

MATERIAL SPECIFICATIONS

FINE CERAMICS		ALUMINA					ZIRCONIA			ELECTROSTATIC DISSIPATIVE
Properties	Units	Al ₂ O ₃ 99.7%	Al ₂ O ₃ 99.99%	Polycrystalline Ruby	Zirconia Toughened Alumina	Zirconia Toughened Alumina	Zirconia ZrO ₂ -3Y	Zirconia Alumina	Zirconia Alumina	ESD
SPT Denomination		A	C	R	CT	AZ	Z	ZF	AZO	ZESD
Density	g/cm ³	3.9	3.98	3.9	4.0	4.25	6.0	6.0	5.5	4.4
Color		White	White (Translucent available)	Red (Translucent available)	White	White	Ivory or Anthracite	White	White	Anthracite
Flexural Strength Typical	MPa	310	610	520	550	985	1'350	1'400	2000	--
Hardness	HV 1	1'800	2'100	2'200	2'050	2'000	1'300	1'300	1'500	1'100
Grain Size	µm	< 8	< 1	< 2	< 1	< 0.9	< 0.6	< 0.6	< 0.5	--
Characteristics										Electrostatic Dissipative 10 ⁸ Ω * cm

SPT Does not guarantee results or warrant that materials are suitable for any particular purpose. Material selection and testing is the responsibility of the user.

Revised: April/09

SPT Roth Ltd

Werkstrasse 28,
CH-3250 Lyss, Switzerland
Tel : +41 32 387 80 80
Fax : +41 32 387 80 88
E-Mail : cim@sptroth.com

Small Precision Tools Inc

1330 Clegg Street,
Petaluma, CA 94954, USA
Tel : +1 707 765 4545
Fax : +1 707 778 2271
E-Mail : cim@sptca.com

SPT Asia Pte Ltd

970 Toa Payoh North, #07-25/26,
Singapore 318992
Tel : +65 6253 5577
Fax : +65 6250 2725
E-Mail : cim@sptasia.com

Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel : +86 510 8516 1968
Fax : +86 510 8516 5233
E-Mail : cim@sptchina.com



www.smallprecisiontools.com

