

# ATCERA Alumina Product Catalogue



One Stop Service of Advanced Ceramic and Quartz Products

# Company Introduction

Hunan ATCERA Co. Ltd.



HUNAN ATCERA CO.,LTD is founded in 2003, located in Changsha, Hunan, China. At present, ATCERA has established three automatic production lines, with around 150 employees, including more than 20 technical engineers. the main products include ceramic substrate, ceramic tube & rod, ceramic ball, ceramic crucible, ceramic shaft, ceramic needle, ceramic tube sleeve, ceramic plunger, ceramic arm, ceramic valve and various quartz products.

During the past 20+ years, ATCERA has produced more than 2000 types precision ceramic products. Besides our own factory, we have more than 20 collaboration factories, focus on the material of alumina ceramics, zirconia ceramics, silicon carbide ceramics, boron carbide ceramics, silicon nitride ceramics, boron nitride ceramics, quartz, etc., and aim to provide one-stop service for your advanced ceramic product request.

[www.atcera.com](http://www.atcera.com)

# Content-Quartz Product

Hunan ATCERA Co. Ltd.

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# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Features

- ◆ Stable structure, good corrosion resistance, no contamination to testing samples
- ◆ High temperature resistance, working temperature up to 1800°C
- ◆ Good thermal shock resistance



## Specification

Items	Unit	Value		
Alumina Purity	%	99	99.5	99.9
Density	g/cm <sup>3</sup>	3.88	3.91	3.93
Elastic Modulus	GPa	350	355	359
Poisson's ratio	/	0.23	0.23	0.22
Compressive strength	MPa	2500	2550	2558
Bending strength	MPa	300	310	315
Vickers Hardness	GPa	13.8	16	18.5
Maximum working temperature	°C	1700	1750	1770
Thermal conductivity	W/m*K	32	35	38
Thermal expansion coefficient	/°C	7*10 <sup>-6</sup>	7.5*10 <sup>-6</sup>	8.1*10 <sup>-6</sup>
Specific resistance	Ohm*cm	1*10 <sup>14</sup>	1*10 <sup>14</sup>	1.2*10 <sup>14</sup>
Dielectric strength	KV/mm	22	23.2	23.8

**Note:** The parameters above may have slight deviations due to the difference in forming and sintering processes.

## Applications

- ◆ material analysis, to burn or melt metal and non-metallic material samples.
- ◆ metal material melting process in metallurgical industry

# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Dimension (the unit is mm unless otherwise noted)

### ARC Conical Alumina Crucible

Model	Volume (ml)	TOP diameter	Bottom diameter	Height
TE-AC-001	1	15	10	7
TE-AC-002	1.5	20	15	9
TE-AC-003	2.5	37	35	5.5
TE-AC-003-1	3	20	16	17
TE-AC-004	3	17	11	25
TE-AC-005	3	20	16	17
TE-AC-006	4	25	14	20
TE-AC-006-1	4	22	14	24
TE-AC-006-2	4	25	19	18
TE-AC-007	4	22	14	24
TE-AC-008	4	25	19	18
TE-AC-008-1	5	26	18	21
TE-AC-009	5	25	18	22
TE-AC-009-1	5	26	18	21
TE-AC-010	7	28	21	13
TE-AC-010-1	8	24	16	32
TE-AC-011	10	28	20	27
TE-AC-011-1	10	30	20	28
TE-AC-011-2	10	29	18	34
TE-AC-012	10	30	18	30
TE-AC-013	9	38	28	17
TE-AC-013-1	10	28	20	32
TE-AC-013-2	15	31	21	35
TE-AC-014	10	30	20	28
TE-AC-015	15	32	21	35
TE-AC-016	15	35	21	30
TE-AC-016-1	10	29	18	34
TE-AC-016-2	20	36	23	41
TE-AC-017	19	34	20	38
TE-AC-017-1	20	36	23	41
TE-AC-018	20	34	24	39
TE-AC-018-1	20	38	24	35
TE-AC-019	20	35	18	35
TE-AC-020	20	38	20	29
TE-AC-021	20	38	24	35
TE-AC-022	25	36	22	42
TE-AC-023	25	39	24	38

### ARC Conical Alumina Crucible

Model	Volume (ml)	TOP diameter	Bottom diameter	Height
TE-AC-023-1	30	38	25	45
TE-AC-023-2	25	39	24	35
TE-AC-023-3	30	45	27	39
TE-AC-023-4	40	46	30	40
TE-AC-023-5	30	38	25	45
TE-AC-024	30	37	24	45
TE-AC-025	30	39	24	49
TE-AC-026	30	45	27	39
TE-AC-027	30	46	25	40
TE-AC-027-1	40	45	30	46
TE-AC-028	40	46	30	40
TE-AC-029	50	52	30	50
TE-AC-029-1	50	48	30	52
TE-AC-030	50	52	32	50
TE-AC-030-1	50	50	30	48
TE-AC-030-2	70	56	35	56
TE-AC-030-3	50	48	30	52
TE-AC-031	50	50	30	54
TE-AC-032	50	50	30	48
TE-AC-033	50	56	30	45
TE-AC-034	70	56	35	56
TE-AC-035	90	55	48	53
TE-AC-036	100	57	37	68
TE-AC-037	100	61	36	54
TE-AC-037-1	100	58	35	68
TE-AC-038	100	61	36	60
TE-AC-039	100	62	40	53
TE-AC-040	120	66	30	55
TE-AC-040-2	100	61	31	60
TE-AC-040-3	100	58	35	68
TE-AC-041	120	63	33	73
TE-AC-042	140	55	48	72
TE-AC-043	150	68	42	80
TE-AC-043-1	150	67	42	78
TE-AC-043-2	150	67	41	80
TE-AC-043-3	150	67	42	78
TE-AC-044	150	73	43	67

# Alumina Crucible

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## ARC Conical Alumina Crucible

Model	Volume (ml)	TOP diameter	Bottom diameter	Height
TE-AC-044-1	150	73	43	67
TE-AC-045	200	70	44	85
TE-AC-046	200	82	43	70
TE-AC-046-1	200	73	48	86
TE-AC-046-2	200	82	43	70
TE-AC-046-3	250	90	53	76
TE-AC-047	200	83	48	86
TE-AC-048	250	75	51	93
TE-AC-049	250	90	53	76
TE-AC-049-1	200	73	48	86
TE-AC-049-2	300	83	52	106
TE-AC-050	300	83	52	106
TE-AC-051	300	88	53	85
TE-AC-051-1	350	82	56	112
TE-AC-051-2	350	99	50	82
TE-AC-051-3	300	83	52	106
TE-AC-052	400	75	56	122
TE-AC-053	400	80	58	108
TE-AC-054	400	86	49	135
TE-AC-055	500	86	50	140
TE-AC-055-1	500	100	60	118
TE-AC-055-2	500	108	62	108
TE-AC-055-3	800	113	83	150
TE-AC-056	500	100	60	118
TE-AC-057	500	108	62	108
TE-AC-057-1	350	87	54	102
TE-AC-058	600	88	54	145
TE-AC-059	600	100	68	118
TE-AC-060	600	100	65	128
TE-AC-060-1	750	112	70	132
TE-AC-061	750	112	70	132
TE-AC-062	800	113	62	140
TE-AC-063	850	100	68	150
TE-AC-063-1	750	112	70	132
TE-AC-063-2	1000	125	80	146
TE-AC-063-3	1500	140	90	170
TE-AC-063-4	1000	125	80	146
TE-AC-064	1000	120	75	143
TE-AC-064-1	1000	135	83	150
TE-AC-065	1250	112	75	160
TE-AC-066	1300	135	83	150

## ARC Conical Alumina Crucible

Model	Volume (ml)	TOP diameter	Bottom diameter	Height
TE-AC-067	1350	120	80	155
TE-AC-068	1500	140	90	170
TE-AC-068-1	1500	140	90	170
TE-AC-068-2	3300	140	90	170
TE-AC-069	2000	150	93	200
TE-AC-070-1	2000	155	95	200
TE-AC-182	10	30	32	14
TE-AC-183	20	39	35	21
TE-AC-184	30	45	38	23
TE-AC-185	50	57	44	28
TE-AC-186	100	67	53	34
TE-AC-187	150	73	58	42
TE-AC-188	250	84	66	48
TE-AC-189	500	108	108	58
TE-AC-190	1200	140	116	90

**Note:** Dimension may be revised without further notice, therefore the buyer shall confirm dimension with ATCERA before releasing purchase order.

