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ZIBO HUAO NEW MATERIALS CO.,LTD

淄博华澳新材料有限公司

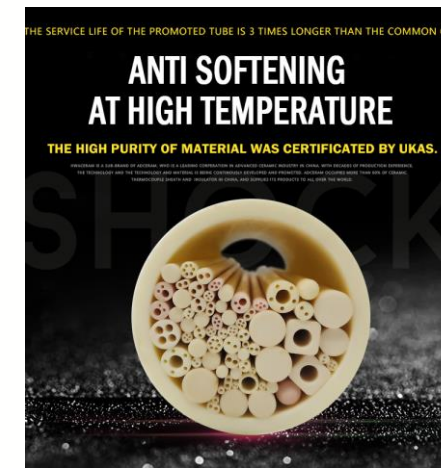
Alumina Ceramic | Heat Treat Series | Mullite | Zirconia | Silicon Carbide | Boron Nitride | Silicon Nitride | Others

Delivering excellence in refractory, heat treat industrial, wear resistance, military products, agriculture, mineral, etc.

Products data sheet

Material		Alumina					Magnesium Oxide	Mullite	Zirconia	Silicon Nitride	Recrystallization Silicon carbide	Silicon Nitride bonded Silicon Carbide	Silicon Carbide	Aluminium Nitride	Boron Nitride
Properties	Units	AL997	AL995	AL99	AL95	AL60	MgO	—	ZrO ₂	Si ₃ N ₄	RSiC	NSiC	SiSiC	AlN	HBN
Ingredient	—	99.70%	99.50%	99.00%	95%	60%	—	—	—	—	—	—	—	95%<	99.2%<
Color	—	Ivory	Ivory	Ivory	Ivory & White	White	White	White	White	Dark Grey	Black	Gray	Dark Grey	Hoary	White
Permeability	—	Gas-tight	Gas-tight	Gas-tight	Gas-tight	Gas-tight	Gas-tight	Gas-tight	Gas-tight	Gas-tight	—	—	Gas-tight	Gas-tight	≤0.1
Density	g/cm ³	3.94	3.9	3.8	3.75	3	3.58	2.6	5.89	3.1	2.7	2.8	3.02	3.30≤	2.0-2.2
Hardness	Mohs Scale	9	9	9	8.8	7.5	6	8	8.5	9.4	9.5	9	9.66	8	2
Water Absorption	—	≤0.2	≤0.2%	≤0.2%	≤0.2%	≤0.2%	0	0	0	0	0	0	0	0	0
Flexural Strength (Typical 20℃)	Mpa	375	370	340	304	205	140	120	1200	150	90	180	250	365-420	30
Compressive Strength (Typical 20℃)	Mpa	2300	2300	2210	1910	1820	550	500	5700	490	600	650	160	2100	58
Coefficient of Thermal Expansion (25℃ to 800℃)	10 ⁻⁶ /℃	7.6	7.6	7.6	7.6	7.1	13	5.6	10	2.9	4.7	5	4.5	4.8	1.5
Dielectric Strength (5mm Thickness)	AC-kv/mm	10	10	10	10	9	—	10.2	—	—	—	—	—	17	—
Dielectric Loss 25℃@1MHz	—	<0.0001	<0.0001	0.0006	0.0004	0.0007	—	0.002	0.001	0.001-0.1	—	—	—	0.00038	0.00025
Dielectric Constant	25° C@1MHz	9.8	9.7	9.5	9.2	8.6	—	6	29	8.3	—	—	—	9	4
Volume Resistivity (20℃) (300℃)	Ω·cm ³	>10 ¹⁴ 2*10 ¹²	>10 ¹⁴ 2*10 ¹²	>10 ¹⁴ 4*10 ¹¹	>10 ¹⁴ 2*10 ¹¹	>10 ¹⁴ >10 ¹³	>10 ¹⁴ —	>10 ¹⁴ 5*10 ¹²	>10 ¹³ 5*10 ⁸	10 ¹¹ -10 ¹² 4*10 ⁸	—	—	—	>10 ¹³ —	10 ⁶ -10 ¹⁴ —
Long-term operating temperature	℃	1700	1650	1600	1400	1100	2300	1550	2200	1300	1650	1450	1380	2200-2300	air 900 inert gas 2100 high vacuum 1900
Thermal Conductivity (25℃)	W/m·K	35	35	34	20	16	36	3.6	3	9.46	23	15	82	175≤	30

