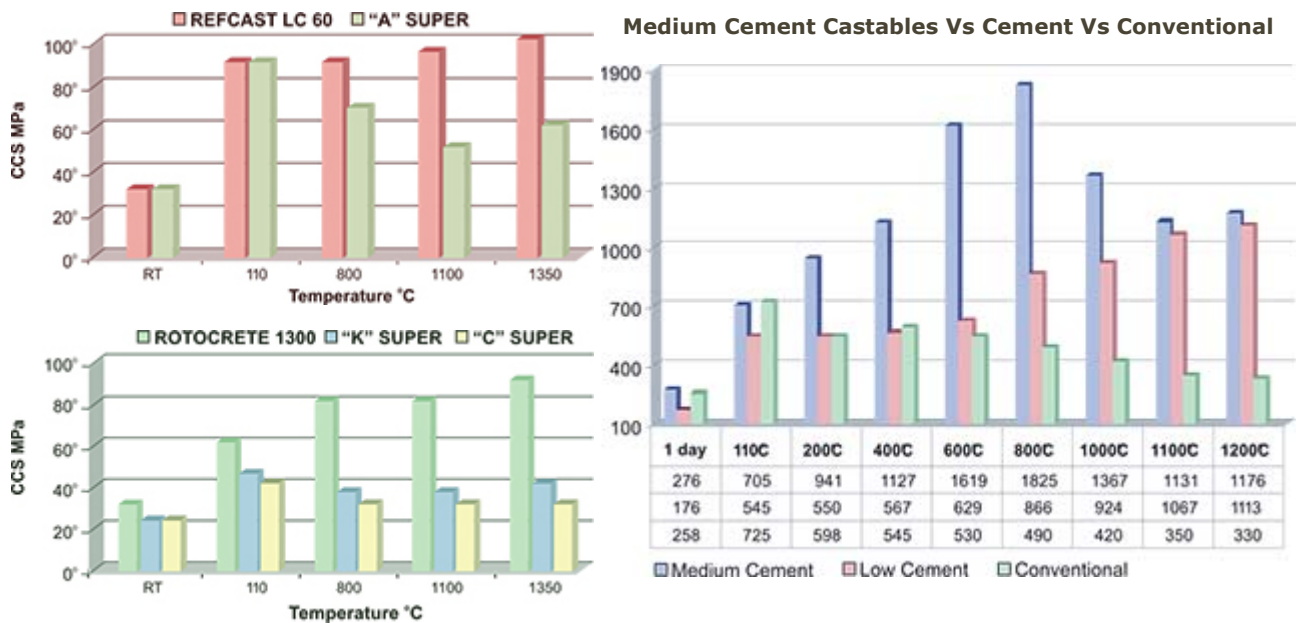


## REFRACTORY CASTABLES FOR CEMENT

**THE TYPICAL RECOMMENDATIONS ARE GIVEN BELOW**

Sl. No.	Application Area	Product Recommended
1	Tip Casting/Burner Pipe & Bull Nose	SMART CAST 009
2	Cooler Discharge wall	SMART CAST 009
3	Cooler Side wall	ROTOCRETE 1300
4	Cooler Side wall	ROTOCRETE 1300
5	Pre-heater/Cyclone walls	ROTOCRETE 1300
6	Pre-heater/ Cyclone suspended wall area	REFCAST LC 60
7	Patchup Areas	SHARADAA CAST SUPER/EXCEL

### Conventional Vs Low Cement Vs Medium Cement Castables



## Data Sheet – Conventional Vs Low Cement Vs Medium Cement Castables

PARTICULARS	RECAST LC45	RECAST LC60	Smart Cast 009
<b>GENERAL PROPERTIES</b>			
Service Temp°C (Max)	1400	1600	1550
Grain Size (MM) (Max.)	6	6	10
Water Required to Mix (%)	5.0 – 6.0	4.5 – 5.0	4.0 – 5.0
Reversible Thermal Expansion	0.50	0.60	0.50
<b>PHYSICAL PROPERTIES</b>			
Bulk Density (gm/cc) (Dried at 110°C)(Min.)	2.2	2.6	2.35
<b>Cold Crushing Strength (kgf/cm )</b>			
1 Day	200	200	300
110°C	750	800	1250
1100°C	950	950	1550
1500°C	1100 (1400°C)	1100	1600
<b>MOR, kg/cm<sup>2</sup></b>			
110°C	100	120	160
1100°C	125	150	170
1500°C	165 (1400°C)	170	200
<b>THERMAL PROPERTIES</b>			
Refractoriness°C (Min)	1717	1804	–
<b>Permanent Linear Change (%) (Max)</b>			
800°C	±0.02	±0.10	±0.10
1100°C	±0.03	±0.30	±0.20
1500°C	±1.00 (1400°C)	±1.00	±0.20
<b>Thermal Conductivity (Kcal/hr/m/°C)</b>			
400°F/3 Hrs	0.84	0.95	1.28
600°F/3 Hrs	1.05	1.10	–
800°F/3 Hrs	1.16	1.20	1.40
<b>CHEMICAL PROPERTIES(%)</b>			
Al <sub>2</sub> O <sub>3</sub> (Min)	40.0	60.0	50
Fe <sub>2</sub> O <sub>3</sub> (Max)	1.50	1.50	1.1
Application Guidelines			
Mixer	P	P	P
Placement	V/T	V/T	V/T
Water/Mix Temperature°C	20 ± 5	20 ± 5	20 ± 5
Mixing Time (Min.): Dry/Wet	2/5	2/5	2/5

## Cement Industry References

**Kiln / Cooler / Preheater / Cyclone etc.**

<b>Application Area</b>	<b>Products</b>	<b>Project</b>
1. Khyber Industries	LC 90, Refcast Spl, LC 60	Project
2. Sagar Cements	Refcast Spl, Refcast A Spl, Refcast C, Refcast LC 60 ABR	Project & Maintenance
3. Madras Cements	Refcast A, Refcast C, Refcast Super, Refcast LC 60 ABR, LC 45	Maintenance
4. RAS Cements / Shree Cements	LC 90, LC 60, C Spl	Project & Maintenance
5. Kesoram Cements	K Plus, LC 80	Maintenance
6. Zuari Cements	LC 90 ABR, Refcast K Plus, LC 60	Maintenance
7. The India Cements	LC 90 ABR, Refcast K & C, Rotocrete 1300	Maintenance
8. Andhra Cements	LC 60 ABR, LC 80, Refcast K	Maintenance
9. Sri Vishnu Cements	LC 90 ABR, LC 90, Refcast A	Maintenance
10. Sri Chakra Cements	LC 90, LC 80, Refcast A, Rotocrete 1300	Maintenance
11. Mangalam Cements	LC 60, LC 90 ABR, Refcast K Plus	Maintenance
12. Suvarna Cements	LC 60 ABR, Refcast A	Maintenance
13. Rain Industries (Priya I & II)	Refcast LC 60 ABR, Refcast A, LC 70, LC 90	Maintenance
14. Anjani Cements	Refcast A, Refcast K	Maintenance
15. NCL Industries	LC 90, Refcast K, Sup	Maintenance
16. Orient Cement	Refcast K, Refcast C, Thermopatch	Maintenance
17. Vasavadatta Cement	LC 60, Rotocrete 1300	Maintenance