## Cylindrical Alumina crucible

Model	Volume (ml)	Outer diameter	Height
TE-AC-070	0.5	20	4
TE-AC-071	0.7	12	8
TE-AC-071-1	0.8	12	12
TE-AC-072	0.9	12	10
TE-AC-073	1	20	5
TE-AC-074	1	12	10
TE-AC-075	1	18	5
TE-AC-076	1	18	8
TE-AC-077	1	10	15
TE-AC-078	1	11	20
TE-AC-079	1.5	12	20
TE-AC-080	1.5	12	25
TE-AC-081	1.5	9	40
TE-AC-082	1.5	13	25
TE-AC-083	2	10	25
TE-AC-083-1	2	20	20
TE-AC-085	2	30	5
TE-AC-086	2	12	39

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# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Cylindrical Alumina crucible

Model	Volume (ml)	Outer diameter	Height
TE-AC-083-2	2.5	22	20
TE-AC-087	3	18	18
TE-AC-088	3	16	28
TE-AC-088-1	3	12.7	25
TE-AC-088-2	3	14	31
TE-AC-088-3	3	15	5
TE-AC-088-5	3	15	20
TE-AC-089	3	15	75
TE-AC-090	3	10	30
TE-AC-091	3.4	17	21
TE-AC-091-1	4	14	44
TE-AC-092	4	20	20
TE-AC-093	5	32	10
TE-AC-094	5	12	60
TE-AC-094-1	5	10	40
TE-AC-094-3	5	11.5	50
TE-AC-094-4	5	11.5	15
TE-AC-095	5	11	20
TE-AC-096	5	10.5	20
TE-AC-097	5	20	30
TE-AC-098	5	15	50
TE-AC-099	5	28	17
TE-AC-099-1	5	35	8.5
TE-AC-100	5	16	50
TE-AC-101	5	54	8
TE-AC-102	5.4	17	37
TE-AC-103	6	16	60
TE-AC-104	6	17	40
TE-AC-104-1	6	16	56
TE-AC-105	6	19	35
TE-AC-105-1	6	16	80
TE-AC-105-2	6	20	30
TE-AC-108	7	22	25
TE-AC-106	8	25	25
TE-AC-109	9	20	40
TE-AC-109-1	10	19	58
TE-AC-109-2	10	20	50
TE-AC-110-1	10	25	30
TE-AC-110-2	10	30	28

## Cylindrical Alumina crucible

Model	Volume (ml)	Outer diameter	Height
TE-AC-112	10	19	100
TE-AC-113	10.2	22	36
TE-AC-083-3	15	30	30
TE-AC-114	15	47	13
TE-AC-114-1	15	23	60
TE-AC-115	15	30	30
TE-AC-115-1	15	47	13
TE-AC-115-2	15	30	30
TE-AC-115-3	15	30	30
TE-AC-116	20	35	35
TE-AC-117	20	25	60
TE-AC-118	20	25	60
TE-AC-118-1	20	35	30
TE-AC-119	20	28	58
TE-AC-119-2	25	35	35
TE-AC-121	25	28	58
TE-AC-122	30	30	60
TE-AC-123	30	36	45
TE-AC-123-1	30	40	32
TE-AC-124	30	40	35
TE-AC-124-1	30	30	60
TE-AC-124-3	34	26	82
TE-AC-124-4	35	40	40
TE-AC-125	35	40	40
TE-AC-111	36	40	40
TE-AC-124-7	40	40	50
TE-AC-126	40	35	58
TE-AC-126-1	40	50	30
TE-AC-110	45	40	50
TE-AC-127	45	42	45
TE-AC-127-2	45	35	65
TE-AC-127-3	45	40	50
TE-AC-128	45	35	70
TE-AC-131-2	45	50	100
TE-AC-128-1	50	40	60
TE-AC-129	50	30	100

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# Alumina Crucible

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## Cylindrical Alumina crucible

Model	Volume (ml)	Outer diameter	Height
TE-AC-107	55	40	60
TE-AC-130	60	40	70
TE-AC-131	60	50	50
TE-AC-132	65	35	100
TE-AC-134	75	45	65
TE-AC-136	80	75	27
TE-AC-134-1	80	75	27
TE-AC-135	80	37	69
TE-AC-137	80	60	40
TE-AC-135-4	85	50	60
TE-AC-138	85	50	60
TE-AC-135-5	90	35	120
TE-AC-131-3	110	50	120
TE-AC-138-1	110	60	60
TE-AC-138-2	110	40	120
TE-AC-119-4	115	40	120
TE-AC-119-5	115	47	85
TE-AC-141	120	90	35
TE-AC-139	120	50	80
TE-AC-140	120	60	60
TE-AC-141	120	90	35
TE-AC-142	125	41	137
TE-AC-124-10	130	60	60
TE-AC-131-6	130	60	60
TE-AC-143	130	60	60
TE-AC-143-1	130	65	45
TE-AC-143-2	130	75	30
TE-AC-144	130	45	110
TE-AC-145	130	60	60
TE-AC-145-1	130	45	110
TE-AC-084	150	37	175
TE-AC-146	150	50	100
TE-AC-146-1	160	90	35
TE-AC-124-5	170	90	35
TE-AC-146-2	170	70	70
TE-AC-146-3	170	48	120
TE-AC-147	170	65	65
TE-AC-160-8	175	90	35
TE-AC-148	180	59	87

## Cylindrical Alumina crucible

Model	Volume (ml)	Outer diameter	Height
TE-AC-124-11	195	60	90
TE-AC-151	200	100	35
TE-AC-152	200	100	40
TE-AC-149	200	55	90
TE-AC-149-1	200	100	40
TE-AC-149-2	200	45	150
TE-AC-150	200	60	100
TE-AC-151	200	100	35
TE-AC-152	200	100	40
TE-AC-154-2	200	70	70
TE-AC-124-12	215	60	100
TE-AC-132-1	215	70	70
TE-AC-153	215	70	70
TE-AC-124-6	220	95	40
TE-AC-152-1	220	50	150
TE-AC-152-2	220	60	120
TE-AC-152-3	220	55	120
TE-AC-131-4	225	55	120
TE-AC-160-9	230	95	40
TE-AC-119-1	250	60	115
TE-AC-154	250	60	120
TE-AC-154-1	250	90	60
TE-AC-124-13	260	60	120
TE-AC-165-1	260	100	40
TE-AC-165-4	260	105	40
TE-AC-174-6	260	60	120
TE-AC-124-14	270	70	90
TE-AC-119-3	300	90	60
TE-AC-131-5	300	55	170
TE-AC-155	300	95	60
TE-AC-156	300	70	100
TE-AC-156-1	300	80	80
TE-AC-157	300	80	80
TE-AC-154-3	320	60	170
TE-AC-124-16	330	75	95
TE-AC-135-1	330	80	80
TE-AC-158	330	80	80
TE-AC-120	350	80	80
TE-AC-159	350	80	80

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# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Cylindrical Alumina crucible

Model	Volume (ml)	Outer diameter	Height
TE-AC-159-1	350	90	30
TE-AC-159-2	350	70	120
TE-AC-154-4	370	65	150
TE-AC-160-5	380	80	100
TE-AC-119-6	400	85	85
TE-AC-160	400	70	120
TE-AC-160-1	400	66	150
TE-AC-160-4	400	85	85
TE-AC-161	400	85	85
TE-AC-160-2	450	90	90
TE-AC-160-3	450	90	90
TE-AC-135-2	480	90	90
TE-AC-162	480	90	90
TE-AC-124-8	500	95	90
TE-AC-160-10	500	95	90
TE-AC-164-1	500	80	130
TE-AC-174-10	500	80	120
TE-AC-165-10	510	95	95
TE-AC-124-9	550	95	95
TE-AC-160-11	550	95	95
TE-AC-163	600	100	100
TE-AC-164	600	100	100
TE-AC-124-15	630	70	210
TE-AC-165-11	630	100	100
TE-AC-165	650	100	100
TE-AC-165-2	650	100	100
TE-AC-165-12	750	88	150
TE-AC-165-5	800	110	100
TE-AC-166	800	115	110
TE-AC-167	800	80	200
TE-AC-135-3	880	100	100
TE-AC-168	880	110	110
TE-AC-160-6	950	80	250
TE-AC-123-2	1000	80	250
TE-AC-168-1	1000	115	155
TE-AC-169-5	1080	120	120
TE-AC-165-7	1100	120	120
TE-AC-169-1	1100	120	120
TE-AC-160-7	1140	80	300