Typical products



POPULAR SIZE

Alumina Single Bore Tube / Furnace Tube

OD*ID (mm)	TYPE & LENGTH	OD*ID (mm)	TYPE & LENGTH	OD*ID (mm)	TYPE & LENGTH
0.7*0.3	99AL/995AL ≤1000mm	7*4.5	95AL/99AL/995AL ≤2500mm	30*25	95AL/99AL/995AL ≤2500mm
0.8*0.4		8*4		40*30	
0.9*0.4		9*6		50*40	
1*0.5		10*4		60*50	
1.1*0.6		10*7		70*60	95AL/99AL/995AL ≤2000mm
1.2*0.6		12*4		80*70	
1.3*0.7		12*8		90*80	
1.4*0.8		14*4		100*90	
1.5*0.8	95AL/99AL/995AL ≤2500mm	14*10		110*100	95AL/99AL/995AL ≤1000mm
2*1		15*11		120*110	
3*2		16*12		130*120	
4*3		18*14		140*130	
5*3.5		20*15		150*138	95AL/99AL/995AL ≤1000mm
6*4		25*19		200*185	

Ceramic Ignition Electrode Tube

TYPE	OD*ID (mm)	LENGTH (Unglazed)	LENGTH (Glazed)	ILLUSTRATION
95AL/99AL	6*4	≤2000mm	≤1600mm	
	8*3.5-4			
	10*3.5-4			
	12*4			
	12*5.5			
	14*4			
	14*5.5			



POPULAR SIZE

Alumina Shaped Tube

TYPE	SIZE	THICKNESS	LENGTH	ILLUSTRATION
Electrode Tube for Corona Treater	15*15	2mm-3mm	≤2000mm	
	16*12	2mm-3mm	≤2000mm	
Kiln Supporter	10*10*10	—	≤2000mm	
	10*10	—	≤2000mm	

Please provide diameter and tolerance data when purchasing, so that we can choose a suitable product for you.

POPULAR SIZE

Alumina Bushing Tube

OD*ID (mm)	TYPE & LENGTH	OD*ID (mm)	TYPE & LENGTH	OD*ID (mm)	TYPE & LENGTH
5*3	995AL≤1500mm	20*15	95AL/99AL/995AL ≤2500mm	50*42	95AL/99AL/995AL ≤2000mm
6*4	95AL/99AL/995AL ≤2500mm	22*16		60*50	
8*5		24*18		70*60	
10*7		25*19		80*70	
12*8		26*20		90*80	
15*10		27*21		100*90	
15*11		28*22		110*100	
16*12		30*23		120*111	
18*13		40*42		135*122	

ADceram provides other more specifications of the bushing tube. Please contact us for details.

Alumina Twin Bores Tube

OD*BD (mm)	TYPE&LENGTH	OD*BD (mm)	TYPE&LENGTH	OD*BD (mm)	TYPE&LENGTH
1*0.3	99AL/995AL ≤1500mm	3.5*0.8	95AL/99AL/995A L ≤2500mm	6*1.8	95AL/99AL/995A L ≤2500mm
1.2*0.3		3.5*1		6.5*1.8	
1.4*0.4		4*1.2		6.5*2	
1.5*0.4	95AL/99AL/995A L ≤2500mm	4*1.5		8*2	
2*0.3		4.5*1.2		8*2.4	
2*0.5		5*1.2		10*2.7	
2*0.6		5*1.5		16*4.9	
2.5*0.7		5.5*1.5			
3*0.7		5.5*1.8			

POPULAR SIZE

Alumina 4 Bores Tube

OD*BD (mm)	TYPE&LENGTH	OD*BD (mm)	TYPE&LENGTH	OD*BD (mm)	TYPE&LENGTH
1.5*0.3	95AL/99AL/995A L ≤2500mm	4*1	95AL/99AL/995A L ≤2500mm	6.5*1.4	95AL/99AL/995A L ≤2500mm
2*0.4		4*1.3		8*2	
2.5*0.6		4.5*1.2		10*3	
3*0.8		5*1.2		12*3.9	
3.5*0.8		5.5*1.3		14*3.9	
3.5*1		6*1.3		16*4	

