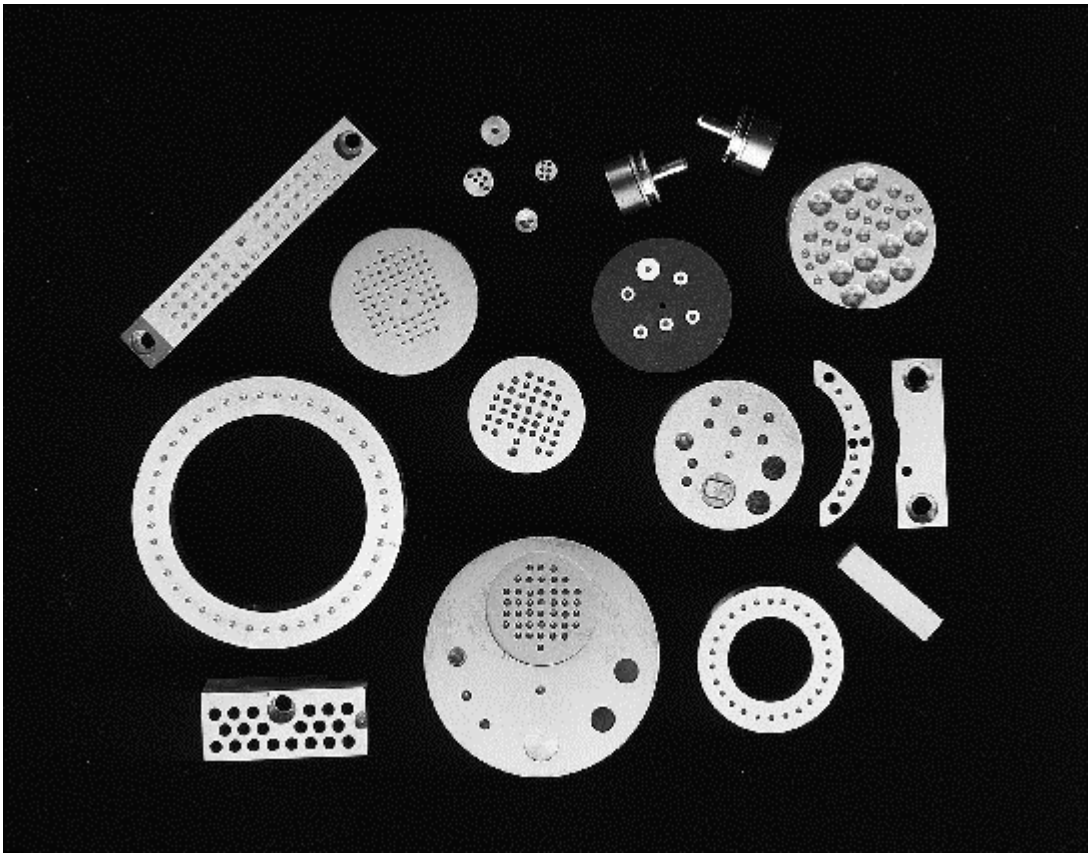
Micro-Analysis Consultants Ltd.



Reference Standards for X-Ray Microanalysis.

The standards supplied are suitable for electron-beam Energy Dispersive or Wavelength Dispersive X-Ray microanalysis systems.

MAC only purchase reference samples from leading suppliers to ensure consistent high quality; the samples are fitted into brass blanks in our own modern factory; diamond polished to a 0.25 micron finish and carbon coated. Every single reference standard is tested with our own Analysis/SEM Equipment before shipping. This attention to detail has gained MAC a reputation for unsurpassed technical excellence during the past decade. Whilst MAC are uncompromising in their approach to quality, they also appreciate the importance of realistic delivery times and economical prices. MAC obtained certification to BS EN ISO 9002:1994 in April 1997.

All the standards are supplied with a certificate of analysis and a large number of the standard materials are traceable to a national institution, as a standard reference material (SRM).

