



INSTITUTE OF NON-FERROUS METALS

Analytical Chemistry Department
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CERTIFICATE OF ANALYSIS

Converter copper

The average results of chemical analyses in wt %

Element No.	CG 1	CG 2	CG 3	CG 4	CG 5
Pb	0,60	0,30	0,22	0,11	0,053
Fe	0,013	0,015	0,030	0,25	0,069
Co	0,17	0,098	0,045	0,057	0,0079
Zn	0,016	0,026	0,14	0,12	0,18
Ni	0,036	0,011	0,39	0,23	0,10
Ag	0,011	0,25	0,040	0,10	0,41

Director of the Institute

Prof. Ph.D. Zbigniew Śmieszek

The confidence intervals in wt % at the probability level of 0,05

Element No.	CG 1	CG 2	CG 3	CG 4	CG 5
Pb	0,020	0,017	0,014	0,010	0,0044
Fe	0,0013	0,0010	0,0021	0,012	0,0031
Co	0,0013	0,0017	0,0014	0,0030	---
Zn	0,00099	0,0013	0,011	0,010	0,013
Ni	0,0018	0,00059	0,022	0,0037	0,0060
Ag	0,00086	0,0090	0,0019	0,0021	0,012

Analytical methods applied:

*Pb - atomic absorption
Fe - atomic absorption
Co - atomic absorption
Ni - atomic absorption
Ag - atomic absorption
Zn - atomic absorption*

The chemical analyses have been carried out in three industrial laboratories and at the Institute of Non-Ferrous Metals.

The set consists of 5 reference materials in form of rods 10 mm in diameter and 100 mm long.