



INTRODUCTION

Consteel's CMFS filler sand is formulated by most compatible composition including additive with favorable grain size distribution which thus features as following and widely utilized in EAF's EBT and ladles nozzle applications.

- Low thermal conductivity property at various temperature scope which help form appropriate sintered layer to support high self-pouring ratio higher than 98%;
- Low sintering temperature which enable quick sintering formation;
- No contamination to molten steel due to inert reaction to steel and extremely low solubility;
- High refractoriness under load which ensure the stable sintered layer in various conditions;
- High fluidity characteristic which guarantee the successful drainage during the pouring step.

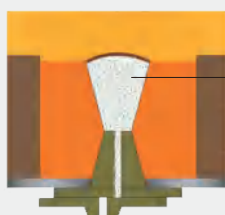


COMPOSITION&PROPERTY

Part number	Chemical Composition(wt%)				Category	Grain size(mm)	Sintered temp.(°C)	Refractoriness under load(°C)	Thermal conductivity (w/m.k)	BD (g/cm³)	Anti-slag ranking	PLC		Suggested applications
	Cr ₂ O ₃	SiO ₂	ZrO ₂	MgO								1500°C×3h		
CMFS M	-	22~35	-	65~96	Magnesium	1.2~0.2	1250~1450	>1800	3.3	≥2.3	6	0.2~+1.5	Low-carbon steel	
CMFS S	-	>90	-	-	Silica	3~0	1250~1450	>1650	3.6	≥2.6	5	0.2~+1.5	Medium-carbon steel	
CMFS Z	-	<30	50~70	<10	Zirconium	3~0	1250~1450	>1800	4.2	≥2.7	1	0.2~+1.5	Alloy steel	
CMFS C	40~50	<1	-	<10	Chromium	3~0	1250~1450	>1700	3.8	≥2.7	3	0.2~+1	Alloy steel	
CMFS SZC	20~25	30~35	30~45	<5	Si-Zir-Chr	3~0	1250~1450	≈1750	3.9	≥2.8	2	0.2~+1	Alloy steel	
CMFS MCZ	35~45	<10	5~20	10~30	Mg-Chr-Zir	3~0	1250~1450	≈1750	4	≥2.9	2	0.2~+1	Alloy steel	
CMFS SC	52~60	29~37	-	<5	Si-Chr	3~0	1250~1450	≈1700	4.1	≥3.0	3	0.2~+1	High-Alu steel	

Note:
The parameters in above sheet are for customers' reference only and please contact our engineer for specific formulation and granularity design according to your particular smelting requirements and metallurgical process characteristics.

HOW TO SELECT THE RIGHT ONE



CMFS Filler sand

When it comes to the design & formulation of filler sand ,in addition to the fundamental chemical & physical properties with corrosion resistant,erosion resistant and thermal shock resistant requirements, the delicate pre-work involves around the theoretical analysis combined with practical accumulation is the key to select the right one for your optimal smelting and re-fining process.