Each block of standards has its own unique number allocated to it, and recorded, and comes with a map for standard identification. We have all of our records back to the first block of standards produced in 1981.

A Faraday Cup, for accurate specimen current measurements, is available as standard on some blocks, and as an optional extra on the others.

We can produce standard blocks in several different materials (Brass, Aluminium, Stainless Steel, Carbon Resin), or sizes, to customers requirements. Carousels, 13mm dia. blocks to fit Pin stubs, and singles of 5mm, 3mm, 2mm are also available.

We have over 300 different standards material to choose from which include rare earth's, SRM's, Compounds and pure elements.

If you require any standard materials that are not contained in our list of material, or if you would like a price quotation on any of our products, please contact us by fax or e-mail.

Standard sets available

Mineral Block

Beryl	$Be_3Al_2Si_6O_{18}$	Anhydrite	$CaSO_4$
Cryolite	Na_3AlF_6	Titanium Monoxide	TiO
Albite	$NaAlSi_3O_8$	Rhodonite	$MnSiO_3$
Magnesium Oxide	MgO	Garnet Spessastine	$Mn_3Al_2Si_3O_{12}$
Fosterite	Mg_2SiO_4	Ferric Oxide	Fe_2O_3
Olivine	$(MgFe)_2SiO_4$	Almandine Garnet	$Fe_3Al_2Si_3O_{12}$
Kyanite	$Al_2O_3SiO_2$	Pyrite	FeS_2
Orthoclase	$KAlSi_3O_8$	Willemite	Zn_2SiO_4
Calcite	$CaCO_3$	Celestine	$SrSO_4$
Fluorite	CaF_2	Zircon	$ZrSiO_4$
Diopside	$Ca(Mg,Fe)Si_2O_6$	Baryte	$BaSO_4$
Augite	$(Ca,Mg,Fe)_2(Si,Al)_2O_6$	Benitoite	$BaTiS_3O_9$
Wollastonite	$CaSiO_3$	Gadolinium Gallium Garnet	$Gd_3Ga_5O_{12}$
Apatite	$Ca_5(PO_4)_3(F,Cl,OH)$	Faraday Cup.	

Available as Type 155-A 25mm diameter
Available as Type 155-B 32mm diameter

Rare Earth (REE-glass) Block

Y,Pr,Dy,Er	La,Sm,Gd,Yb
Ce,Eu,Ho,Tm	Nd,Tb,Lu
All 15.	Glass Blank.

Available as 25mm diameter

Rare Earth Block

LaB_6	NdF_3	TbF_3	ErF_3
LaF_3	SmF_3	$TbSi_2$	Tm
$CeAl_2$	EuF_3	DyF_3	$TmSi_2$
PrF_3	GdF_3	HoF_3	YbF_3
	LuF_3	$LuSi_2$	

Available as Type 255-A 25mm diameter
Available as Type 255-B 32mm diameter

Semiconductor Block

B	Si	Cu_2S	Ge	InSb
C	CaF_2	ZnS	Ag_2S	HgTe
Mg_2Sn	$FeSi_2$	GaP	CdS	PbTe
Al_2SiO_5	FeS_2	GaAs	InP	Bi_2Se_3
		Bi_2Te_3		

Available as Type 355-A 25mm diameter
Available as Type 355-B 32mm diameter

Biological Block

BN	Al	$CaCO_3$	FeS_2	$BaSO_4$
C	SiO_2	$CaSO_4$	Se	Bi
NaCl	KCl	Ti	InP	Faraday Cup.
MgO	KBr	V	BaF_2	

Available as Type 455-A 25mm diameter
Available as Type 455-B 32mm diameter

42 Standard Universal Block

Jade	Fe	SrF_2	InAs	Ir
MgO	FeS_2	Y	Sn	Pt
Al_2O_3	Co	Zr	Sb	Au
Ortho	Ni	Nb	BaF_2	HgTe
Wollas	Cu	Mo	LaB_6	PbTe
Ti	Zn	Rh	$CeAl_2$	Bi
V	GaP	Pd	Hf	
Cr	Ge	Ag	Ta	
Mn	Se	Cd	W	

