



Date: 02/10/23		Material Specification for		 IRAN ALLOY STEEL CO.																														
Rev.: 00		End Block (ϕ 100mm)																																
ID code : N-068006.Y		Area : EAF Tap hole		Storage site : 46																														
General properties																																		
Basic Components: Magnesita-Carbon			Bonding System: Resin bonded																															
Classification: Fused Magnesita																																		
Chemical composition (wt. %) : <table border="0"> <tr><td>MgO</td><td>Min 97.0</td></tr> <tr><td>CaO</td><td>1-1.5</td></tr> <tr><td>SiO₂</td><td>0.5-1</td></tr> <tr><td>Al₂O₃</td><td>0.5-1.5</td></tr> <tr><td>Fe₂O₃</td><td>0.5-1</td></tr> <tr><td>C</td><td>14-15</td></tr> <tr><td>L.O.I</td><td>13-18</td></tr> </table>		MgO	Min 97.0	CaO	1-1.5	SiO ₂	0.5-1	Al ₂ O ₃	0.5-1.5	Fe ₂ O ₃	0.5-1	C	14-15	L.O.I	13-18																			
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Sieve analysis /Dimension: Physical properties : <table border="0"> <tr> <td>Bulk Density</td> <td>Min 2.9</td> <td>g/cm³</td> </tr> <tr> <td>Appearance Porosity</td> <td>Max 6</td> <td>%</td> </tr> </table> Mechanical/Thermal properties: <table border="0"> <tr> <td>Permanent Linear Change</td> <td>-</td> <td>%</td> </tr> <tr> <td>Cold Crushing Strength</td> <td>Min 300</td> <td>kg/cm²</td> </tr> <tr> <td>Refractoriness Under Load</td> <td>-</td> <td>T2 , °C</td> </tr> <tr> <td>Hot Modulus of Rupture</td> <td>-</td> <td>kg/cm² at 1000</td> </tr> <tr> <td>Thermal Conductivity</td> <td>Max 11.0</td> <td>W/m. k at 1000</td> </tr> <tr> <td>Thermal Expansion</td> <td>-</td> <td>%</td> </tr> <tr> <td>Thermal Shock Resistance</td> <td>-</td> <td>cycle</td> </tr> <tr> <td>Max Service Point</td> <td>1750</td> <td>° C</td> </tr> </table>					Bulk Density	Min 2.9	g/cm ³	Appearance Porosity	Max 6	%	Permanent Linear Change	-	%	Cold Crushing Strength	Min 300	kg/cm ²	Refractoriness Under Load	-	T2 , °C	Hot Modulus of Rupture	-	kg/cm ² at 1000	Thermal Conductivity	Max 11.0	W/m. k at 1000	Thermal Expansion	-	%	Thermal Shock Resistance	-	cycle	Max Service Point	1750	° C
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Remark: - Packing:- Shelf life: <input checked="" type="checkbox"/> 2 Year NA <input type="checkbox"/> Quality Check: Certificate from supplier and laboratory test																																		
Edited: Ehsan Zarezadeh		Checked: Mehdi Eslampour		Approved: Ali Kamali																														