

# GNR ANALYTICAL INSTRUMENTS



SUPPLY · SERVICE · SOFTWARE

GNR ANALYTICAL INSTRUMENTS UK - web: [www.gnranalytical.co.uk](http://www.gnranalytical.co.uk) - email: [info@gnranalytical.com](mailto:info@gnranalytical.com) 0115 937 6686

	CU 01	CU 02	CU 10	CU 11	CU 12	CU 20	CU 21	CU 30	CU 40
	Cu Orientation	Cu 99.9	Bronze	Pb Bronze	Al-Bronze Alloys	Brass	High Alloyed Brass	Cu-Ni Alloys	Cu-Be-Co
Al	0.001-12.0	0.001-0.1		0.01-0.2	0.01-12.0	0.005-1.0	0.005-8.0	0.005-0.15	
As	0.003-0.4	0.003-0.1							
Be	0.0005-3.0	0.0005-0.1							0.05-3.0
Bi	0.005-0.2	0.005-0.1							
B	0.001-0.01	0.001-0.01							
Cd	0.001-0.5	0.001-0.1							
Co	0.0005-3.5	0.0005-0.1						0.005-0.15	0.05-3.0
Cr	0.001-1.5	0.001-0.1	0.001-0.05			0.001-0.05	0.001-0.05		
Cu#2	REF		REF	REF	REF	REF	REF	REF	REF
Fe	0.0005-7.0	0.0005-0.1	0.01-1.0	0.01-0.5	0.01-8.0	0.01-1.0	0.01-4.0	0.01-2.0	0.05-0.5
Mg	0.0005-0.2	0.0005-0.1							
Mn	0.0005-5.0	0.0005-0.1	0.01-0.4	0.01-0.4	0.01-4.0	0.01-1.0	0.01-5.0	0.01-2.0	
Ni	0.0005-40.0	0.0005-0.1	0.005-2.0	0.005-4.0	0.005-6.0	0.01-1.0	0.01-3.0	8.0-30.0	0.05-2.0
P	0.002-1.5	0.002-0.1	0.005-0.2	0.005-1.5		0.005-0.2	0.005-0.2	0.005-0.02	
Pb	0.001-35.0	0.001-0.1	0.01-8.0	0.01-35.0	0.01-0.5	0.01-2.0	0.01-2.0	0.005-0.05	0.005-0.2
S	0.002-0.3	0.002-0.1	0.005-0.3	0.005-0.3		0.005-0.1	0.005-0.1	0.005-0.02	
Sb	0.005-1.5	0.005-0.1	0.01-1.5	0.01-1.5		0.01-0.1	0.01-0.1	0.01-1.5	
Si	0.005-6.0	0.005-0.1	0.01-0.2	0.01-0.2	0.01-0.2	0.01-1.0	0.01-6.0	0.01-0.8	0.01-0.5
Sn	0.002-15.0	0.002-0.1	0.1-15.0	0.1-15.0	0.01-0.4	0.01-2.0	0.01-4.0		0.01-0.03
Te	0.005-0.1	0.005-0.1							
Zn	0.005-45.0	0.005-0.1	0.005-10.0	0.005-2.0	0.05-6.0	1-40.0	1-40.0	0.01-0.2	0.01-0.2
Zr	0.005-0.2	0.005-0.1							

LIMITS OF DETECTION FOR THE GNR METAL LAB PLUS in COPPER BASED MATERIALS