

Certificate of Certified Reference Material

NCS HC 13806

Electric Furnace Slag

Reissued in 2014

Approved by China National Analysis Center for Iron and Steel

(Beijing China)

Certified Values and Standard Deviation

(%)

No		SiO ₂	Al ₂ O ₃	TCa	MgO	MnO	TFe
NCS HC 13806	Certified Value	21.37	4.00	16.22	21.18	13.16	13.11
	Standard Deviation	0.10	0.03	0.07	0.10	0.05	0.07
		TiO ₂	FeO	F	P ₂ O ₅	S	
	Certified Value	0.18	(15.25)	0.17	0.125	0.036	
	Standard Deviation	0.01		0.01	0.005	0.002	

Note:

1. Each certified value is the mean of analytical results of 9 independent laboratories.
2. The sample should be stoved at 105°C for 2 hours before using and stored in drier.
3. The sample is powder, packed in glass bottle. The minimum package is 100 grams.
4. The valid time of the sample is 10 years, although we reserve the right to make change as issue revisions.

Analytical Methods

Composition	Methods
SiO ₂	The perchloric acid dehydration-gravimetric method; Dehydrate gravimetric method with hydrochloric acid
Al ₂ O ₃	Sodium fluoride separation-EDTA titrimetric method; EDTA complex copper ion volumetric method; Fluoride replacement complex volumetric method
TCa	Permanganate titrimetric method after separation with sediment; EDTA titrimetric method after separation with sediment
MgO	EDTA volumetric method; C _Y DTA titrimetric method after separation with sediment; Phosphate gravimetric method
MnO	The sodium arsenite-sodium nitrite titrimetric method
TFe	SnCl ₂ reduction potassium dichromate titrimetric method
TiO ₂	Diantipyrylmethane colorimetric method
FeO	Potassium dichromate titrimetric method
F	Fluorin ion selective electrode analysis; Photometric method after distillation separation
P ₂ O ₅	The n-butyric alcohol-trichloromethane extraction photometric method; Bismuth-phosphorus-molybdenum blue photometric method; The butyl acetate extraction phosphorus-molybdenum blue photometric method
CaO	Permanganate oxidation volumetric method; EDTA volumetric method
S	The aluminum oxide chromatographic separation-barium sulfate gravimetric method; The combustion-potassium iodate titrimetric method; Infrared absorption method



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