

Department of Commerce and Labor

Bureau of Standards

Certificate

OF

ANALYSES OF STANDARDIZED STEEL

BESSEMER, 0.4

ANALYST.	CARBON.			SILICON.	PHOSPHORUS.	SULPHUR.		MANGANESE.
	BY DIRECT COMBUSTION.	BY SOLUTION AND OXIDATION.	COLORIMETRIC.			TOTAL BY OXIDATION.	EVOLVED AS HYDROGEN SULPHIDE.	
John R. Cain, Bureau of Standards		0.420		0.035	0.117	0.118	0.109	0.855
Helen Isham, Bureau of Standards		0.412		0.036	0.116	0.117	0.109	0.832
Booth, Garrett & Blair, Philadelphia	0.447	0.436		0.040	0.118	0.119	0.110	0.856
Albert W. Smith, Cleveland		0.429		0.032	0.121	0.116		0.924
Jones & Laughlin Steel Co., Pittsburg		*0.525			0.119	0.119		0.870
Pennsylvania Steel Co., Steelton		0.414			0.119		0.118	0.890
Carnegie Steel Co., Pittsburg:								
Homestead Works		0.440		0.052	0.116		0.112	0.880
Duquesne Works		0.445	0.460		0.116		0.105	0.865
South Sharon Works		0.423	0.415	0.073	0.106		0.108	0.875
AVERAGE	0.447	0.427	0.437	0.045	0.116	0.118	0.110	0.872

Initial diameter of bar, 74.4 mm; final diameter, 17.5 mm; depth of each cut, 4.7 mm.

CARBON DETERMINATIONS IN THE PORTIONS USED FOR THE SAMPLE.

Number of cut.	Per cent carbon.
I	0.400
II	0.400
III	0.390
IV	0.420
†V	0.450
†VI	0.450

*Omitted in averaging the results.
 †This part of the bar was rejected.

Director.

Test No.

In charge of Analyses.

Washington, D. C.