Available as Type 555-A 25mm diameter
Available as Type 555-B 32mm diameter

45 Standard + FC Universal Block

B	V	GaP	Pd	Hf
BN	Cr	Ge	Ag	Ta
C	Mn	Se	Cd	W
Jade	Fe	SrF_2	InAs	Ir
MgO	FeS_2	Y	Sn	Pt
Al_2O_3	Co	Zr	Sb	Au
Ortho	Ni	Nb	BaF_2	HgTe
Wollas	Cu	Mo	LaB_6	PbTe
Ti	Zn	Rh	$CeAl_2$	Bi

Available as Type 655-A 25mm diameter
Available as Type 655-B 32mm diameter

37 Standard + FC Block

B	Cr	GaP	InAs	Au
Pd	Hf	Bi		
C	Mn	SrF_2	Sn	PbTe
MgO	Fe	Zr	Sb	Bi
Albite	FeS_2	Nb	BaF_2	V
W				
Si	Co	Mo	Hf	Al_2O_3
Ortho	Ni	Pd	Ta	
Wolllas	Cu	Ag	W	
Pt				
Ti	Zn	Cd	Pt	

55 Standard + FC Universal Block

	Be	Si_3N_4	Cr	GaP	
B	SiO_2	Mn	Ge	Ag	Ta
BN	Ortho	Fe	Se	Cd	PbTe
C	KBr	Fe_3C	SrF_2		InAs
Albite	CaF_2	FeS_2	Y	Sn	Re
NaCl	Woll	Co	Zr	Sb	Ir
MgO	Sc		Ni	Nb	BaF_2
Al_2O_3	Ti	Cu	Mo	LaB_6	Au

Si	V	Zn	Rh	CeO_2	HgTe

Available as Type 775-A 25mm diameter
Available as Type 755-B 32mm diameter

Available as Type 855-B 32mm diameter

Standard sets available

Transmission Standards

Thin Foil set

Al	Hf	Ni	Ag	V
Cd	In	Nb	Ta	Y
Co	Fe	Pd	Sn	Zn
Cu	Mg	Pt	Ti	Zr
Au	Mo	Rh	W	316

Rare earth Thin Film set

$CeAl_2$	HoF_3	SmF_3
DyF_3	LaF_3	TbF_3
ErF_3	LuF_3	TmF_3
EuF_3	NdF_3	YbF_3
GdF_3	PrF_3	

Universal Thin Film set

Ag_2Te_3	$CaWO_4$	GaAs	$KAlSi_3O_8$	K453
$BaSO_4$	CdTe	$Gd_3Ga_5O_{12}$	LaB_6	$SrTiO_3$
$Be_3Al_2Si_6O_{18}$	$CeAl_2$	HgTe	$Li_2Ta_2O_6$	TlBr
Bi_2Se_3	Cu_2S	InP	$(Mg.Fe)_2SiO_4$	ZnS
$CaMoO_4$	$FeCr_2O_3$	InSb	Na_3AlF_6	$ZrSiO_4$

Thin Foils for STEM.
We have a selection of 25 high purity thin foils, 0.1mm thick by 3mm diameter to fit into TEM grid holders for use in the STEM mode. They are polished to 3 micron diamond finish, and come in a variety of pure metals.

Thin Film Microanalysis Standards.
We manufacture a set of thin film standards for calibrating energy-dispersive X-Ray detectors for thin film microanalysis. These come on 3mm diameter grids or "holey carbon films" for TEM's. Please ask for details.

Auger Electron Spectroscopy Standards.
Up to 50 reference materials can be mounted in a block of AISI 304 Stainless Steel. With over 180 high purity single elements, together with 31 natural mineral standards to choose from, mounted with Wood's metal, to produce a standard block that is UHV compatible.

Synthetic Compound Standards.

