

Certificate of Certified Reference Material

NCS HC 25653

Ferro Chromite

Issued in 2008

Approved by China National Analysis Center for Iron and Steel

( Beijing China )

This Certified Reference Material is prepared in accordance with the ISO guides 30-35. The intended use for this CRM is for the quality control in ferro chromite analysis, the evaluating methods of analysis and the calibration of analytical instruments.

## Certified Values and Standard Deviation

(%)

No.		Cr	Si	P	Mn	C	S	Ti
NCS HC	Certified Value	62.49	0.15	0.025	0.11	8.70	0.024	0.016
25653	Standard Deviation	0.15	0.02	0.002	0.01	0.09	0.002	0.002

Note:

- 1.8 independent laboratories take part in the analysis work.
- 2.The sample is chips packed in glass bottle. The minimum package is 50 grams.
- 3.The sample should be stored at cool, dry and dark place.
- 4.The valid time of the sample is 10 years, although we reserve the right to make change as issue revisions.

## Analytical Methods

Element	Analytical method
Cr	Ammonium persulfate volumetric method
Si	The perchloric acid dehydration-gravimetric method; Silicon-molybdenum blue photometric method; ICP-AES spectrography
P	Hydrazine sulfate- phosphorus-molybdenum blue photometric method; The butyl acetate extraction molybdenum blue photometric method; Bismuth-phosphorus-molybdenum blue photometric method; ICP-AES spectrography; The n-butyric alcohol-trichloromethane extraction photometric method
Mn	Potassium periodate photometric method; ICP-AES spectrography
C	The gasometric method; Infrared absorption method; Gravimetric method
S	Infrared absorption method; ICP-AES spectrography; Gravimetric method; The combustion-potassium iodate titrimetric method
Ti	Diantipyrylmethane photometric method; Atomic absorption method; Photometric method with chromotropic acid

## Statement:

This material is used only in labs and for analysis work, producer will be not responsible for any problem caused by misuse or not properly store.

Please check carefully the package, quantity and type of the material after receiving it. Related compensation is only limited in the certified materials, any other losses will be not included.

  
**Jia Yunhai**  
**Laboratory Director**