## Cylindrical Alumina crucible

Model	Volume (ml)	Outer diameter	Height
TE-AC-169	1140	120	120
TE-AC-124-2	1200	80	300
TE-AC-169-6	1200	110	150
TE-AC-169-7	1200	135	30
TE-AC-169-8	1200	135	110
TE-AC-165-3	1300	100	200
TE-AC-170	1300	115	155
TE-AC-178	1300	100	200
TE-AC-170-1	1400	130	130
TE-AC-169-2	1450	130	130
TE-AC-170-2	1450	130	130
TE-AC-165-6	1500	110	195
TE-AC-171	1500	125	150
TE-AC-165-8	1800	120	200
TE-AC-171-1	1800	140	140
TE-AC-169-3	1850	140	140
TE-AC-172	1850	140	140
TE-AC-173	2000	135	160
TE-AC-174	2000	135	200
TE-AC-174-1	2000	150	80
TE-AC-174-2	2000	170	165
TE-AC-180	2200	100	210
TE-AC-169-4	2250	150	150
TE-AC-173-1	2250	160	160
TE-AC-174-11	2250	150	150
TE-AC-181	2600	140	200
TE-AC-174-3	2700	150	180
TE-AC-165-9	3300	130	300
TE-AC-175	3350	170	170
TE-AC-176	4000	180	180
TE-AC-174-8	5400	185	240
TE-AC-174-9	5500	200	200
TE-AC-177	5500	200	200
TE-AC-174-5	5700	120	600
TE-AC-174-7	6000	176	280
TE-AC-173-2	7400	220	220
TE-AC-178-1	7400	220	220
TE-AC-179	9700	240	240
TE-AC-174-4	23000	315	315

**Note:** Dimension may be revised without further notice, therefore the buyer shall confirm dimension with ATCERA before releasing purchase order.

# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Rectangular Alumina Crucible

Model	Volume (ml)	Length	Width	Height
TE-ASJ-93	0.9	45	8	6
TE-AS-018	2.6	70	12	7
TE-AS-005	2.8	50	10	10
TE-ASJ-92	3	25	15	15
TE-AS-006	3.6	50	12	10
TE-AS-027	3.6	80	10	10
TE-AS-001	4.2	27.5	23	10
TE-AS-001-1	4.5	20	20	17
TE-AS-005-9	4.5	20	20	17
TE-ASJ-91	4.5	20	20	17
TE-AS-036	5.8	100	10	10
TE-AS-020	6.2	75	15	10
TE-AS-002	6.7	30	20	16
TE-AS-002-1	7.1	30	20	17
TE-ASJ-90	7.1	30	20	17
TE-AS-008	7.7	50	25	10
TE-AS-005-2	8.5	42	22	13
TE-ASJ-89	8.8	50	25	10
TE-AS-005-1	9.2	45	22	13
TE-AS-021	11.9	75	18	14
TE-AS-035-6	13.2	98	18	12
TE-AS-005-4	13.2	50	20	20
TE-AS-005-5	13.2	50	28	14
TE-AS-043-4	14	100	35	6
TE-AS-016-6	14.7	61	47	8
TE-ASJ-88	14.8	50	20	20
TE-AS-016-2	15.3	60	25	15
TE-AS-016-9	17.5	60	30	14
TE-ASJ-86	18	60	30	15
TE-ASJ-87	18	70	30	15
TE-AS-017	18.5	65	23	18
TE-AS-016-3	18.9	60	30	15
TE-AS-029-2	19.4	85	34	10
TE-AS-039	20	100	20	15
TE-AS-022	20.4	75	20	20
TE-AS-016-13	20.6	65	30	15
TE-AS-005-8	20.8	30	30	30
TE-AS-013	21.2	52	25	23
TE-AS-019-5	22.3	70	30	15
TE-ASJ-85	26	50	25	35
TE-AS-052	26	110	24	17

## Rectangular Alumina Crucible

Model	Volume (ml)	Length	Width	Height
TE-AS-015	26.2	60	30	20
TE-AS-016	26.2	60	40	15
TE-AS-016-10	26.2	60	30	20
TE-AS-039-1	26.2	100	25	15
TE-AS-035-5	26.8	95	25	16
TE-AS-065	27	150	20	20
TE-AS-070	27	200	150	5
TE-ASJ-84	28	100	20	20
TE-ASJ-83	28.5	60	30	20
TE-AS-051-10	29.2	100	20	21
TE-AS-005-6	29.8	50	40	20
TE-ASJ-81	31	110	24	17
TE-AS-012	31.9	50	25	35
TE-ASJ-80	32	100	50	10
TE-ASJ-79	32.2	50	40	20
TE-AS-061-2	33	120	30	15
TE-AS-011-4	33	55	40	20
TE-ASJ-78	34	55	40	20
TE-AS-016-8	34	65	35	20
TE-AS-051-1	35.3	100	50	10
TE-ASJ-77	38	120	30	15
TE-AS-054-3	39	113	30	18
TE-AS-019-3	39.2	70	37	20
TE-AS-003	39.4	35	35	40
TE-AS-027-3	41	80	40	17
TE-ASJ-76	43.9	60	30	30
TE-ASJ-74	44	70	30	30
TE-AS-041	44.9	100	30	20
TE-AS-019-2	48	70	30	30
TE-AS-005-7	48.7	50	50	25
TE-ASJ-73	50	50	50	25
TE-AS-004	52.7	40	40	40
TE-AS-051	54.9	100	48	15
TE-AS-038-4	57.4	100	30	25
TE-ASJ-72	61	100	40	20
TE-AS-024	65.5	75	75	15
TE-AS-051-12	65.7	100	40	21
TE-AS-051-2	69.9	100	30	30
TE-ASJ-71	70	75	75	15
TE-ASJ-70	70	100	30	30
TE-AS-044	70.7	100	50	18

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# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Rectangular Alumina Crucible

Model	Volume (ml)	Length	Width	Height
TE-AS-070-26	72	250	35	15
TE-AS-034-4	72.2	90	60	17
TE-AS-070-31	75	400	20	20
TE-ASJ-69	78	65	65	25
TE-ASJ-68	84	65	65	30
TE-AS-031	86.7	90	60	20
TE-ASJ-67	91.7	90	60	20
TE-AS-061-3	92	120	60	18
TE-ASJ-63	100	65	65	35
TE-ASJ-64	100	100	50	30
TE-ASJ-65	100	120	60	20
TE-AS-011	101.6	50	50	50
TE-AS-016-11	104.2	65	65	30
TE-AS-061-4	105	120	60	20
TE-AS-016-7	108.5	62	38	57
TE-AS-029-6	111	95	65	22
TE-AS-062-5	117	120	60	22
TE-AS-064-4	118	150	40	30
TE-AS-019-1	122	70	70	30
TE-AS-021-1	122.8	65	65	35
TE-AS-051-4	123.6	100	50	30
TE-AS-054-4	126	118	100	15
TE-AS-062-7	129	120	100	15
TE-ASJ-62	136	120	100	15
TE-AS-029	138.3	85	65	30
TE-AS-064-5	141	150	40	35
TE-ASJ-61	141	150	40	30
TE-AS-025	141.1	75	75	30
TE-AS-019	143.7	70	70	35
TE-AS-034	146.9	90	65	30
TE-ASJ-60	150	70	70	30
TE-AS-045	150.5	100	60	30
TE-AS-070-32	152	800	20	20
TE-AS-032	158.9	90	60	35
TE-ASJ-59	160	100	100	20
TE-AS-029-1	161.7	80	80	30
TE-AS-023	163.6	75	52	50
TE-AS-043-2	165.9	100	100	20
TE-AS-035-4	166.2	98	72	28
TE-ASJ-58	168	150	40	35

