



# SCHAEFER

## INDUSTRIAL CERAMICS

A **TKG** COMPANY

### Mullite & Fused Silica Pouring Cups

Schaefer Pouring Cups have become the industry standard for nearly 40 years. Manufactured to the highest quality standards, Schaefer Pouring Cups are designed for use in the most demanding environments. Engineered to provide clean and consistent pours, Schaefer pouring cups exhibit excellent thermal shock resistance, high strength, and minimal reactivity to investment casting alloys.

Quality is our primary concern at Schaefer Industrial Ceramics. Our manufacturing process is designed to produce the highest quality parts from beginning to end. With full batch traceability, process controls, and 100% inspection throughout, our quality levels are the highest in the industry.

Schaefer Pour Cups are available in Mullite or Fused Silica compositions. Mullite is recommended for most casting requirements while fused silica is suggested for large pouring cups where differential thermal expansion between the cup and the mold may cause cracking or separation. A special formulation for cup extensions meets the demanding requirements for SC/DS casting applications.

Chemical Analysis (Wt. %, Calcined basis)	Mullite (PC1-M)	Mullite (1046)	Fused Silica (FS4)	Cup Extension (CXT)
Al <sub>2</sub> O <sub>3</sub>	44 - 46	50 - 52	21-23	53 - 55
SiO <sub>2</sub>	51 - 53	45 - 47	76-78	43 - 45
CaO/MGO	0.4 - 0.5	0.37 - 0.41	0.3 - 0.4	0.3 - 0.4
Fe <sub>2</sub> O <sub>3</sub>	0.8 - 0.9	0.9 - 1.0	0.3 - 0.5	0.8 - 0.9
Alkali	0.2 - 0.3	0.2 - 0.3	0.1 - 0.2	0.1 - 0.2
Maximum Pouring Temperature	3100°F	3100°F	3100°F	3100°F
Recommended Preheat Temperature	1500°F Minimum	1500°F Minimum	500°F Minimum	500°F Minimum



### Regular Cups

Part Name	Neck (Bottom) ID	Neck (Bottom) OD	Top ID	Top OD	Height
<b>SII-1.375</b>	1.38	1.88	3.00	3.50	3.00
<b>SII-2FLE</b>	1.25	1.80	3.00	3.75	2.50
<b>SII-3</b>	2.00	2.65	4.00	4.65	2.80
<b>SII-3x3</b>	3.00	3.50	4.00	4.50	3.00
<b>SII-3.5</b>	1.75	2.50	4.20	5.10	3.50
<b>SII-3.75</b>	2.50	3.13	4.63	5.25	3.00
<b>SII-318</b>	3.13	3.63	4.63	5.13	3.00
<b>SII-32.2</b>	3.20	3.80	4.10	4.72	2.00
<b>SII-3FL</b>	2.00	2.50	4.20	5.00	2.90
<b>SII-3LM</b>	2.50	3.00	4.10	4.80	3.00
<b>SII-4</b>	2.00	2.50	4.60	5.30	4.00
<b>SII-444</b>	4.75	5.75	5.25	7.00	4.25
<b>SII-5FL</b>	2.38	2.90	5.50	5.90	4.13
<b>SII-7.3</b>	3.05	3.50	6.00	6.50	5.40
<b>1BR</b>	1.50	2.25	6.00	6.70	5.00
<b>2BR</b>	2.00	2.75	6.00	6.70	5.00
<b>3BR</b>	2.00	2.75	6.00	6.70	5.00
<b>4BR</b>	2.13	2.75	5.30	6.10	5.30

### Filter Cups

Part Name	Neck ID	Neck OD	Top ID	Top OD	Height
<b>SII-1.5FIT</b>	1.50	2.10	4.25	4.88	3.55
<b>SII-3FIT</b>	2.00	2.65	4.30	4.65	2.80
<b>SII-4FIT</b>	2.00	2.50	4.60	5.30	4.10
<b>SII-3LM-FB</b>	2.50	3.00	4.58	5.00	3.40
<b>SII-8FIT</b>	2.70	3.50	6.70	7.00	5.00

### Flange Cups

Part Name	Neck ID	Neck OD	Top ID	Top OD	Height
<b>SII-3F</b>	2.00	2.65	4.00	5.25	2.80
<b>SII-64.2</b>	2.00	2.65	5.30	6.25	4.00
<b>SII-5F</b>	2.40	2.95	4.60	5.90	4.25
<b>SII-8F</b>	2.50	3.13	6.00	7.00	4.40
<b>SII-2.6F</b>	2.60	3.20	4.00	5.25	1.75
<b>SII-3.8F</b>	3.00	3.50	4.75	5.50	3.80
<b>SII-6.3F</b>	3.00	3.50	5.27	6.13	3.00

### Rollover Cups

Part Name	Neck ID	Neck OD	Top ID	Top OD	Height
<b>SII-2.3RO</b>	2.00	2.70	6.88	7.50	3.25
<b>SII-144</b>	2.00	2.65	5.00	5.50	3.10
<b>SII-25.3RO</b>	2.50	3.13	6.19	7.13	2.75
<b>SII-29.2RO</b>	2.88	3.62	6.50	7.50	2.20