Alumina Shaped Multi-bore Tube

OD*BD (mm)	TYPE	OD*BD (mm)	TYPE	OD*BD (mm)	TYPE
2.8-2.1*0.8	Oval Section	6*0.7	10 & 11 Bores	4.5*0.8	6 Bores
3.2-2.4*0.8	Oval Section	6.5*0.7	10 & 11 Bores	6*0.8	6 Bores

Alumina Ceramic Solid Rod

DIA. (mm)	TYPE & LENGTH	DIA. (mm)	TYPE & LENGTH	DIA. (mm)	TYPE & LENGTH
0.5	99AL/995AL ≤1000mm	6	95AL/99AL /995AL ≤2500mm	25	99AL/995AL ≤1000mm
0.8		8		30	
1		10		35	
2	95AL/99AL /995AL ≤2500mm	12		50	
3		16		55	99AL/995AL ≤500mm
4		18		65	
5		20		80	

POPULAR SIZE

Alumina Ceramic Arc Crucible / Cone Crucible

CAPACITY	CAPACITY	TOP OD * H	TOP OD * H	TOP OD * H	TOP OD * H
2500cc	150cc	170*220	120*115	100*128	82*125
2000cc	100cc	170*170	115*145	100*100	82*110
1500cc	50cc	160*170	115*100	98*175	80*80
1000cc	30cc	150*140	115*130	91*118	80*85
750cc	25cc	150*120	112*160	90*105	76*68
500cc	20cc	125*165	105*150	90*100	75*125
400cc	15cc	125*135	105*165	85*115	75*105
300cc	10cc	125*110	103*145	85*90	70*100
250cc	5cc	120*130	100*175	85*80	42*41
200cc	2cc	120*120	100*140	83*90	40*35

Alumina Cylindrical Crucible

OD*H mm	OD*H mm	OD*H mm	OD*H mm	OD*H mm	OD*H mm
115*200	84*160	75*45	70*45	55*50	40*95
115*155	81*30	75*25	68*23	55*45	40*80
100*100	80*135	73*95	65*45	55*40	40*40
90*60	80*80	72*148	65*25	50*100	40*35
85*60	80*60	70*200	60*100	50*35	30*30
85*55	80*50	70*120	60*60	50*25	25*25
85*50	75*92	70*92	60*45	48*120	20*25
85*45	75*70	70*60	58*45	45*35	15.4*20
85*35	75*65	70*55	55*90	45*26	
85*30	75*50	70*50	55*57	43*100	

Alumina Rectangled Crucible / Saggar

L*W*H mm	L*W*H mm	L*W*H mm	L*W*H mm	L*W*H mm	L*W*H mm	L*W*H mm
228*101*76	155*120*55	140*70*33	105*105*26	100*64*32	86*68*40	75*75*15
203*102*25	150*150*150	125*125*25	105*105*32	100*45*19	87*62*40	72*52*50
202*107*50	150*150*70	120*80*40	105*85*35	100*40*18	85*85*30	71*71*36
180*70*60	150*80*26.5	120*76*40	104*104*38	100*30*25	85*71*46	70*70*40
180*70*40	150*69*19	115*115*28	100*100*55	100*30*20	85*61*31	70*70*30
160*80*35	150*65*21	110*110*28	100*100*25	100*20*15	82*42*23	65*65*30
160*75*60	145*145*145	110*80*40	100*100*18	97*81*34	81*34*33	65*65*30
160*75*55	140*140*90	108*108*35	100*85*40	95*95*40	79*34*33	64*64*40
160*70*50	140*140*60	108*108*26	100*72*50	90*90*46	75*75*40	60*30*30
160*70*40	140*140*50	107*107*42	100*72*32	90*65*30	75*75*33	54*38*20

THANK YOU

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Zibo Huao New Materials Co., Ltd.

We are specially engaged in providing, process and sales of high-alumina wear-resistant products, good heat resistant products, abrasive resistant equipment and machines.

