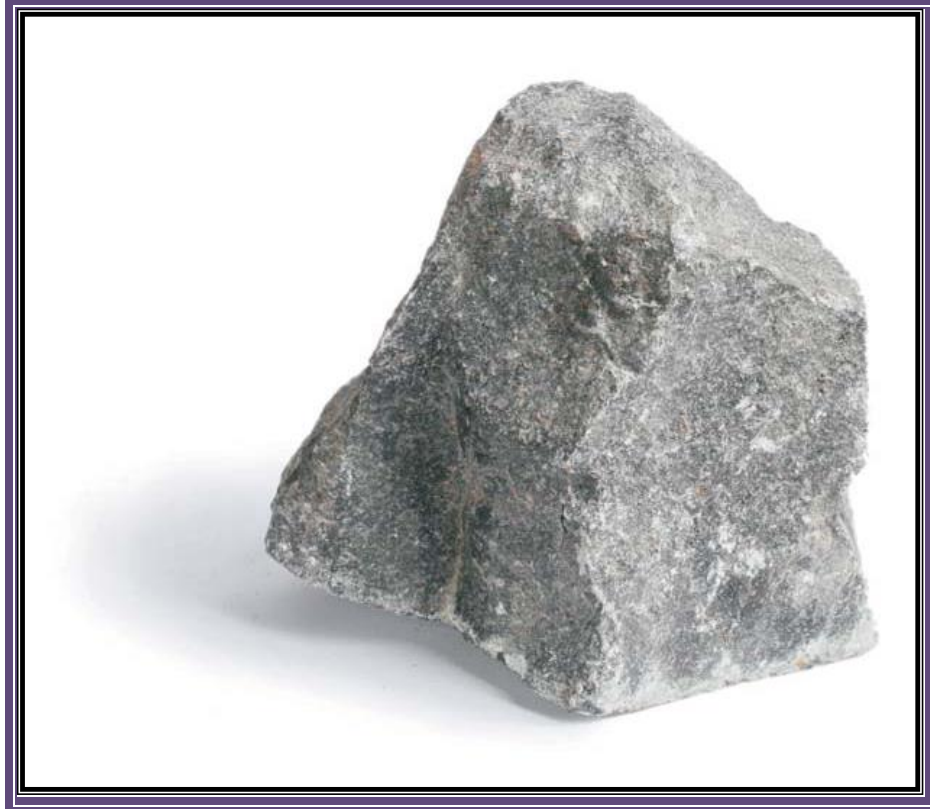


## BROWN FUSED ALUMINA (BROWN CORUNDUM)



### PROCESS OF PRODUCTION

Brown fused alumina is produced from bauxite, charcoal, iron chip by being fused under high temperature in an electric arc furnace. It is characterized by high toughness and has a micro hardness of 2000-2200kg/mm<sup>2</sup>. The abrasive tools made by brown fused alumina are suitable for grinding carbon steel, normal alloy steel, malleable cast iron and hard bronze, etc. Brown fused alumina can also be used for making fine quality refractory etc.

### APPLICATIONS

Brown Fused Alumina is a tough, sharp abrasives which is highly suitable for grinding metals of high tensile strength. Its thermal properties make it an excellent material for use in the manufacture of refractory products. This material is also used in other applications like blasting and surface hardening.



## SPECIFICATIONS

### Tilting Furnace (Turn-over Furnace)

Items		Unit	Index	Typical
Chemical Composition	Al <sub>2</sub> O <sub>3</sub>	%	95%min	95.56
	SiO <sub>2</sub>	%	1.2max	0.96
	Fe <sub>2</sub> O <sub>3</sub>	%	0.30max	0.09
	TiO <sub>2</sub>	%	3.00max	2.55
Melting point		°C	2050	
Refractoriness		°C	1980	
True density		g/cm <sup>3</sup>	3.80min	
Mohs hardness		---	9.00min	
Refractory grain sizes		mm	0-50, 0-1, 1-3, 3-5, 5-8...	
Fine powder		mesh	-80, 100, 150, 200, 325F...	
Abrasives Grits		FEPA	8, 14, 16, 20, 22,24, 30, 36, 40, 46, 60, 70, 80, 90, 100, 120, 150, 180, 220, 240...	

## WHITE FUSED ALUMINA (WFA)



### PROCESS OF PRODUCTION

White fused alumina is fused by alumina powder by electric arc furnace under high temperature. It has white color and little higher hardness and lower toughness comparing with brown fused alumina. The micro hardness of the product is 2200-2300kg/mm<sup>2</sup>. It has higher hardness and slight lower toughness comparing with brown fused alumina. It is also characterized by its high purity, acid and alkali resistance, good thermal stability. It's the high grade refractory materials.

### APPLICATIONS

Dedicated lines produce products for different applications. White Fused Alumina is highly friable and hence used in Vitriified Bonded Abrasives products where cool, fast cutting action is essential and also in the manufacture of high purity Alumina refractories. Other applications include use in Coated Abrasives, Surface treatment, Ceramic Tiles, Anti-Skid Paints, Fluidized Bed Furnaces and Skin / Dental Care.



**SPECIFICATIONS**

Items		Unit	Index	Typical
Chemical composition	Al <sub>2</sub> O <sub>3</sub>	%	99.00min	99.32
	SiO <sub>2</sub>	%	0.10max	0.08
	Fe <sub>2</sub> O <sub>3</sub>	%	0.10max	0.07
	Na <sub>2</sub> O	%	0.40max	0.23
Refractoriness		°C	1850min	
Bulk density		g/cm <sup>3</sup>	3.50min	
Mohs hardness		---	9.00min	
Principal crystalline phase		---	α-Al <sub>2</sub> O <sub>3</sub>	
Refractory grade	Grain	mm	0-50, 0-1, 1-3, 3-5, 5-8...	
	Fines	mesh	-200, -325...	
Grit (F grade and P grade)		FEPA	16, 24, 46, 100, 120, 150,...	