Formulae	Name	Formulae	Name
AgCl	Silver (I) Chloride	InSb	Indium Antimonide
Ag_2S	Silver Sulphide	K	Potassium REE Glass
Ag_2Te_3	Silver Telluride	KBr	Potassium Bromide
Al,Cu,Mg	Dural	KCl	Potassium Chloride
Al,Mg,Si		La	Lanthanum REE Glass
AlSb	Aluminium Antimonide	La_2O_3	Lanthanum (III) Oxide
Al,Si		LaB_6	Lanthanum Hexaboride
Al_2O_3	Aluminium Oxide	LaF_3	Lanthanum Fluoride
AlF_3	Aluminium Fluoride	$Li_2Nb_2O_6$	Lithium Niobate
AlF_3	Aluminium Fluoride anhydrous	$Li_2Ta_2O_6$	Lithium Tantalate
AlN	Aluminium Nitride	LiF	Lithium Fluoride
B_2O_3	Boron Trioxide	LuF_3	Lutetium Fluoride
B_4C	Boron Carbide	$LuSi_2$	Lutetium Silicide
Ba	Barium REE Glass	Mg,Al,Mn,Zn	Magnesium Alloy
BaF_2	Barium Fluoride	Mg_2Sn	Magnesium Tin Alloy
$BaTiO_3$	Barium Titanate	$MgAl_2O_4$	Spinel
Bi_2Se_3	Bismuth Selenide	MgF_2	Magnesium Fluoride
Bi_2Te_3	Bismuth Telluride	MgO	Periclase
BN	Boron Nitride	MnF_2	Manganese Fluoride
$CaMoO_4$	Calcium Molybdate	$MnTiO_3$	Manganese Titanate
$CaWO_4$	Calcium Tungstate	MoO_3	Molybdenum (V1) Oxide
CdS	Cadmium Sulphide	MoS_2	Molybdenum (IV) Sulphide
CdSe	Cadmium Selenide	Na_3AlF_6	Cryolite
CdTe	Cadmium Telluride	NaCl	Sodium Chloride

$CeAl_2$	Cerium Alumate	NaF	Sodium Fluoride
CeF_2	Cerium (III) Fluoride	Nb_2O_5	Niobium Oxide
CeO_2	Cerium (IV) Oxide	Nd_2O_3	Neodymium Oxide
Co_3O_4	Cobalt (II,III) Oxide	Nd	Neodymium 12mm pcs 99.9%
$COSi_2$	Cobalt Silicide	NdF_3	Neodymium Fluoride
Cr_3C	Chromium Carbide	NiAs	Nickel Arsenide
CrN	Chromium (III) Nitride	NiO	Nickel Oxide
Cr_2O_3	Chromium Oxide	Ni_2Si	Nickel Silicide
Cs	Caesium REE Glass	$NiSO_4$	Nickel Sulphate
CsBr	Caesium Bromide	NiP	Nickel Phosphide
CsI	Caesium Iodide	PbF_2	Lead Fluoride
CuI	Copper Iodide(Powder)	PbO	Lead Oxide
CuO	Copper Oxide	PbS	Lead Sulphide
CuS	Copper Sulphide	PbS	Galena
$CuSO_4$	Copper Sulphate	PbSe	Lead Selenide
DyF_3	Dysprosium Fluoride	PbTe	Lead Telluride
Er	Erbium REE Glass	Pr	Praseodymium REE Glass
ErF_3	Erbium Fluoride	PrF_3	Praseodymium Fluoride
Eu_2O_3	Europium (III) Oxide	Rb	Rubidium REE Glass
EuF_3	Europium Fluoride	RbBr	Rubidium Bromide
Fe_2O_3	Hematite	RbI	Rubidium Iodide
Fe_2P	Iron Phosphide	Sb_2S_3	Antimony (III) Sulphide
Fe_3C	Iron Carbide	Si_3N_4	Silicon Nitride
FeO	Ferrous Oxide	SiC	Silicon Carbide
FeS	Synthetic Troilite	SiO_2	Silicon Oxide
$FeSi_2$	Iron Silicide	Sm_2O_3	Samarium Oxide
Ga_2Se_3	Gallium Selenide	SmF_3	Samarium Fluoride
GaAs	Gallium Arsenide	SnO_2	Tin Oxide
GaN	Gallium (III) Nitride	Sr	Strontium REE Glass
GaP	Gallium Phosphide	SrF_2	Strontium Fluoride
GaS	Gallium Sulphide	$SrTiO_3$	Strontium Titanate
GaSb	Gallium Antimonide	Ta_2O_5	Tantalum Oxide
Gd_2O_3	Gadolinium (III) Oxide	TaN	Tantalum Nitride
$Gd_3Ga_5O_{12}$	Gadolinium Gallium Garnet	$TaSi_2$	Tantalum Silicide
GdF_3	Gadolinium Fluoride	TbF_3	Terbium Fluoride
HfO_2	Hafnium Oxide	$TbSi_2$	Terbium Silicate
HgS	Mercury Sulphide (black)	TeO_2	Telluride
HgS	Mercury Sulphide (Red)	Th	Thorium Ree-Glass
HgTe	Mercury Telluride	ThO_2	Thorium Oxide
HoF_3	Holmium Fluoride	TiC (325 mesh) 98%	Titanium Carbide
In_2Se_3	Indium Selenide	TiC (solid) 99.5%	Titanium Carbide
In_2Te_3	Indium Telluride	TiN	Titanium Nitride 99.5%
InAs	Indium Arsenide	TiO	Titanium Monoxide
InP	Indium Phosphide	TiO_2	Titanium (IV) Oxide
InS	Indium Sulphide	$TiSi_2$	Titanium (IV) Sulphide