## Rectangular Alumina Crucible

Model	Volume (ml)	Length	Width	Height
TE-ASJ-57	173	90	60	40
TE-AS-046	177.4	100	70	30
TE-ASJ-55	180	80	80	40
TE-ASJ-56	180	90	90	30
TE-AS-034-3	183	90	60	40
TE-AS-027-4	183.7	85	85	30
TE-ASJ-51	197	90	60	45
TE-ASJ-50	200	80	85	40
TE-AS-067-5	204	175	55	30
TE-ASJ-49	207	100	100	25
TE-AS-034-1	207.1	90	90	30
TE-AS-034-5	207.1	90	60	45
TE-AS-051-5	212	100	100	25
TE-AS-026	216.8	75	75	45
TE-AS-026-2	219.5	80	80	40
TE-ASJ-48	220	85	85	40
TE-AS-062-2	221	120	120	20
TE-ASJ-47	223	92	63	47
TE-AS-061-5	228	120	60	40
TE-AS-061-6	228	120	80	30
TE-ASJ-46	233	120	60	40
TE-AS-034-6	233.6	92	63	47
TE-AS-026-3	233.9	80	85	40
TE-ASJ-45	234	175	55	30
TE-ASJ-44	243	120	80	30
TE-AS-054-7	247	115	90	30
TE-AS-030	249.3	85	85	40
TE-AS-054-6	250	115	115	24
TE-ASJ-43	255	115	90	30
TE-ASJ-42	260	100	100	35
TE-AS-054-2	270	115	65	45
TE-ASJ-40	280	90	90	45
TE-ASJ-41	280	120	80	40
TE-AS-034-2	281	90	90	40
TE-ASJ-39	284	115	65	45
TE-AS-055	285	110	80	40
TE-AS-057	291	120	75	40
TE-ASJ-38	300	100	100	40
TE-AS-048	304.1	100	100	35
TE-AS-061	312	120	80	40

# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Rectangular Alumina Crucible

Model	Volume (ml)	Length	Width	Height
TE-AS-029-4	318	90	90	45
TE-AS-053-1	346	110	110	35
TE-ASJ-37	350	115	115	35
TE-AS-051-6	350.2	100	100	40
TE-AS-062	351	120	120	30
TE-AS-069-5	371	200	100	25
TE-AS-061-1	380	115	115	35
TE-AS-049	396.3	100	100	45
TE-AS-070-27	406	178	85	35
TE-ASJ-36	407	200	100	25
TE-ASJ-35	424	100	100	50
TE-ASJ-34	470	100	100	55
TE-AS-064-3	488	145	145	30
TE-AS-051-8	488.4	100	100	55
TE-ASJ-33	516	100	100	60
TE-ASJ-32	520	140	140	38
TE-AS-064-7	524	150	150	30
TE-AS-067-2	528	160	120	35
TE-ASJ-31	530	145	145	30
TE-AS-051-9	534.5	100	100	60
TE-ASJ-29	550	120	120	50
TE-ASJ-30	550	140	140	37
TE-ASJ-28	554	150	150	30
TE-ASJ-27	561	160	120	35
TE-AS-064-1	575	140	140	35
TE-AS-062-10	611	140	140	37
TE-AS-062-9	611	120	120	50
TE-AS-064-8	625	150	150	35
TE-AS-064	664	140	140	40
TE-ASJ-26	700	200	100	50
TE-AS-062-3	718	120	100	70
TE-ASJ-25	730	260	75	50
TE-AS-064-14	732	150	120	50
TE-AS-062-11	754	140	140	45
TE-AS-070-15	777	260	75	50
TE-AS-050-1	791	155	120	50
TE-AS-050	811	100	100	90
TE-AS-069-6	813	200	100	50
TE-ASJ-23	850	150	150	50
TE-AS-064-2	988	150	150	53
TE-ASJ-22	996.1	160	160	45

## Rectangular Alumina Crucible

Model	Volume (ml)	Length	Width	Height
TE-ASJ-20	1000	150	110	80
TE-ASJ-21	1000	160	160	50
TE-AS-070-30	1025	360	120	30
TE-AS-067-1	1063	160	160	50
TE-AS-064-9	1101	150	110	80
TE-AS-064-11	1129	150	150	60
TE-ASJ-19	1150	305	90	57
TE-ASJ-18	1175	150	150	60
TE-AS-062-12	1203	140	140	70
TE-AS-070-20	1227	305	90	57
TE-ASJ-16	1273	120	120	100
TE-AS-070-13	1324	250	160	40
TE-AS-067-6	1361	180	180	50
TE-AS-059-2	1371	130	120	100
TE-ASJ-15	1430	160	120	85
TE-ASJ-13	1500	180	180	60
TE-ASJ-14	1500	200	200	50
TE-AS-064-13	1532	150	150	80
TE-AS-069-7	1634	200	120	80
TE-ASJ-11	1650	240	170	50
TE-AS-067-7	1657	180	180	60
TE-ASJ-10	1680	200	120	80
TE-AS-069-9	1696	200	200	50
TE-AS-070-7	1729	240	170	50
TE-AS-067	1756	160	160	80
TE-AS-043-3	1824.8	100	400	50
TE-AS-064-6	1907	150	100	150
TE-AS-070-21	2079	340	220	35
TE-AS-067-4	2327	160	140	120
TE-AS-070-24	2473	224	224	57
TE-ASJ-7	2500	250	155	80
TE-ASJ-6	2600	200	200	80
TE-AS-070-9	2612	250	150	80
TE-AS-070-11	2704	250	155	80
TE-AS-070-2	2802	200	200	80
TE-ASJ-5	3000	300	180	70
TE-ASJ-4	3200	220	220	80
TE-AS-070-17	3205	300	180	70
TE-ASJ-3	3300	200	200	100
TE-AS-070-29	3362	300	210	61
TE-AS-070-6	3416	220	220	80

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# Alumina Crucible

Hunan ATCERA Co. Ltd.

## Rectangular Alumina Crucible

Model	Volume (ml)	Length	Width	Height
TE-AS-070-16	3451	300	150	90
TE-AS-070-3	3539	200	200	100
TE-ASJ-2	3566	300	150	90
TE-AS-070-18	4133	300	200	80
TE-AS-070-8	4451	250	250	80
TE-AS-069-11	5000	250	250	100
TE-AS-069-10	5100	340	220	35
TE-AS-069-91	5250	250	200	125
TE-AS-069-8	5344	200	150	200
TE-AS-070-25-1	5400	200	150	200
TE-AS-070-12	5622	250	200	125
TE-AS-070-14	5622	250	250	100
TE-AS-070-22-1	7465	330	330	80
TE-AS-070-23-1	15760	330	330	160

**Note:** Dimension may be revised without further notice, therefore the buyer shall confirm dimension with ATCERA before releasing purchase order.

## Rectangular Alumina Crucible with Cover

Model	Volume (ml)	Length	Width	Height
TE-AS-182	1	45	8	6
TE-AS-149	1.3	45	8	6
TE-AS-183	3	25	15	15
TE-AS-148	4	25	15	15
TE-AS-171	4	20	20	17
TE-AS-125	7	30	20	17
TE-AS-172	9	50	25	10
TE-AS-116-1	15	50	20	20
TE-AS-117	15.7	50	20	21
TE-AS-126	17	50	20	23
TE-AS-128	21	60	30	15
TE-AS-184	26	50	25	35
TE-AS-115	28	60	30	20
TE-AS-116	29	60	30	21
TE-AS-185	40	50	50	25
TE-AS-130	44	60	30	30
TE-AS-111	48	100	30	20
TE-AS-110	66	100	40	20
TE-AS-186	68	65	65	25
TE-AS-131	70	75	75	15

## Cylindrical Alumina crucible

Model	Volume (ml)	Length	Width	Height
TE-AS-173	75	100	30	30
TE-AS-187	84	65	65	30
TE-AS-115	92	90	60	20
TE-AS-188	110	70	70	30
TE-AS-142	110	120	60	18
TE-AS-189	115	65	65	35
TE-AS-108-2	123	120	60	20
TE-AS-140	130	100	50	30
TE-AS-190	150	100	100	25
TE-AS-112	154	90	65	30
TE-AS-191	170	90	90	30
TE-AS-114	191	90	60	40
TE-AS-135	216	90	60	45
TE-AS-132	228	80	80	40
TE-AS-108-1	257	120	60	40
TE-AS-145	257	120	80	30
TE-AS-192	260	100	100	35
TE-AS-136	329	90	90	45
TE-AS-193	330	115	115	35
TE-AS-146	347	120	80	40
TE-AS-141	362	100	100	40
TE-AS-194	370	200	100	25
TE-AS-196	510	120	120	50
TE-AS-197	520	140	140	38
TE-AS-174	550	100	100	60
TE-AS-162	616	150	150	30
TE-AS-198	750	150	150	50
TE-AS-199	800	200	100	50
TE-AS-147	1072	160	160	45

**Note:** Dimension may be revised without further notice, therefore the buyer shall confirm dimension with ATCERA before releasing purchase order.

