



SCHAEFER
INDUSTRIAL CERAMICS
A TKG COMPANY



Alumina Crucibles

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

Today's crucibles 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 crucibles 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 crucibles. The result is an extremely durable, longer lasting crucible superior to today's conventional products.

Chemical Analysis (Wt. %, Calcined basis)	90% Alumina	95% Alumina
Al₂O₃	89 - 91%	94 - 96%
SiO₂	8 - 9%	3 - 5%
CaO/MGO	0.1 - 0.2%	0.1 - 0.2%
Fe₂O₃	0.03 - 0.07%	0.03 - 0.07%
Other	1 - 2%	0.5 - 0.9%

Maximum Use Temperature: 3050°F

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

Item No.	Top OD	Top ID	Outside Ht.	Inside Ht.	Bottom
ALC-25	4.63	3.63	9.50	9.0	0.5
ALC-30	4.5	3.75	10.88	9.25	0.5
ALC-40	5.875	4.875	10.875	10.25	0.5
ALC-50	6.5	5.5	11	10.375	0.625
ALC-65	6.5	5.5	13.25	12.5	0.75
ALC-100	8.75	7.75	12.75	12.125	0.625
ALC-150	9	7.75	14.5	13.75	0.75
ALC-200	10.75	9.25	15	14.125	0.875