Synthetic Compound Standards

Formulae	Name	Formulae	Name
TlBr	Thallium Bromide	$Y_3Al_5O_{12}$	Yttrium Aluminium Garnet
TlI	Thallium Iodide	YbF_3	Ytterbium Fluoride
Tm	Thulium Ingot 99.9%	ZnS	Zinc Sulphide
$TmSi_2$	Thulium Silicide	ZnSe	Zinc Selenide
U	Uranium REE-Glass	ZnTe	Zinc Telluride
UO_2	Uranium Oxide	ZrB_2	Zirconium Boride
VC	Vanadium Carbide	ZrC	Zirconium Carbide (Powder)
V_2O_5	Vanadium (V) Oxide	ZrN	Zirconium Nitride
WC	Tungsten Carbide	ZrO_2	Zirconium Oxide
WSi_2	Tungsten Silicide	ZrO_2	Zirconium Oxide Yttria Slab 99.5%
WTi	W 95%; Ti 5%;	ZrO_2	Zirconium Oxide Tablets 99.995%
Y_2O_3	Yttrium Oxide		REE Free Glass Blank

Pure Standards

Formulae	Name	Formulae	Name
Ag	Silver	Ni	Nickel
Al	Aluminium	Os	Osmium
As	Arsenic	Pb	Lead (Very soft material)
Au	Gold	Pd	Palladium
B	Boron	Pt	Platinum
Be	Beryllium	Re	Rhenium

Bi	Bismuth	Rh	Rhodium
C	Carbon	Ru	Ruthenium
Cd	Cadmium	Sb	Antimony
Co	Cobalt	Sc	Scandium
Cr	Chromium	Se	Selenium
Cu	Copper	Si	Silicon
Fe	Iron	Sn	Tin
Gd	Gadolinium	Ta	Tantalum
Ge	Germanium	Te	Tellurium
Hf	Hafnium	Ti	Titanium
In	Indium (Very soft material)	Tl	Thallium (Very soft material)
Ir	Iridium	Tm	Thulium
La	Lanthanum	V	Vanadium
Mg	Magnesium	W	Tungsten
Mn	Manganese	Y	Yttrium
Mo	Molybdenum	Zn	Zinc
Nb	Niobium	Zr	Zirconium

Natural Mineral Standards.

