

Department of Commerce and Labor

# Bureau of Standards

## Certificate

55#18

### OF ANALYSES OF STANDARDIZED STEEL

ACID 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 .....		0.098		0.008	0.053	0.055	0.057	0.420
2. H. C. P. Weber, Bureau of Standards .....	0.102			0.012	0.055	0.059	0.057	0.398
3. Porter W. Shimer, Easton, Pa. ....	0.104	0.105		0.016	{(a) 0.057} {(b) 0.057}	0.062	0.061	0.388
4. Booth, Garrett & Blair, Philadelphia .....	0.096	0.094		0.012	0.059	0.057	0.054	0.395
5. Jones & Laughlin Steel Co., Pittsburg .....	0.103	0.100	0.090		0.056		0.058	0.410
6. Pennsylvania Steel Co., Steelton .....		0.125		0.022	0.059		0.054	0.420
Carnegie Steel Co., Pittsburg:								
7. Homestead Works .....			0.103	0.026	0.057		0.058	0.420
8. Duquesne Works .....		0.104	0.100		0.055	0.054	0.057	0.440
9. South Sharon Works .....			0.095	0.019	0.057		0.054	0.425
AVERAGE .....	0.101	0.104	0.097	0.016	0.056	0.057	0.057	0.412

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 and 4; persulphate by 5, 7, and 8; Ford-Williams by 1, 2, and 6; lead peroxide by 9.

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

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*Director.*

*Washington, D. C.*

Form 29.  
ACID OPEN HEARTH (0.1) CERTIFICATE.  
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