Certificate of Certified Reference Material

NCS AH37322 — NCS AH37327

Stainless Steel

Issued in 2016

Approved by China National Analysis Center for Iron and Steel

(Beijing　China)

Certified Value and Extended Uncertainty (%)

Item No.		C	S	Si	Mn	P	Cr	Ni	Mo	Cu	Co	Ti
NCS AH 37322	Certified Value	0.032	0.019	0.78	1.45	0.026	16.14	10.30	2.28	0.026	0.039	
	Uncertainty	0.003	0.002	0.02	0.02	0.002	0.04	0.07	0.03	0.002	0.002	
NCS AH 37323	Certified Value	0.075	0.025	0.77	1.44	0.033	18.56	8.49	0.089	0.225	0.17	
	Uncertainty	0.003	0.002	0.02	0.02	0.002	0.04	0.07	0.003	0.002	0.02	
NCS AH 37324	Certified Value	0.086	0.014	0.84	1.45	0.032	17.45	9.26	0.040	0.16	0.17	0.56
	Uncertainty	0.003	0.002	0.02	0.02	0.002	0.04	0.07	0.003	0.01	0.02	0.02
NCS AH 37325	Certified Value	0.134	0.021	1.06	1.51	0.033	17.01	8.56	0.062	0.16	0.16	0.61
	Uncertainty	0.003	0.002	0.02	0.02	0.002	0.04	0.05	0.003	0.01	0.02	0.02
NCS AH 37326	Certified Value	0.144	0.028	0.56	0.71	0.038	12.07	0.184		0.207	0.017	
	Uncertainty	0.003	0.002	0.02	0.02	0.002	0.04	0.004		0.002	0.02	
NCS AH 37327	Certified Value	0.232	0.027	0.82	0.80	0.042	12.42	0.68	0.073	0.12	0.030	
	Uncertainty	0.003	0.002	0.02	0.02	0.002	0.04	0.03	0.003	0.02	0.002	

Note:

1.Each certified value is the mean of analytical results of 6 independent laboratories.

2.The sample is cylinder bar with size Φ36×36 mm and packed in box.

3.The sample should be stored at dry place.

4. The valid time for these samples is 15 years

Analytical Methods

Element	Analytical methods
C	Combustion-gas volumetric method; Combustion-infrared absorption method
Si	Gravimetric method after dehydration with perchloric acid; Molybdenum blue photometric method
Mn	Titrimetric method; Photometric method; AAS
P	Bismuth phosphomolybdimum blue photometric method; ICP-AES
S	Combustion-infrared absorption method; ICP-AES; Combustion- titrimetric method
Cr	Ammonium presulfate oxidation titrimetric method; AAS
Ni	Dimethylglyoxime gravimetric method; AAS
Mo	Thiocyanate photometric method; ICP-AES
Cu	ICP-AES; AAS
Co	ICP-AES; AAS
Ti	Diantipyrylmethane photometric method; ICP-AES

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