**\*Please contact ATCERA if you need other dimension crucibles, or other shapes such as trapezoid crucible, flat bottom crucible, round bottom crucible, boat shape crucible and tray shape crucible and other customized shape.**

# Alumina Substrate

Hunan ATCERA Co. Ltd.

## Features

- ◆ High temperature resistance, good thermal conductivity
- ◆ High hardness and good wear resistance
- ◆ Excellent insulation performance
- ◆ Good corrosion resistance, long service life



## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.81
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	33
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>
Specific resistance	Ω*cm	1*10 <sup>14</sup>

**Note:** The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.

## Applications

- ◆ Manufacture of electronic components, such as electronic capacitors, resistors, magnetic components and high-power LED components;
- ◆ High-power electrical components, such as power module, heating module and communication module;
- ◆ High density and large scale integration circuit board;
- ◆ Medium layer of high-speed communication equipment

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# Alumina Substrate

Hunan ATCERA Co. Ltd.

Dimension (the unit is mm unless otherwise noted)

Rectangular Alumina Substrate

Model	Length	Width	Thickness
TE-J-1	10	2.4	2
TE-J-2	10	2.4	1.5
TE-J-3	10	15	0.6
TE-J-4	10	16	1.5
TE-J-5	10	20	1.6
TE-J-6	10	16	6
TE-J-7	10	10	2
TE-J-8	10	14	2
TE-J-9	10.4	18	1
TE-J-10	10.6	17	1
TE-J-11	11	11	1
TE-J-12	11	17	1
TE-J-13	11	7	1.5
TE-J-14	11	18	1
TE-J-15	12	18.5	0.6
TE-J-16	12	18	0.6
TE-J-17	12	18.5	1
TE-J-18	12	18.5	0.6
TE-J-19	12.7	16.5	1.8
TE-J-20	13	19	0.6
TE-J-21	14	18	3
TE-J-22	14	19	2
TE-J-23	14	20	1
TE-J-24	14	20	0.6
TE-J-25	14	20	1
TE-J-26	14	20	0.6
TE-J-27	14	20	2
TE-J-28	14	20	2
TE-J-29	15	19.5	1
TE-J-30	15	2	2.4
TE-J-31	16	21	2.5
TE-J-32	16	22	0.6
TE-J-33	16	22	0.6
TE-J-34	16	22	0.6
TE-J-35	16	46	1
TE-J-36	17	22	1
TE-J-37	17	22	0.6
TE-J-38	17	22	0.6
TE-J-39	17	22	1.5

Rectangular Alumina Substrate

Model	Length	Width	Thickness
TE-J-40	17	22	1
TE-J-41	17	37.1	1
TE-J-42	17	25	1
TE-J-43	17.8	26	1
TE-J-44	17.8	21.5	1.5
TE-J-45	18	19	1.5
TE-J-46	18	23	2
TE-J-47	18	24	0.6
TE-J-48	18	25.3	1.3
TE-J-49	18	25.3	1
TE-J-50	18	29	1
TE-J-51	18	29.5	1
TE-J-52	18	26	1
TE-J-53	18	26	0.6
TE-J-54	18	26	0.6
TE-J-55	18.5	25	0.6
TE-J-56	18.5	27	0.6
TE-J-57	19	23	2
TE-J-58	20	23	0.6
TE-J-59	20	26	1
TE-J-60	20	2	1
TE-J-61	20	26	1
TE-J-62	20	26	0.6
TE-J-63	20	25	1
TE-J-64	20	25	0.6
TE-J-65	20	25	1
TE-J-66	20	25	0.6
TE-J-67	20	25	1
TE-J-68	20	25	1
TE-J-69	20	25	0.6
TE-J-70	20	25	2
TE-J-71	20	25	2
TE-J-72	20	28	0.6
TE-J-73	20	28	2
TE-J-74	20	31.85	1
TE-J-75	20	32.1	1
TE-J-76	20	35	1
TE-J-77	21.5	34.5	1.5
TE-J-78	21	28	0.6

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# Alumina Substrate

Hunan ATCERA Co. Ltd.

## Rectangular Alumina Substrate

Model	Length	Width	Thickness
TE-J-79	21	28	0.8
TE-J-80	21	28	1
TE-J-81	21.8	30	1
TE-J-82	21.8	30	0.6
TE-J-83	21.8	30	1
TE-J-84	21.8	30	0.6
TE-J-85	22	30	2
TE-J-86	22	28	1
TE-J-87	22	28	0.6
TE-J-88	22	28	1
TE-J-89	22	28	0.6
TE-J-90	22	25	1
TE-J-91	22	25	0.6
TE-J-92	22	25	1
TE-J-93	22	22	0.6
TE-J-94	22	35	1
TE-J-95	22	35	1.5
TE-J-96	23	34	1
TE-J-97	24	30	1
TE-J-98	24	35.5	1
TE-J-99	24	40	0.6
TE-J-100	24	60	1
TE-J-101	24	70	0.6
TE-J-102	24	72	1
TE-J-103	24	90	0.6
TE-J-104	24	95	1
TE-J-105	24	125	1
TE-J-106	24	104	1
TE-J-107	25	34	0.6
TE-J-108	25	40	1
TE-J-109	25	40	0.6
TE-J-110	25	110	0.6
TE-J-111	26	30	1
TE-J-112	26	31	1
TE-J-113	26	35	1
TE-J-114	27	60	0.6
TE-J-115	27	90	0.6
TE-J-116	27	48	1
TE-J-117	27.5	4.2	2.5
TE-J-118	28	40	1
TE-J-119	28	42	0.6

## Rectangular Alumina Substrate

Model	Length	Width	Thickness
TE-J-120	28	44	0.6
TE-J-121	28	64	1
TE-J-122	28	72	1
TE-J-123	29	33	1.3
TE-J-124	30	38	1
TE-J-125	30	40	1
TE-J-126	30	43	0.6
TE-J-127	32	50	1
TE-J-128	32	60	1
TE-J-129	33	53	1.3
TE-J-130	33	73	1.3
TE-J-131	33.6	51.4	0.8
TE-J-132	33.6	51.4	2
TE-J-133	34	64	0.6
TE-J-134	34	39	0.6
TE-J-135	35	48	1
TE-J-136	35	68	1
TE-J-137	35	45	1
TE-J-138	35	85	0.6
TE-J-139	38	38	0.6
TE-J-140	38	50	0.6
TE-J-141	35	35	2
TE-J-142	38.5	41	1
TE-J-143	39	91	0.6
TE-J-144	40	30	1
TE-J-145	40	56	1
TE-J-146	40	43	0.6
TE-J-147	40	105	0.635
TE-J-148	40	140	0.6
TE-J-149	40	150	1
TE-J-150	40	260	1
TE-J-151	44	16	1
TE-J-152	44	28	0.6
TE-J-153	50	50	1
TE-J-154	50	50	3
TE-J-155	55	18	2
TE-J-156	75	18	2
TE-J-157	100	100	1
TE-J-158	100	100	2
TE-J-159	100	100	3
TE-J-160	120	160	2

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# Alumina Substrate

Hunan ATCERA Co. Ltd.

