



SCHAEFER
INDUSTRIAL CERAMICS
A **TKG** COMPANY

Alumina Kiln Furniture

Schaefer Industrial Ceramics is proud to introduce its newest product line of alumina kiln furniture. Recognizing a need for longer lasting refractories, SIC embarked on a development program to re-invent alumina kiln furniture.

Today's alumina parts are largely based on technology developed by General Motors in the early 1900's for kiln furniture used in the manufacturing of spark plug insulators. Manufacturers have used this technology due to its good thermal shock resistance, compatibility with molten metals, and its high temperature refractoriness. Differences in conventional alumina products are mainly due to processing rather than product design.

At Schaefer Industrial Ceramics, we have upgraded this technology to incorporate modern advancements in materials engineering through the utilization of advanced raw materials and by developing a process that will maximize the desired properties and minimize the weaknesses found in today's materials. The result is extremely durable, longer lasting kiln furniture superior to today's conventional products.

Chemical Analysis (Wt. %, Calcined basis)

Al ₂ O ₃	89-91%
SiO ₂	8-9%
CaO / MGO	0.1 – 0.2%
Fe ₂ O ₃	0.03 – 0.07%
Other	1-2%

Maximum Use Temperature: 3100°F

Hot Modulus of Rupture (2800°F): 1700 – 1900 psi