Formulae	Name	Formulae	Name
$NaAlSi_3O_8$	Albite	$Ca(Mg,Fe)Si_2O_6$	Diopside
$Fe_3Al_2Si_3O_{12}$	Almandine Garnet	$CaMg(CO_3)_2$	Dolomite
$Ca_3Fe_2(SiO_4)_3$	Andradite	CaF_2	Fluorite
$CaSO_4$	Anhydrite	Mg_2SiO_4	Forsterite
$Ca_5(PO_4)_3(F,Cl,OH)$	Apatite	$Mn_3Al_2Si_3O_{12}$	Garnet Spessartine
$(Ca,Mg,Fe)_2(SiAl)_2O_6$	Augite	$NaAlSi_2O_6$	Jadeite
$Cu_3(CO_3)_2(OH)_2$	Azurite	Al_2SiO_5	Kyanite
$BaSO_4$	Baryte (Cumbria)	Fe_3O_4	Magnetite
$BaSO_4$	Baryte (Shropshire)	$Cu_2CO_3(OH)_2$	Malachite
$BaTiS_3O_9$	Benitoite	$(Mg.Fe)_2SiO_4$	Olivine
$Be_3Al_2Si_6O_{18}$	Beryl	$KAlSi_3O_8$	Orthoclase
$CaCO_3$	Calcite	FeS_2	Pyrite
$SrSO_4$	Celestine	$MnSiO_3$	Rhodonite
$BaAl_2Si_2O_8$	Celsian	$CaTiSiO_5$	Sphene
$FeCr_2O_4$	Chromite	Zn_2SiO_4	Willemite
Cu_2O	Cuprite	$CaSiO_3$	Wollastonite
Cu_2S	Chalcocite	$ZrSiO_4$	Zircon
$CuFeS_2$	Chalcopyrite		

NATURAL MINERALS

Formulae	Name	Locality	Notes
* Certificate of analysis	* Natural History Museum		
$CaAl_2Si_2O_8$	Anorthite Powder BM 1921, 618	Miyakejima Iyu Province, Japan	Supplier: *NHM *C.O.A.
$K(Mg,Fe)_3AlSi_3O_{10}(OH)_2$	Biotite Powder	Northern Okanogan Highlands. Washington State USA	Supplier: *NHM *C.O.A .
$PbCrO_4$	Crocoite Powder	Australia	Supplier: *NHM Theoretical values
PbS	Galena	Cumbria	*C.O.A.
$Ca_2,(Mg,Fe,Al)_5(Al,Si)_8O_{22}(OH)_2$	Hornblende (Amphibole)	Kragero, Norway	Supplier: Midland Mineral. Typical analysis.
$FeTiO_3$	Ilmenite Powder	Travancore, India	Supplier: *NHM Theoretical Values .
SiTiAlFeMgCaNaKO	Kaersutite KK1-15	Kakanui Nephelinitic, Breccia, New Zealand	Supplier: *NHM *C.O.A.
$AlSi_2O_6$	Pollucite		Supplier: *NHM *C.O.A.

NATURAL MINERALS

(NO CERTIFICATE OF ANALYSIS)

Formulae	Name	Locality	Notes
$CaAl_2Si_2O_8$	Anorthite	Kragero, Norway	Supplier: Midland Minerals
$(Mn,Ca)SiO_3$	Bustamite	Meldon Quarry, Okehampton	Supplier: Midland Minerals