## Rectangular Alumina Substrate

Model	Length	Width	Thickness
TE-J-161	120	160	3
TE-J-162	120	160	4
TE-J-163	120	160	6
TE-J-164	160	160	1
TE-J-165	160	160	0.6
TE-J-169	10	10	0.25
TE-J-170	10	10	0.5
TE-J-171	10	10	0.635
TE-J-172	10	10	1
TE-J-173	20	20	1
TE-J-174	20	20	2
TE-J-175	25	25	1
TE-J-176	30	30	0.635
TE-J-177	30	30	1
TE-J-178	30	30	2
TE-J-179	35	35	1
TE-J-180	40	40	1
TE-J-181	40	40	5
TE-J-182	50	50	0.5
TE-J-183	50	50	0.635
TE-J-184	50	50	1.5
TE-J-185	50	50	5
TE-J-191	60	60	1
TE-J-192	65	74	0.2
TE-J-193	65	74	0.28
TE-J-194	70	70	2
TE-J-195	70	70	3
TE-J-196	76.2	76.2	0.75
TE-J-197	80	80	3
TE-J-198	80	80	5
TE-J-199	80	110	5
TE-J-200	84	84	0.8
TE-J-201	100	100	0.5
TE-J-202	100	100	0.635
TE-J-203	100	100	1.2
TE-J-204	100	100	1.5
TE-J-205	100	100	2.2
TE-J-206	100	100	2.5
TE-J-207	100	100	3.5
TE-J-208	100	100	0.25
TE-J-209	100	100	1.055

## Rectangular Alumina Substrate

Model	Length	Width	Thickness
TE-J-210	100	100	0.25
TE-J-211	100	100	0.35
TE-J-212	100	100	0.5
TE-J-213	100	100	0.6
TE-J-214	100	100	0.7
TE-J-215	100	100	1.5
TE-J-216	100	100	2.335
TE-J-217	100	100	2.5
TE-J-218	100	100	3.2
TE-J-219	100	100	3.5
TE-J-220	100	100	4
TE-J-221	100	100	5
TE-J-227	109	109	1
TE-J-228	110	110	5
TE-J-229	114	114	1
TE-J-230	114	114	0.38
TE-J-231	114	114	0.5
TE-J-232	114	114	0.65
TE-J-233	115	115	0.12
TE-J-234	115	115	0.125
TE-J-235	120	120	0.25
TE-J-236	120	120	0.38
TE-J-237	120	120	0.5
TE-J-238	120	120	0.635
TE-J-239	120	120	0.8
TE-J-240	120	120	0.25
TE-J-241	120	120	1
TE-J-242	120	120	3
TE-J-243	125	125	2
TE-J-244	127	127	1
TE-J-245	127	127	1.5
TE-J-246	138	190	0.25
TE-J-247	138	190	0.38
TE-J-248	138	190	0.32
TE-J-249	138	190	0.5
TE-J-250	138	190	0.8
TE-J-251	138	190	0.65
TE-J-252	138	190	1
TE-J-253	138	190	0.38
TE-J-254	138	190	0.5
TE-J-255	138	190	0.635

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# Alumina Substrate

Hunan ATCERA Co. Ltd.

## Rectangular Alumina Substrate

Model	Length	Width	Thickness
TE-J-256	138	190	1
TE-J-257	150	150	1.8
TE-J-258	150	150	1
TE-J-259	150	150	1.5
TE-J-260	150	150	2
TE-J-261	150	150	3
TE-J-262	150	150	5
TE-J-263	150	150	8
TE-J-264	152	152	0.635
TE-J-265	160	170	2.5
TE-J-266	180	180	2
TE-J-267	180	180	3
TE-J-268	180	180	5
TE-J-269	200	200	2
TE-J-270	200	200	3
TE-J-271	200	200	5
TE-J-272	220	220	2

**Note:** Dimension may be revised without further notice, therefore the buyer shall confirm dimension with ATCERA before releasing purchase order.

## Round Alumina Substrate

Model	Diameter	Thickness
TE-AD-002	3.5	1
TE-AD-003	5	1
TE-AD-004	6	0.25
TE-AD-005	6	0.5
TE-AD-006	6	0.635
TE-AD-007	6	1
TE-AD-008	8	0.25
TE-AD-009	8	0.5
TE-AD-010	8	0.635
TE-AD-011	8	1
TE-AD-012	10	0.25
TE-AD-013	10	0.38
TE-AD-002	3.5	1
TE-AD-003	5	1
TE-AD-004	6	0.25
TE-AD-005	6	0.5
TE-AD-006	6	0.635

## Rectangular Alumina Substrate

Model	Diameter	Thickness
TE-AD-007	6	1
TE-AD-008	8	0.25
TE-AD-009	8	0.5
TE-AD-010	8	0.635
TE-AD-011	8	1
TE-AD-012	10	0.25
TE-AD-013	10	0.38
TE-AD-014	10	0.5
TE-AD-015	10	0.635
TE-AD-016	10	1
TE-AD-017	12	0.25
TE-AD-018	12	0.5
TE-AD-019	12	0.635
TE-AD-020	12	1
TE-AD-021	16	0.25
TE-AD-022	16	0.5
TE-AD-023	16	0.635
TE-AD-024	16	1
TE-AD-025	18	0.5
TE-AD-026	18	0.635
TE-AD-027	18	1
TE-AD-028	20	0.25
TE-AD-029	20	0.5
TE-AD-030	20	0.635
TE-AD-031	20	1
TE-AD-032	25	0.5
TE-AD-033	25	0.65
TE-AD-034	25	1
TE-AD-035	30	0.5
TE-AD-036	30	0.635
TE-AD-037	30	1
TE-AD-038	33	1
TE-AD-039	35	1
TE-AD-040	35	2
TE-AD-041	36	4
TE-AD-042	40	1
TE-AD-043	40	1.5
TE-AD-044	42	2
TE-AD-045	50	0.5
TE-AD-046	50	0.635
TE-AD-047	50	1

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# Alumina Substrate

Hunan ATCERA Co. Ltd.

## Round Alumina Substrate

Model	Diameter	Thickness
TE-AD-048	50	2
TE-AD-049	55	0.5
TE-AD-050	60	10
TE-AD-051	65	0.5
TE-AD-052	75	1
TE-AD-053	82	6
TE-AD-054	89	5.5
TE-AD-055	100	0.5
TE-AD-056	100	0.635
TE-AD-057	100	1
TE-AD-058	101.6	0.5
TE-AD-059	101.6	1
TE-AD-060	120	2
TE-AD-061	125	6
TE-AD-048	50	2
TE-AD-049	55	0.5
TE-AD-050	60	10

**Note:** Dimension may be revised without further notice, therefore the buyer shall confirm dimension with ATCERA before releasing purchase order.

**\*Please contact ATCERA if you need other dimension, shape or other purity alumina substrates, metallization service by ATCERA is also available.**

# Alumina Tube

Hunan ATCERA Co. Ltd.

## Features

- ◆ High temperature resistance, good thermal shock resistance
- ◆ High hardness and good wear resistance
- ◆ Excellent insulation performance
- ◆ Good corrosion resistance and biocompatibility



## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.81
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	33
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>
Specific resistance	Ω*cm	1*10 <sup>14</sup>

**Note:** The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.

## Applications

- ◆ High temperature protection tube, heat exchanger tube, electrical heating tube, thermocouple protection tube, etc.;
- ◆ High temperature and wear resistant mechanical parts such as cylinder sleeve, bearing sleeve and shaft sleeve.
- ◆ Liquid delivery pipe for mechanical, food processing and pharmaceutical industries;
- ◆ Electrical insulation tubes and electrical cable or wire protection tube.

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# Alumina Tube

Hunan ATCERA Co. Ltd.

