



# KERSAND™ 100-400

Kersand is the ideal substitute to chromite sand.

Kersand100-400 is a new refractory sand. It is an alternative material for massive casting in iron and steel. The product matches all foundry requirements.

## CHEMICAL ANALYSIS IN WT %

	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	Na <sub>2</sub> O
<b>Kersand™ 100 - 400</b>	59,1	38,5	0,75	0,15

## TYPICAL PARTICLE SIZE DISTRIBUTION

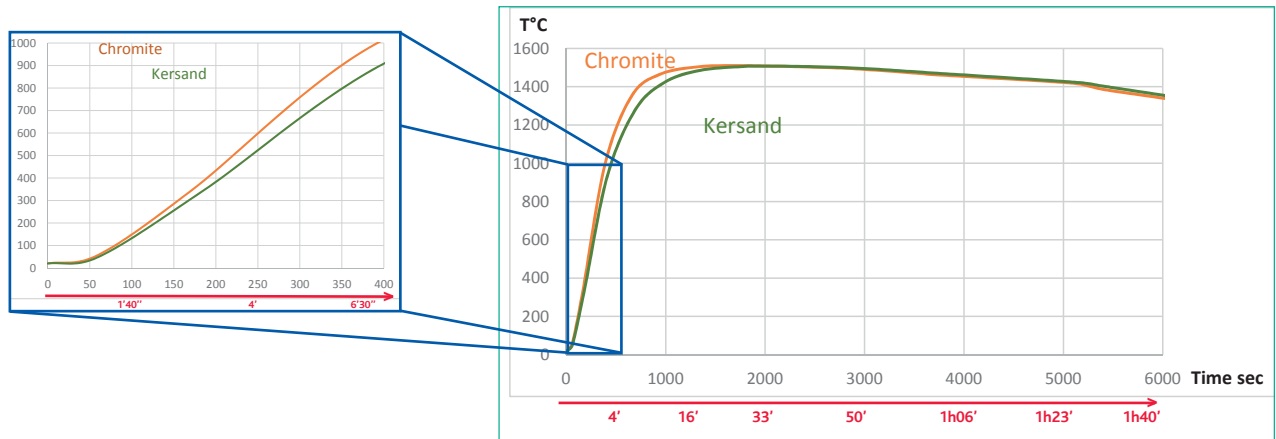
<b>Kersand™ 100 - 400</b>	<b>AFS</b>	<b>60</b>
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## KEY PROPERTIES

- ◆ High refractoriness : resistance to high temperature (> 1700°C) without melting or sintering
- ◆ Low bulk density. We can produce 50% more cores using Kersand versus chromite
- ◆ Cooling behavior is performing as good as chromite
- ◆ Suitable for all organic binders with total compatibility with silica sand
- ◆ Low thermal expansion to prevent veining and finning

## TEST RESULTS

COOLING EFFECT = Simulation of the temperature of a thin core in massive steel casting  
 Ø 400mm / height 500mm with a cylindrical central core of 40mm



## CASE STUDY

### Test conditions

Metal/Alloys	Iron
Pouring T°	1350°C
Casting weight	1900 kg
Cores diameter	75mm
Cores height	380mm
Coating	Water based

### Test conclusions

- 1 Remove defects, lower production costs
- 2 Avoid the use of oxygen lance for cavities
- 3 Elimination of casting scraps

