

Department of Commerce and Labor

# Bureau of Standards

## Certificate

OF

### ANALYSES OF STANDARDIZED STEEL

BASIC OPEN HEARTH, 0.1

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 .....		0.127		0.000	0.028	0.037	0.037	0.524
2. H. C. P. Weber, Bureau of Standards .....	0.139	0.145		0.009	0.029	0.033	0.034	0.525
3. Porter W. Shimer, Easton, Pa .....	0.137	0.137		0.012	{ (a) 0.031 (b) 0.031	0.038	0.037	{ (a) 0.509 (b) 0.506
4. Booth, Garrett & Blair, Philadelphia .....	0.153	0.153		0.008	0.028	0.036	0.034	0.517
5. Jones & Laughlin Steel Co., Pittsburg .....	0.145	0.145	0.140		0.032		0.036	0.530
6. Pennsylvania Steel Co., Steelton .....		0.141			0.030		0.036	0.530
Carnegie Steel Co., Pittsburg:								
7. Homestead Works .....		0.130	0.130	0.020	0.039		0.030	0.550
8. Duquesne Works .....		0.130	0.120	0.013	0.030	0.033	0.037	0.560
9. South Sharon Works .....		0.115		0.024	0.031		0.039	0.530
AVERAGE .....	0.144	0.136	0.130	0.013	0.031	0.035	0.036	0.523

PHOSPHORUS: Reduction of molybdate used by 1, 2, 3(b), 4, 7, and 9; alkalimetric determination of molybdate by 5, 6, and 8; gravimetric determination by 3(a).

MANGANESE: Bismuthate method by 3(b) and 4; persulphate by 5, 7, and 8; Williams's by 1, 2, 3(a), and 6; lead peroxide by 9.

**This standard is not recommended for colorimetric carbon determinations.**

S. W. STRATTON,

Director.  
(v. 7-11)

Washington, D. C.

Form 116  
BASIC OPEN HEARTH (0.1) CERTIFICATE  
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