**Dimension (the unit is mm unless otherwise noted)**

## Alumina Tube (Both Ends Open)

Model	Outer Diameter	Inner Diameter	Length
TE-AT-001	0.7	0.3	
TE-AT-002	0.8	0.4	
TE-AT-003	0.9	0.4	
TE-AT-004	1	0.5	
TE-AT-005	1.1	0.6	
TE-AT-006	1.2	0.6	
TE-AT-007	1.3	0.7	
TE-AT-008	1.4	0.8	
TE-AT-009	1.5	0.8	
TE-AT-010	2	1	
TE-AT-011	3	1.5	
TE-AT-012	3	2	
TE-AT-013	4	2	
TE-AT-014	4	3	
TE-AT-015	5	3	
TE-AT-016	5	3.5	
TE-AT-017	6	4	
TE-AT-018	7	4.5	
TE-AT-019	8	4	
TE-AT-020	8	5	
TE-AT-021	9	6	
TE-AT-022	10	4	
TE-AT-023	10	6	
TE-AT-024	10	7	
TE-AT-025	12	4	
TE-AT-026	12	8	
TE-AT-027	14	4	
TE-AT-028	14	10	
TE-AT-029	15	11	
TE-AT-030	16	12	
TE-AT-031	18	14	
TE-AT-032	20	15	
TE-AT-033	25	19	
TE-AT-034	30	25	
TE-AT-035	40	30	
TE-AT-036	44	38	
TE-AT-037	50	40	
TE-AT-038	60	50	
TE-AT-039	70	60	
TE-AT-040	80	70	

## Alumina Tube (Both Ends Open)

Model	Outer Diameter	Inner Diameter	Length
TE-AT-041	90	80	
TE-AT-042	100	90	
TE-AT-043	110	100	
TE-AT-044	120	110	
TE-AT-045	150	140	
TE-AT-046	200	190	

## Alumina Tube (One End Open)

Model	Outer Diameter	Inner Diameter	Length
TE-AT-047	2	1	
TE-AT-048	3	2	
TE-AT-049	4	2.5	
TE-AT-050	5	3	
TE-AT-051	6	3.5	
TE-AT-052	6.35	3.96	
TE-AT-053	7.95	4.78	
TE-AT-057	10	7	
TE-AT-058	11.13	7.95	
TE-AT-059	12	8	
TE-AT-060	12.7	8.9	
TE-AT-061	14	10	
TE-AT-062	15	10	
TE-AT-063	15	11	
TE-AT-064	16	12	
TE-AT-065	17.48	12.7	
TE-AT-066	19.05	14.3	
TE-AT-061	20	15	
TE-AT-062	22.23	15.88	
TE-AT-063	23.83	17.48	
TE-AT-064	25	18.8	
TE-AT-065	25.4	19.05	
TE-AT-066	26	20	
TE-AT-067	28	22	
TE-AT-068	30	23	

**Note:** Dimension may be revised without further notice, therefore the buyer shall confirm dimension with ATCERA before releasing purchase order.

**Please contact ATCERA if you need other dimension or other shape alumina tubes.**

# Alumina Membrane Tube

Hunan ATCERA Co. Ltd.

## Features

- ◆ High working temperature and good thermal shock resistance
- ◆ Good corrosion resistance and biocompatibility
- ◆ Good filtration effect and high filtration speed
- ◆ Easy maintenance and long service life



## Specification

Item	Unit	Value
Porosity	%	
Purity	%	90-96
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	1.5-2.6
Pore size	μm	1-500
Outer diameter	mm	20-250
Channel	/	1-37
Hole size	mm	3-200
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Maximum working temperature	°C	1650
Thermal conductivity	W/m*K	33

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for detailed product information or request, plate type filtration membrane and filtration rod are also available.

## Applications

- ◆ Milk filtration, juice concentration, natural plant extract, wine/tea beverage production in food and beverage industry;
- ◆ Solid-liquid or gas-solid separation, and organics separation and purification
- ◆ Purification for oily wastewater, textile wastewater, urban sewage and paper-making wastewater, as well as high temperature waste gas purification;
- ◆ Separation of particles, bacteria and macromolecular impurities in the medicine.

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## Features

- ◆ High working temperature and good thermal shock resistance
- ◆ High strength and good wear resistance
- ◆ Good corrosion resistance and stability
- ◆ Good electrical insulation performance

## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.81
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	33
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>
Specific resistance	Ω*cm	1*10 <sup>14</sup>
Size	mm	Diameter 0.5-42 Length 15-2500

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for product information or request, rectangular and hexagonal rods are also available.

## Applications

- ◆ Furnace roller rod, furnace inlet rod, heat treatment furnace roller, heating rod in the high temperature refractory industry;
- ◆ Mechanical parts, including hydraulic rod, shaft, plunger, grinding rod;
- ◆ Corrosion-resistant and electrically insulated parts.

# Alumina Ball & Bead

Hunan ATCERA Co. Ltd.

## Features

- ◆ High hardness and good wear resistance
- ◆ Good corrosion resistance and biocompatibility
- ◆ High temperature resistance and good mechanical strength
- ◆ Low grinding loss and long service life



## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.81
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	33
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>
Size	mm	Diameter 0.2-80

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for detailed product information or request, grinding column is also available.

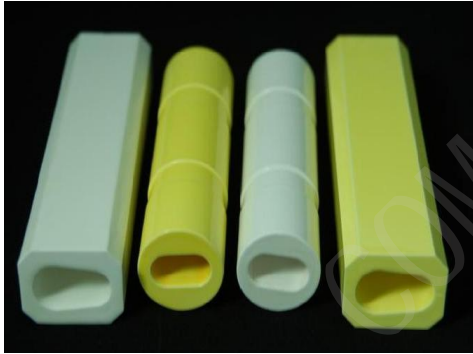
## Applications

- ◆ Small and uniform particles of mineral powder for mineral processing industry;
- ◆ Grinding pulverized coal for power plant and metallurgical industry;
- ◆ Grinding raw material powder for cement and ceramic products;



# Alumina Laser Reflector

Hunan ATCERA Co. Ltd.



## Features

- ◆ High reflectivity to improve the monochromaticity
- ◆ Withstand strong light source irradiation
- ◆ Good corrosion resistance, available for direct contact with cooling medium, long service life
- ◆ Small thermal expansion and high stability

## Specification

Item	Unit	Value
Purity	%	99
Porosity	%	18
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.15
Compressive strength (MPa)	MPa	1700
Bending strength (MPa)	MPa	170
Hardness	Hv	1650
Maximum working temperature	°C	1550
Thermal conductivity	W/m*K	30
Thermal expansion coefficient	/°C	8*10 <sup>-6</sup>
Size	mm	Hole length 16.5-43
Surface roughness	μm	Ra0.02
Reflectivity	%	98% (600-1000nm)

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for product information or request, cylinder and ellipsosome reflectors are also available.

## Applications

- ◆ Flash light and continuous wave laser pump chamber which with Nd:YAG or Alexandrite as laser medium
- ◆ Layered and segmented pump chambers for diode-pumped lasers;
- ◆ DPSS laser for scientific and medical applications and distance meter;
- ◆ Intense Pulsed light (IPL) lasers for medical and cosmetic purposes.

# Alumina Vacuum Chuck

Hunan ATCERA Co. Ltd.

## Features

- ◆ High hardness and good wear resistance
- ◆ High mechanical strength and light weight
- ◆ High temperature resistance and thermal stability
- ◆ Smooth surface and strong absorption force



## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.83
Tensile strength (MPa)	MPa	250
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	340
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	30
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>

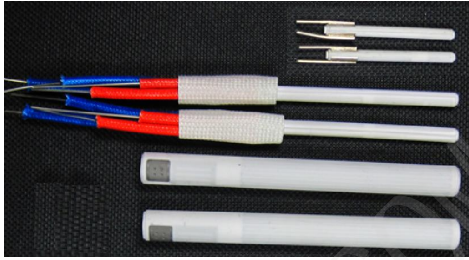
- Note:**
1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
  2. Please contact ATCERA for detailed product request.

## Applications

- ◆ Used to absorb and transfer wafer or chip semiconductor production process;
- ◆ In the production of photovoltaic panels to absorb and transfer solar cells;
- ◆ Transfer and precision positioning of electronic parts in electronic device assembly.

# Alumina Heater

Hunan ATCERA Co. Ltd.



## Features

- ◆ High temperature resistance, good stability
- ◆ High power available for fast heating speed,
- ◆ Good corrosion resistance and biocompatibility

## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.83
Tensile strength (MPa)	MPa	310
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2200
Bending strength (MPa)	MPa	310
Hardness	Hv	1650
Maximum working temperature (long-term)	°C	1650
Thermal conductivity	W/m*K	30
Thermal expansion coefficient	/°C	7*10 <sup>-6</sup>
Shape	/	Plate/rod/tube
Power supply	V	5-48 (DC) /220 (AC)

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for product information or customized request.

## Applications

- ◆ Household heaters, air conditioners, water heaters, electric cookers and other home appliances
- ◆ Industrial processes, such as plastics and rubber production, petrochemical;
- ◆ Infrared physiotherapy equipment for medical industry;
- ◆ Electronic cigarette lighter, seat heating, engine and battery heating for automotive industry.

# Alumina Relay Housing

Hunan ATCERA Co. Ltd.