		Devon UK	
SnO_2	Cassiterite (Tin Oxide)	Cligga Mine, Perranporth, Cornwall.	Supplier: Midland Minerals
$SrSO_4$	Celestine	. Yate, Gloucestershire.	Supplier: Midland Minerals
$CuFeS_2$	Chalcopyrite	Ontario, Canada..	Supplier: Midland Minerals
$FeCr_2O_4$	Chromite	Tobacco Root Mtn. Shendan, Montana. USA.	Supplier: Midland Minerals
CoAsS	Cobaltite	Espanola, Ontario, Canada.	Supplier: Midland Minerals
	Chrome Diopside	Minas Gerais, Brazil	Supplier: Midland Minerals
$FeTiO_3$	Ilmenite	St Jean, Quebec, Canada	Supplier: Midland Minerals
$KalSi_3O_6$	Microcline	Manqualda, Beira Alta, Portugal	Supplier: Midland Minerals
NiS	Millerite (Nickle Sulphide)	(Thompson open pit) Thompson, Manitoba, Canada.)	Supplier: Midland Minerals
(Ce,La,Th NdY)PO_4	Monazite	New Mexico USA	Supplier: Midland Minerals
(Ce,La,Th)PO_4	Monazite Powder		Supplier: Natural History Museum
$KAl_2(AlSi_3O_{10})$	Muscovite	Little Scatwell, Invernesshire, Scotland	Supplier: Midland Minerals
SiO_2	Obsidian	Millard County, Utah, USA	Supplier: Midland Minerals
ZnS	Sphalerite	Snailbeach Mine, Minsterley, Shropshire.	Supplier: Midland Minerals
$LiAlSi_2O_6$	Spodumene (Lithium Aluminium Silicate)	Kunar, Afghanistan	Supplier: Midland Minerals
$Na_4AlBe(Si_4O_{12})C1$	Tugtupite	Illaussaq Tunugdliarfik Fjord, Greenland	Supplier: Midland Minerals
Sb_2O_3	Valentinite (Antimony Oxide)	Apache Mine, Gila Co. Arizona. USA.	Supplier: Midland Minerals

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MBH/NIST/NBS/BAS Material

Formulae	Name	Notes
NIST/NBS Standards		
SRM 101g	Cr 18%; Ni 10%	AISI 304L Stainless Steel
SRM C1287	High Alloy Steel	AISI 310 Mod. ACI HK
SRM 160b	Cr 19%; Ni 12%; Mo 3%	AISI 316 Stainless Steel
SRM 121d	Cr 17%; Ni 11%; Ti 0.3%	AISI 321 Stainless Steel
SRM 343a	Cr 16%; Ni 2%	AISI 431 Stainless Steel
SRM 361		AISI 4340 Steel
SRM 132b		AISI M-2 Tool Steel
SRM 478	Cu 73%; Zn 27%	Cartridge Brass
SRM 481	Au/Ag Set of 6	Gold-Silver wires
SRM 482	Au/Cu Set of 6	Gold-Copper wires
SRM 710	Soda-Lime-Silica glass	
SRM 1872	Set of three glasses	K-453; K-491; K-968
SRM 1134	High Silicon Steel	
SRM 1160	Ni 80% Mo 4% Fe 14%	Electronic & Magnetic alloy
SRM 1276a	Cu 67.5%; Ni 30.8%	CDA 715
SRM C2400	High Alloy Steel	ACI 17/4 PH
SRM 872	Phosphor Bronze B2	CDA 544
SRM 179	High Silicon Steel	
SRM 480	W 78.5% Mo 21.5%	Tungsten 20% Molybdenum Alloy
BAS EURO Standards.		

