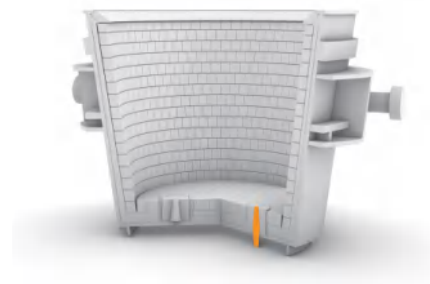




## INTRODUCTION

Consteel's CFS series slide plates and CFN series upper and collector nozzles are made of optimal composition and state of the art process, which guarantee our customers with cutting-edge industrial service from the fundamental aspects to various demanding applications. Consteel's products distinguish themselves by following features except basic performance in anti-corrosion, anti-erosion and anti-thermal shock.

- Extraordinary & endless products research capability ;
- Rigid products inspection procedures;
- Case-oriented products application analysis ability;



## COMPOSITION&PROPERTY

Consteel SN	Chemical composition(Wt%)			Physical properties			Chemical category	Anchor Raw material	Process feature
	Al <sub>2</sub> O <sub>3</sub>	ZrO <sub>2</sub>	C	B.D. g/cm <sup>3</sup>	A.P.%	C.C.S Mpa			
CFS-DA80	≥ 80	-	5	2.95	10	100	Al-C	Sintered corundum&syntetic mullite	Dead-burned
CFS-DA75	≥ 75	-	5	2.9	10	80			
CFS-DAZ78	≥ 78	≥ 4	6	3.18	8	120	Al-C-Zr	Sintered corundum&syntetic mullite	Light-burned
CFS-DAZ75	≥ 75	≥ 4	5	3.05	10	115			
CFS-DAZ70	≥ 70	≥ 5	7	3.05	10	120	Al-C	Sintered corundum&syntetic mullite	Non-burned
CFS-LA80	≥ 80	-	2	3.1	8	120			
CFS-LA75	≥ 75	-	3	2.95	10	100	Al-C-Zr	Sintered corundum&syntetic mullite	Non-burned
CFS-LA70	≥ 70	-	3	2.85	12	80			
CFS-LAZ80	≥ 80	≥ 4	2	3.05	10	120	Al-C	Sintered corundum&syntetic mullite	Non-burned
CFS-LAZ75	≥ 75	≥ 4	3	3	10	110			
CFS-LAZ70	≥ 70	≥ 4	4	2.95	12	90	Al-C	Sintered corundum&syntetic mullite	Non-burned
CFS-NA80	≥ 80	-	2	3	8	80			
CFS-NA75	≥ 75	-	2	2.95	8	80	Al-C-Zr	Sintered corundum&syntetic mullite	Non-burned
CFS-NA70	≥ 70	-	2	2.9	10	60			
CFS-NAZ80	≥ 80	≥ 3	2	3	8	80	Al-C-Zr	Sintered corundum&syntetic mullite	Non-burned
CFS-NAZ75	≥ 75	≥ 3	3	2.9	8	60			
CFS-NAZ70	≥ 70	≥ 3	3	2.85	10	50			

Note:  
The above parameters are for customers' reference only, please reach our engineer with your ladle process metallurgical&flow control features including the sliding gate valve brand and model information or drawings to enable us to configure the specific products for you.

## ANTI-WEARING PROOF



CONVENTIONAL PLATES WEARING APPEARANCE AFTER 10HEATS



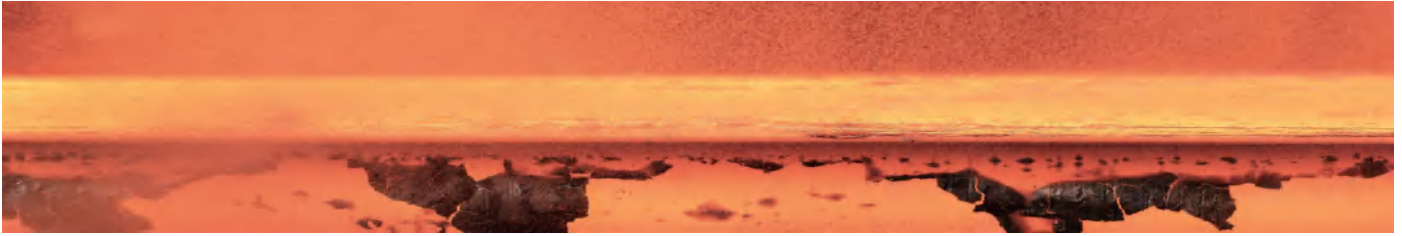
CONVENTIONAL NOZZLES WEARING APPEARANCE AFTER 10HEATS



CONSTEEL'S PLATES WEARING APPEARANCE AFTER 10HEATS



CONSTEEL'S NOZZLES WEARING APPEARANCE AFTER 10HEATS



## COMPOSITION&PROPERTY

Consteel SN	Chemical composition(Wt%)			Physical properties			Chemical category	Binder	Application
	Al <sub>2</sub> O <sub>3</sub>	MgO	C	B.D. g/cm <sup>3</sup>	A.P%	C.C.S Mpa			
CFN-NC90	≥ 90	-	-	3	20	45	Corundum	Resin	Ladle collector nozzle
CFN-NC85	≥ 85	-	2	2.9	12	40	Corundum-graphite		
CFN-NC75	≥ 75	-	2	2.8	12	38			
CFN-NC65	≥ 65	-	3	2.7	14	32	Spinel-graphite		
CFN-NU75	≥ 6	≥ 75	4	2.8	10	42			
CFN-NU80	≥ 80	-	3	2.9	10	40	Corundum-graphite		Ladle upper nozzle
CFN-NU75	≥ 75	-	3	2.75	14	38			
CFN-NU70	≥ 70	-	3	2.7	14	38			

Note:  
The above parameters are for customers' reference only, please reach our engineer with your ladle process metallurgical&flow control features including the sliding gate valve brand and model information or drawings to enable us to configure the specific products for you.

## HOW TO SELECT THE RIGHT ONE



When it comes to the design & configurations of plates&nozzles,in addition to the fundamental chemical & physical properties corrosion resistant,erosion resistant and thermal shock resistant requirements, the delicate pre-work involves around the theoretical analysis combined with empirical accumulation is the key to select the right one for your crucial steel-making re-finishing process.



- Note:
- Please reach Consteel engineer to select the specific group which suit your particular smelting equipment & processing features.
  - The specific chemical formula can be designed on the basis of the working severity assessment after the study of information obtained from customers.
  - The size & body structure above are for reference only, Consteel preserve the right to update and modify the design without notifications.