

# Bureau of Standards

## Certificate of Analyses

OF

STANDARD SAMPLE No. 23

### BESSEMER STEEL, 0.8% CARBON

ANALYST.	CARBON.			SILICON.		PHOSPHORUS.			SULPHUR.		MANGANESE.				
	DIRECT COMBUSTION.	SOLUTION AND COMBUSTION.	COLORIMETRY.	DROWN METHOD.	OTHER METHODS.	ALKALI MOLYBDATE.	MOLYBDATE REDUCTION.	WEIGHING YELLOW PRECIPITATE.	OXIDATION.	EVOLUTION (CaS-Iodine).	FORD (Min as $Mn_2P_2O_7$ ).	FORD-WILLIAMS.	VOLHARD.	BISMUTHATE.	COLOR (Permanganate).
1	.800				.150		.114		.062	.063 <sup>b</sup>		.77			
2	.800	.802			.153		.111	.113 <sup>a</sup>	.068	.066	.765				
3	.816	.812		.152	.150		.106		.065	.050 <sup>c</sup>				.781	
4	.790		.800	.143		.108				.058				.790	.79
5	.800	.805				.111				.060		.76			
6	.816		.800	.143				.108	.055	.052	.755				.76
7	.814		.810	.150	.155			.108	.056	.054	.775		.775		.78
8	.805			.156				.103		.058					.80
9	.806			.145		.110		.111	.054	.057					
AVERAGE	.805	.806	.803	.148	.152	.110	.110	.109	.060	.058	.765	.765	.775	.785	.782
GENERAL AVERAGE	.805			.150		.109			.059		.775				

<sup>a</sup>As  $Mg_2P_2O_7$ .

<sup>b</sup>Evolution—NaSH-Iodine.

<sup>c</sup>Evolution—PbS-BaSO<sub>4</sub>.

### INDEX TO ANALYSTS

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This standard is not recommended for colorimetric carbon determinations, because of uncertainty as to the condition of the carbon.

S. W. STRATTON,  
Director.

Washington, D. C.

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