



## Certificate of Certified Reference Material

NCS FC 28207

Coal

Reissued in 2019

Approved by China National Analysis Center for Iron and Steel

( Beijing China )

## Certified Values and Uncertainty

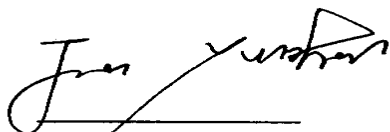
No.		St,d(%)	Ad(%)	Vd(%)	Qgr,d (MJ/kg)	Carbon (%)	Hydrogen (%)	Nitrogen (%)	True Specific Gravity (20 °C)	Coal Type
NCS FC 28207	Certified Value	0.40	16.36	7.30	26.13	77.00	0.95	0.28	1.95	anthracite
	Uncertainty	0.05	0.17	0.24	0.14	0.56	0.20	0.08	0.04	

Note:

- 1.All values are expressed on dry bases. Calorific value is high value of dry base.  
The sample is air dry base.
- 2.Each certified value is the mean of analytical results of 8 independent laboratories.  
Uncertainty( $\Delta x$ ) is calculated by  $\Delta x = t_{\alpha(m-1)} S_T$ . In above formula,  $t_{\alpha(m-1)}$  is confidence coefficient of t-distribution,  $\alpha$  is confidence level and  $S_T$  is standard deviation.  
Uncertainty is expanded uncertainty at 95% confidence level.
- 3.The sample is powder with size <0.2mm packed in glass bottle.  
The minimum package is 50 grams. The minimum weight for analysis S is 0.05g, for ash is 0.5g.
- 4.The sample should be stored in cold and dry place.
- 5.The certified values are redetermined once every year and customers will be informed if there is any change in certified values.

## Analytical Methods

Item	Analytical method
Total Sulfur	GB/T214—1996 method of determination of total sulfur in coal
Ash and Volatile	GB212—2001 analytical method of coal for industry
Calorific Value	GB/T213—2003 method of determination of calorific value of coal
Carbon , Hydrogen	GB476—2008 Method of Determination of Carbon and Hydrogen in Coal
Nitrogen	GB/T19227-2008 Method of Determination of Nitrogen in coal
True Specific Gravity	GB/T217—2008 Method of Determination of True Specific Gravity of Coal



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