## Features

- ◆ Good insulation, high breakdown voltage
- ◆ High temperature resistance and thermal stability
- ◆ Good adapt with brazing materials (aluminum, copper and nickel), and the connection is strong



## Specification

Item	Unit	Value
Purity	%	96
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.73
Gas tightness	Pa*m <sup>3</sup> /s	1*10 <sup>-11</sup>
Tensile strength (MPa)	MPa	210
Compressive strength (MPa)	MPa	1900
Bending strength (MPa)	MPa	280
Hardness	Hv	1400
Maximum working temperature	°C	1550
Thermal conductivity	W/m*K	24
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>
Volume resistivity	Ohm*cm	1*10 <sup>13</sup> -1*10 <sup>14</sup>
Breakdown voltage	KV/mm	18

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for detailed product request.

## Applications

- ◆ Electric vehicle and the charging pile;
- ◆ Power stations, transformer substations and other high voltage electrical equipment;
- ◆ Electric locomotive and other rail transit power equipment.

# Alumina Cylinder Sleeve

Hunan ATCERA Co. Ltd.



## Features

- ◆ High working temperature and good thermal shock resistance
- ◆ High strength and good wear resistance
- ◆ Good corrosion resistance and stability
- ◆ High surface finish and low friction resistance

## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.88
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	25-30
Thermal expansion coefficient	/°C	7*10 <sup>-6</sup>

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for product information or request.

## Applications

- ◆ High pressure mud pump (mainly used for drilling equipment);
- ◆ Internal combustion engine, hydraulic cylinder;
- ◆ Chemical reaction equipment liner.

# Alumina Ring

Hunan ATCERA Co. Ltd.

## Features

- ◆ High hardness and good wear resistance
- ◆ Good corrosion resistance and long life time
- ◆ Large working temperature range
- ◆ Small thermal expansion coefficient and good thermal stability



## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.83
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2200
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature	°C	1650
Thermal conductivity	W/m*K	30
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>
Size	mm	Diameter 3-400 Thickness 1-40

### Note:

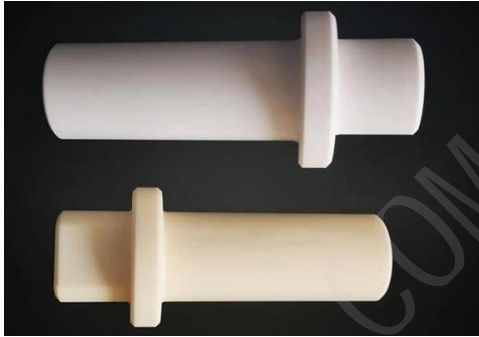
1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for detailed product information or request.

## Applications

- ◆ Sealing ring for pipeline, pump, valve, shaft and other mechanical equipment;
- ◆ Fixing ring for various for machining equipment, transmission systems, hydraulic systems, etc;

# Alumina Shaft

Hunan ATCERA Co. Ltd.



## Features

- ◆ High working temperature and good thermal shock resistance
- ◆ High strength and good wear resistance
- ◆ Good corrosion resistance and stability
- ◆ Good self-lubrication and low friction resistance

## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.88
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	25-30
Thermal expansion coefficient	/°C	7*10 <sup>-6</sup>
Size	mm	Diameter 8-80 Length 20-1500

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for product information or request.

## Applications

- ◆ Supporting and fixing shaft in metallurgical or chemical equipment;
- ◆ Transmission shaft in mechanical equipment.

# Alumina Pump

Hunan ATCERA Co. Ltd.

## Features

- ◆ High hardness and good wear resistance
- ◆ Good corrosion resistance and long life time
- ◆ Good self-lubrication and low friction resistance
- ◆ Non-toxic and harmless, good biocompatibility



## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.83
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2200
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature	°C	1650
Thermal conductivity	W/m*K	30
Thermal expansion coefficient	/°C	7.5*10 <sup>-6</sup>
Volume	ml	0.05-50

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for detailed product information or request.

## Applications

- ◆ Online filling machine to fill a variety of liquids, such as pharmaceutical liquid, beverage, cosmetics, electrolyte, liquid additives;
- ◆ Measurement and control flow of fluids to achieve precise metering of various liquids;
- ◆ Corrosive liquid transportation, circulation and pressurization.





## Features

- ◆ High hardness and good wear resistance
- ◆ Good corrosion resistance and long life time
- ◆ Good self-lubrication and low friction resistance
- ◆ Non-toxic and harmless, good biocompatibility

## Specification

Item	Unit	Value
Purity	%	99
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.88
Tensile strength (MPa)	MPa	260
Elastic Modulus (GPa)	GPa	380
Poisson's ratio	/	0.24
Compressive strength (MPa)	MPa	2210
Bending strength (MPa)	MPa	350
Moh's hardness	/	9.0
Maximum working temperature (long-term)	°C	1650
Maximum working temperature (short-term)	°C	1760
Thermal conductivity	W/m*K	25-30
Thermal expansion coefficient	/°C	7*10 <sup>-6</sup>
Size	/	DN15-DN500

### Note:

1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for product information or request.

## Applications

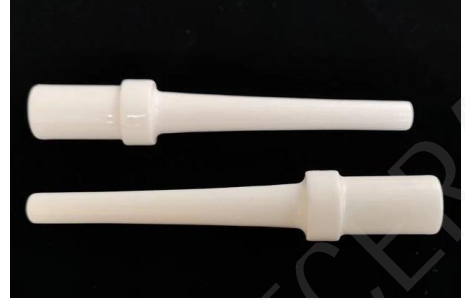
- ◆ In hydraulic system, lubricating oil system, fuel system and air conditioning refrigerant system to control liquid flow and direction, or to achieve flow shut off;
- ◆ Control transportation and flow of crude oil, refined oil, chemical liquids;
- ◆ Production of drugs and biological agents;
- ◆ Steam flow control in power generation and other industries

# Alumina Nozzle

Hunan ATCERA Co. Ltd.

## Features

- ◆ High hardness and good wear resistance
- ◆ Good corrosion resistance and long life time
- ◆ High working temperature and good thermal stability
- ◆ Good self-lubrication and low friction resistance



## Specification

Item	Unit	Value
Purity	%	96
Density (g/cm <sup>3</sup> )	g/cm <sup>3</sup>	3.7
Tensile strength (MPa)	MPa	230
Elastic Modulus (GPa)	GPa	340
Poisson's ratio	/	0.25
Compressive strength (MPa)	MPa	2100
Bending strength (MPa)	MPa	310
Hardness	HV	1550
Maximum working temperature	°C	1450
Thermal conductivity	W/m*K	25
Thermal expansion coefficient	/°C	7*10 <sup>-6</sup>
Size	/	DN8-DN80

### Note:

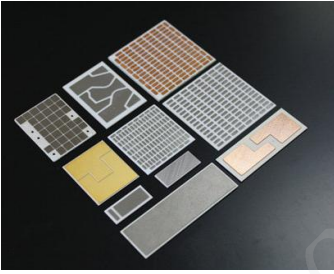
1. The parameters above may have slight deviations due to the raw material composition, OR difference in forming and sintering processes.
2. Please contact ATCERA for product information or request.

## Applications

- ◆ Surface paint and coating spray for automotive, shipbuilding industry, construction and other industries;
- ◆ Washing and cleaning, to remove stains and dirt;
- ◆ Humidification, cooling and sandblasting process;
- ◆ Spit out gas or liquid fuel in combustion engineering.

# Other Alumina Products

Hunan ATCERA Co. Ltd.



**Metallized Substrate**



**Pin**



**Grading Wheel**



**Bonding Capillary**



**Grinding Tank**



**Plunger**



**Lining Plate**



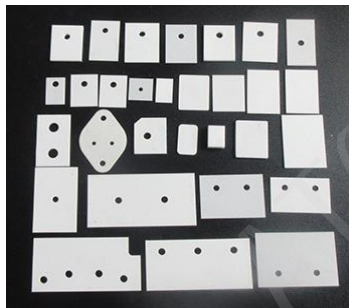
**Fiber Blanket**



**Flange**



**Bolt & Screw**



**Washer for IC**



**Sand Mill Disc**

**Note:** Please inquire ATCERA or visit [www.atcera.com](http://www.atcera.com) if need details of the products above, OR if need other quartz products, please contact ATCERA to inquire customized service.



**Whatsapp**



**Wechat**

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