Figure 1

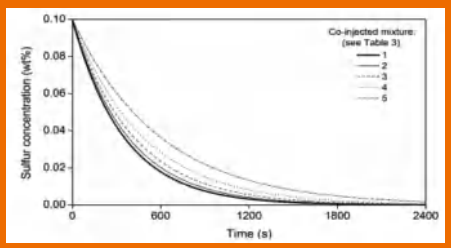

Figure 2

Current industrial consumers demand high quality steels with strict chemical specifications, superior mechanical performance and low impurity contents. Particularly, sulfur is a detrimental impurity which causes brittleness and granular cracks in steels and adversely affects mechanical properties such as du ctility and impact toughness. Therefore, hot metal from EAF must be treated during or prior to the refining furnace treatment in order to obtain steels with low sulfur contents . In the de-sulfurization process, powdered reagents are injected into the hot metal through an immersed lance using an inert carrier gas such as argon or nitrogen as shown as figure 2 or the KR method as shown as figure 1.The reagents chemically react with the dissolved sulfur forming a sulfide that ascends and is captured in the slag layer that covers the melt. Lime, calcium carbide and magnesium are the powdered reagents commonly employed for the hot metal desulfurization

INTRODUCTION

Consteel's CADS desulfurizer is widely used in the so-called short steel met allurgical process ranges from melting, swift tapping to final outside furna ce refining process. This product is elaborately designed with cutting-edge formula and premium granularity selection which reult in high desulfurizat ion rate from 30% to 80% depending on various smelting processes. CADS series is characterized by following features.

- Remarkably decrease the noise pollution and electrode consumption;
- Increase the arc submerge effect and heat power efficiency;
- Apparently help reduce the smelting duration and smelting cost by enha ncing the bath temperature remarkably;
- Injection of CADS desulfurizer allows to achieve ultra-low concentration s of sulfur in steel as 0.0002%.

COMPOSITION&PROPERTY

Part number	Chemical Composition(wt%)						Density (g/cm^3)	Granularity (mm)	Melting point (℃)	Dosage ratio(Kg/ton)
	CaO	MgO	Al_2O_3	SiO_2	Fe_2O_3	H_2O				
CADS	40~80	⩽ 10	2~10	⩽ 8	⩽ 3	⩽ 0.5	⩽ 0.96	⩽ 10	> 1300	2~5

Note:
The exact formula for our customer will be determined by our engineer based on metallurgical equipment features and smelting process characteristics which guarantee the superior de-sulfurization rate while enhancing the smelting efficiency. Transition of sulfur from steel to slag may be presented by the chemical equation: [S] + (CaO) = (CaS) + [O]