

Rongsheng Corundum Bricks Physical and Chemical Index Tables

1. Technique Data of Corundum Brick

Item	Specification			
	GYZ-99A	GYZ-99B	GYZ-98	GYZ-95
Al ₂ O ₃ %	≥99	≥99	≥98	≥95
SiO ₂ %	≤0.15	≤0.2	≤0.5	/
Fe ₂ O ₃ %	≤0.1	≤0.15	≤0.2	≤0.3
Apparent Porosity, %	≤19	≤19	≤19	≤20
Bulk Density, g/cm ³	≥3.20	≥3.15	≥3.15	≥3.1
CCS, MPa	≥80	≥80	≥80	≥100
0.2MPa RUL °C	≥1700			
PLC, % 1500°C × 2h	±0.2			±0.3

2. Technique Data of Sintered Zirconia Corundum Brick

Item	Specification		
	AZS16	AZS20	AZS32
ZrO ₂ %	≥16	≥20	≥32
Al ₂ O ₃ %	≥59	≥55	≥45
Fe ₂ O ₃ %	≤0.5	≤0.5	≤0.5
CCS, MPa	≥70	≥80	≥90
Apparent Porosity, %	≤20	≤18	≤17
Bulk Density, g/cm ³	≥3.0	≥3.1	≥3.2
0.2MPa RUL °C	≥1620	≥1650	≥1680

3. Technique Data of Chrome Corundum Brick

Item	Specification			
	GGZ-5	GGZ-12	GGZ-20	GGZ-30
Cr ₂ O ₃ %	≥5	≥12	≥20	≥30
Cr ₂ O ₃ +Al ₂ O ₃ %	≥93	≥93	≥93	≥93
Fe ₂ O ₃ %	≤0.3	≤0.3	≤0.3	≤0.3
Apparent Porosity, %	≤18	≤18	≤18	≤18
Bulk Density g/cm ³	≥3.10	≥3.20	≥3.40	≥3.50
CCS, MPa	≥100	≥100	≥100	≥100
0.2MPa RUL °C	≥1700	≥1700	≥1700	≥1700

4. Technique Data of Fused Corundum Brick

Item	Specification		
	RA- $\alpha\beta$	RA- β	
Al_2O_3 %	93~96	92~94	
$\text{K}_2\text{O}+\text{Na}_2\text{O}$ %	3.2~5.0	5.5~7.5	
$\text{SiO}_2+\text{Fe}_2\text{O}_3+\text{TiO}_2+\text{CaO}+\text{其他}$ %	≤ 2.0	≤ 1.5	
Bulk Density, g/cm^3 (Dense Part)	≥ 3.3	≥ 2.8	
CCS, MPa	≥ 200	≥ 30	
Bubble Precipitation Rate, $1300^\circ\text{C} \times 10\text{h}$ %	≤ 0.3	/	
Static Corrosion, $1350^\circ\text{C} \times 48\text{h}$ mm/24h	≤ 0.4	/	
Bulk Density, kg/m^3 Unit Weight > 100Kg	PT	≥ 3050	≥ 2500
	WS	≥ 3250	≥ 2700

5. Technique Data of Fused Zirconia Corundum Brick(AZS)

Item	Specification			
	AZS33Y	AZS36Y	AZS41Y	
ZrO_2 %	32~36	35~40	40~44	
SiO_2 %	≤ 16	≤ 14	≤ 13	
Na_2O %	≤ 1.45	≤ 1.45	≤ 1.3	
$\text{Fe}_2\text{O}_3+\text{TiO}_2+\text{CaO}+\text{MgO}+\text{K}_2\text{O}+\text{Na}_2\text{O}$ %	≤ 2.0	≤ 2.0	≤ 2.0	
$\text{Fe}_2\text{O}_3+\text{TiO}_2$ %	≤ 0.3	≤ 0.3	≤ 0.3	
Bulk Density, g/cm^3	≥ 3.75	≥ 3.8	≥ 3.95	
Apparent Porosity, %	≤ 1.5	≤ 1.0	≤ 1.0	
Static Corrosion, $1500^\circ\text{C} \times 36\text{h}$ mm/24h	≤ 1.6	≤ 1.5	≤ 1.3	
Exudation Temperature, $^\circ\text{C}$	≥ 1400	≥ 1400	≥ 1400	
Bubble Precipitation Rate, $1300^\circ\text{C} \times 10\text{h}$ %	≤ 2.0	≤ 1.5	≤ 1.0	
Exudation Amount of Glass Phase, $1500^\circ\text{C} \times 4\text{h}$ %	≤ 2.0	≤ 3.0	≤ 3.0	
Bulk Density, kg/m^3 Unit Weight > 50Kg	PT/QX	≥ 3400	≥ 3450	≥ 3550
	ZWS	≥ 3600	≥ 3700	≥ 3850
	WS	≥ 3700	≥ 3750	≥ 3900