

Certificate of Certified Reference Material

NCS HC 13805

Open Hearth Slag

Reissued in 2013

Approved by China National Analysis Center for Iron and Steel

(Beijing China)

Certified Values and Standard Deviation

(%)

No		SiO ₂	Al ₂ O ₃	TFe	FeO	CaO
NCS HC 13805	Certified Value	8.91	3.92	34.33	36.55	26.73
	Standard Deviation	0.03	0.04	0.11	0.12	0.11
		MgO	MnO	S	P ₂ O ₅	TiO ₂
	Certified Value	12.15	2.01	0.107	0.87	0.32
	Standard Deviation	0.14	0.02	0.004	0.02	0.01

Note:

1. Each certified value is the mean of analytical results of 9 independent laboratories.
2. The sample should be stored at 105°C for 2 hours before using and stored in drier.
3. The sample is powder with size < 0.110mm, packed in glass bottle.

The minimum package is 100 grams.

Analytical Methods

Composition	Methods
SiO ₂	The perchloric acid dehydration-gravimetric method
Al ₂ O ₃	Sodium fluoride separation-EDTA titrimetric method; EDTA complex copper ion volumetric method; Fluoride replacement complex volumetric method
TFe	Potassium dichromate titrimetric method; Atomic absorption spectrometric method
FeO	Potassium dichromate titrimetric method
CaO	Permanganate oxidation volumetric method; EDTA volumetric method
MgO	EDTA volumetric method; Atomic absorption spectrophotometric method; Phosphate gravimetric method
MnO	Atomic absorption spectrometric method ;The sodium arsenite-sodium nitrite titrimetric method; Potassium periodate photometric method
S	The aluminum oxide chromatographic separation-barium sulfate gravimetric method; The combustion-potassium iodate titrimetric method; Infrared absorption method
P ₂ O ₅	The n-butyric alcohol-trichloromethane extraction photometric method; Bismuth-phosphorus-molybdenum blue photometric method; X-ray fluorescence method; The butyl acetate extraction phosphorus-molybdenum blue photometric method
TiO ₂	Dianthipyrylmethane colorimetric method



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