Certificate of Certified Reference Material

NCS NS 41006

NCS NS 41007

O, N in Steel

Issued in 2014

Approved by China National Analysis Center for Iron and Steel

(Beijing China)

Certified Values and Extended uncertainty

No.		O	N
NCS NS 41006	Certified Value (%)	0.0108	0.0027
	Extended uncertainty(%)	0.0003	0.0002
NCS NS 41007	Certified Value (%)	0.0029	0.0037
	Extended uncertainty(%)	0.0002	0.0002

Note:

Extended Uncertainty: $U=ku_{CRM}$; $u_{CRM}=\sqrt{u_{char}^2+u_{bb}^2+u_{lts}^2+u_{sts}^2}$; $u_{char}=s/\sqrt{n}$

U_{CRM} combined uncertainty; U_{bb} between bottle uncertainty;
Ults long time stability uncertainty, neglectable;
Usts short time stability uncertainty, neglectable;
Uchar standard uncertainty of analysis;
s standard deviation;
n number of data;
k cover factor;
k=2 with confidence interval at 95%.

1.The certified value is the mean of analytical results of 9 independent laboratories.
2.The sample is ball with D6.18mm packed in plastic bottle.
The minimum package is 20 pieces.
3.The sample should be washed by dithylether and acetone before use.
4.The sample should be stored at dry place.
5.The valid time of the sample is 15 years, although we reserve the right to make change as issue revisions.

Analytical Methods

Oxygen

Pulse- infrared method

Nitrogen

Pulse -thermal conductometric method

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