481-1	Cast Iron	
281-1	Cr 18.7%; Ni 9.3%	Highly alloyed steel
553-1	High Carbon Fe-Cr	B.C.S. No. 204/4
B.C.S. Stainless Steel Spectroscopic Standards		
S.S. No. 62	Austenitic	B.S. 970 En 58D
S.S. No. 63	Austenitic	B.S. 970 En 58A & 58E
S.S. No. 72	Ferritic	
S.S. No. 461	Austenitic	
S.S. No. 464	Austenitic	
S.S. No. 465	Austenitic	
S.S. No. 466	Austenitic	
S.S.-CRM No. 474		B.S. 970, type 317
S.S. No. 495/1	13% Manganese steel	Containing Ni & Cr
B.C.S. No. 204/4	High Carbon Ferro-Chromium	
BCS No. 179/2	High-Tensile Brass	
BCS/SS-CRM No 470	Ferritic Stainless Steel	
BCS/SS-CRM No 355	Tin Ore Sn 31.42%	MBH#206A355
Assorted Standards		
ISO 3585	Borosilicate 3.3 glass	Duran glass
AISI 316	Stainless Steel	EN58J Wire.
AISI 304L	Stainless Steel	From Advent (1mm wire)
Glass No 1360-3		
B.S.153	AISI Grade 430 F Stainless Steel	
B.S. 154	Stainless Steel 430FR (High Silicon)	
M.B.H. Standards.		
27X14386	Ni; Cr; Co; Mo Cast.	
11X S/1-CR1	Corr.Resist Cast Iron	Chill cast.
210X11775	Ni; Co; Cr; Al; Ti Cast.	
212NN50.01	Ni Rem; Cu 30%; Sn 10%; Fe 4%.	BNF.
31XWSB1	Silicon Brass Cast.	
59XG77J1	Al; Zn; Mg; Cu Cast.	
81XPA12.5	Sb 12.6%; Pb 87.4%	
111X12670	Cr 19.31%; W 10.1%	Cobalt/Tungsten Cast.
204JC	Fluorspar	Swedish Inst for Metals Res.
206ABL5	Uranium Ore. U 7.09%	Canada Centre for Mineral and Energy Technology
206A355	Tin Ore. Sn 31.42%	BCS-CRM No. 355
13MBS89	Martensitic Stainless Steel	AISI 410
13MBS91E	Martensitic Stainless Steel	AISI 430
13MBS186A	High Alloy Stainless Steel	INVAR 36
14XHS1	High Speed Steel	Tool steel T-1
(37MBS314B) (37MBS360A) (37MBS630	Copper Alloy	CDA 314, CDA 360, CDA 630
14HYT2/2	Steel	
Ref 0683	Bronze (85c,5Sn,5Pb,5Zn)	
C13X170020	Austentic Stainless Steel	
C55XG02D60	Aluminium/Silicon/Copper	Chippings
(55XG900J5) (55XG26H5) (55XG04H8) (55XG04H6)	Aluminium/Silicon/Copper	Cast
43XZ2	Zinc/Aluminium/Copper	Cast
55XG900JB	Aluminium/Silicon/Copper	Cast
58XG40H9	Aluminium/Zinc	Cast
FCr-3-1		
14M B.S. 190	High Manganese Stainless Steel	
13X 18001	Austenitic Stainless Steel	Cast
(65XMGA5) (65X MGA1) (65XMGA3)	Manganese/Aluminium/Zinc	Cast
54X G231 H4		

REFURBISHMENT SERVICE

FULL DIAMOND POLISH

CARBON COATING

RE-CHECKING

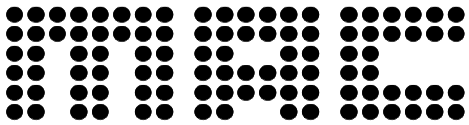
CERTIFICATE of ANALYSIS

Ordering Information.

Please supply the following information when ordering:

1. Make and Model of instrument in which the standards are to be used.
2. Specify the quantity and standard materials required.
3. The outer diameter of the block or individual standard required.
4. The inner diameter of the block or standard if appropriate.
5. The thickness of the block. (Normally 5mm used).
6. The material of the block to be used. (Normally Brass).
7. Whether a Faraday Cup is required.
8. Any limitation of the X and Y movements of the stage.
9. Standard Block type number where possible.
10. Any additional requirements.

Delivery is normally 3-4 weeks for a full custom block.
Some standard blocks are available for immediate delivery.



Micro-Analysis Consultants Ltd.

Unit 3, Edison Road, St. Ives Industrial Estate,
St. Ives, Cambridgeshire.
PE27 3LF. UK.
Telephone: +44(0)1480 462626.
Fax: +44(0)1480 462901.
e-mail: standards@dial.pipex.com
http:/www.macstandards.co.uk
VAT Reg. No: GB 359 8446 01
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