



## BROWN FUSED ALUMINA



### PROCESS OF PRODUCTION

Brown Fused Alumina is produced by the smelting of Calcined Bauxite in an electric arc furnace at temperatures greater than 2000°C. A slow solidification process follows the fusion, to yield blocky crystals. The melting help in removing residual sulphur and carbon , Strict control over Titania levels during the fusion process ensures optimum toughness of the grains.

Then The cooled crude is further crushed, cleaned of magnetic impurities in high intensity magnetic separators and classified into narrow size fractions to suit the end use. Dedicated lines produce products for different applications.

### 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.



## SPEC

### BROWN FUSED ALUMINA- TILTING FURNACE(Brown Corundum)

Items		Unit	Index	Typical
Chemical Composition	Al <sub>2</sub> O <sub>3</sub>	%	95%min	95.55
	SiO <sub>2</sub>	%	1.0max	0.76
	Fe <sub>2</sub> O <sub>3</sub>	%	0.30max	0.09
	TiO <sub>2</sub>	%	3.00max	2.3
	CaO+MgO	%	1.0max	0.6
Melting point		°C	2050	
Refractoriness		°C	1980	
True density		g/cm <sup>3</sup>	3.90min	
Mohs hardness		---	9.00min	
Grain size		mm	0-50, 0-1, 1-3, 3-5, 5-8	
Fine powder		mesh	-80, 100, 150, 200, 325F	
Abrasive grade		FEPA	F14---F30—F150-F220	



## BROWN FUSED ALUMINA- FIXED FURNACE(Brown Corundum)

Items		Unit	Index	Typical
Chemical Composition	Al <sub>2</sub> O <sub>3</sub>	%	95%min	95.4
	SiO <sub>2</sub>	%	1.50max	1.36
	Fe <sub>2</sub> O <sub>3</sub>	%	0.30max	0.07
	TiO <sub>2</sub>	%	3.00max	2.05
	CaO+MgO	%	1.0max	0.7
Melting point		°C	2050	
Refractoriness		°C	1980	
True density		g/cm <sup>3</sup>	3.90min	
Mohs hardness		---	9.00min	
Grain size		mm	0-50, 0-1, 1-3, 3-5, 5-8	
Fine powder		mesh	-80, 100, 150, 200, 325F	
Abrasive grade		FEPA	F14---F30—F150-F220	