIC OPEN HEARTH, I. O

ANALYST.	CARBON.			SILICON.	PHOSPHORUS.	SULPHUR.		MANGANESE.
	BY DIRECT COMBUSTION.	BY SOLUTION AND COMBUSTION.	COLORIMETRIC.			BY OXIDATION.	BY EVOLUTION AS HYDROGEN SULPHIDE.	
1. John R. Cain, Bureau of Standards		1.060		0.181	0.041	0.030	0.032	0.394
2. H. C. P. Weber, Bureau of Standards...	1.060	1.055		0.170	0.045	0.028	0.028	0.385
3. Porter W. Shimer, Easton, Pa	1.035	1.036		0.155	{ (a) 0.047 (b) 0.045	0.029	0.029	{ (a) 0.399 (b) 0.397
4. Booth, Garrett & Blair, Philadelphia...	1.053	1.053		0.158	0.044	0.028	0.024	0.394
5. Jones & Laughlin Steel Co., Pittsburg...	1.050	1.050	1.050		0.047		0.026	0.430
6. Pennsylvania Steel Co., Steelton		1.056			0.045		0.027	0.430
Carnegie Steel Co., Pittsburg:								
7. Homestead Works		1.060	1.160	0.146	0.045		0.029	0.320
8. Duquesne Works		1.080	1.100	0.146	0.047	0.021	0.028	0.440
9. South Sharon Works		1.040		0.162	0.045		0.031	0.460
AVERAGE	1.049	1.054	1.100	0.153	0.045	0.027	0.028	0.405

PHOSPHORUS: Reduction of molybdate used by 1, 3(b), 4, 7, and 9; alkalimetric determination of molybdate by 5, 6, and 8; gravimetric determinations by 3(a).
MANGANESE: Noyes's method (J. Amer. Ch. Soc., 24, 243) 2; bismuthate by 3(b) and 4; persulphate by 5, 7, and 8; Williams's by 1 and 6; lead peroxide by 9; gravimetric by 3(a).

This standard is not recommended for colorimetric carbon determinations.

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Director.

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