RENO REFRACTORIES, INC
RENO PUMP 50 LC

## TECHNICAL DATA SHEET

RENO PUMP $\mathbf{5 0}$ LC is a $50 \%$ alumina, low cement castable developed to be cast, pumped or shotcreted into place.

RENO PUMP 50 LC has low iron content volume stability, strength and abrasion resistance and is ideal for a variety of applications.

## SERVICE TEMPERATURE: $3000^{\circ} \mathrm{F}$ <br> MATERIAL REQUIRED FOR ESTIMATING: <br> 143 lbs. /cu. ft. <br> PUMPING WATER: <br> 6.5-7.5\%

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

| $\mathrm{Al}_{2} \mathrm{O}_{3}$ | $\mathrm{SiO}_{2}$ | $\mathrm{Fe}_{2} \mathrm{O}_{3}$ | $\mathrm{TiO}_{2}$ | MgO | CaO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 | 46 | $<0.9$ | $<1.5$ | $<0.1$ | 2.0 |

TYPICAL PHYSICAL PROPERTIES (pumping)

| Prefired to <br> ${ }^{\circ} \mathrm{F}$ | Modulus of <br> Rupture, psi | Cold Crushing <br> Strength, psi | Linear Change <br> $\%$ | "K" Factor <br> Btu-in/hr- $\mathrm{ft}^{2}{ }^{\circ} \mathrm{F}$ |
| :---: | :---: | :---: | :---: | :---: |
| 250 |  |  |  |  |
| 1500 | $1,500-2,000$ | $9,500-11,000$ | --- | 9.65 |
| 2000 | $1,200-1.400$ | $11,000-12,500$ | -0.6 | 9.03 |
| 2500 | $1,600-1,850$ | $7,500-8,500$ | 0.4 | 8.80 |
|  | $1,400-2,100$ | $6,700-9,000$ | -0.1 | 8.95 |

Coefficient of Thermal Expansion: $2.39 \times 10^{-6} \mathrm{in} / \mathrm{in} /{ }^{\circ} \mathrm{F}$
HOT MOR @2500ㅇ: $\quad 429 \mathrm{psi}$
HOT MOR @2700 ${ }^{\circ}$ : $\quad 266$ psi
POROSITY, $1500^{\circ} \mathrm{F}: \quad 14 \%$
ABRASION LOSS AFTER 1500${ }^{\circ}$ (ASTM C 704): Cast: <7cc , Pump: <9cc
ABRASION LOSS AFTER 2000º (ASTM C 704): Cast: <6cc, Pump: <9cc
PACKAGING: 2000 lb . Bags, 2 per Pallet (4,000 lbs.)

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The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures as required. They are subject to normal variations and should not be used for specification purposes.

