



Date: 04/03/12 Rev.: 00		Material Specification for Purging Plug GP6 ST TYPE		 IRAN ALLOY STEEL CO.																						
ID code : 7005050009		Area : Ladle		Storage site : PU 46																						
General properties																										
Basic Components: Tabular Alumina & Refractory Cement			Bonding System: Ceramic Bond																							
Classification: Precast Shape (Low Cement Refractory Castable)																										
<u>Chemical composition (wt. %) :</u> <table border="0"> <tr> <td>Al₂O₃</td> <td>94-96</td> </tr> <tr> <td>SiO₂</td> <td>Max 0.2</td> </tr> <tr> <td>CaO</td> <td>1.8-2.2</td> </tr> <tr> <td>Fe₂O₃</td> <td>Max 0.1</td> </tr> <tr> <td>MgO</td> <td>1.5-2.0</td> </tr> </table>			Al ₂ O ₃	94-96	SiO ₂	Max 0.2	CaO	1.8-2.2	Fe ₂ O ₃	Max 0.1	MgO	1.5-2.0	<u>Fig.</u> 													
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<u>Sieve analysis /Dimension:</u> <u>Physical properties :</u> <table border="0"> <tr> <td>Bulk Density</td> <td>2.8-3.0</td> <td>g/cm³</td> </tr> <tr> <td>Appearance Porosity</td> <td>17-19</td> <td>%</td> </tr> </table> <u>Mechanical/Thermal properties:</u> <table border="0"> <tr> <td>Permanent Linear Shrinkage</td> <td>-0.26</td> <td>% at 1600 °C</td> </tr> <tr> <td>Cold Crushing Strength</td> <td>Min 500</td> <td>kg/cm²</td> </tr> <tr> <td>Hot Modulus of Rupture</td> <td>-</td> <td>kg/cm² at 1000 °C</td> </tr> <tr> <td>Thermal Conductivity</td> <td>-</td> <td>W/m.k at 1000 °C</td> </tr> <tr> <td>Max Service Point</td> <td>1750</td> <td>°C</td> </tr> </table>						Bulk Density	2.8-3.0	g/cm ³	Appearance Porosity	17-19	%	Permanent Linear Shrinkage	-0.26	% at 1600 °C	Cold Crushing Strength	Min 500	kg/cm ²	Hot Modulus of Rupture	-	kg/cm ² at 1000 °C	Thermal Conductivity	-	W/m.k at 1000 °C	Max Service Point	1750	°C
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<u>Remark:</u> - <u>Packing:</u> Pallet/Box <u>Shelf life:</u> <input checked="" type="checkbox"/> 1 Year NA <input type="checkbox"/> <u>Quality Check:</u> Certificate from supplier and laboratory test																										
Edited: Ehsan Zarezadeh		Checked: Mehdi Eslampour		Approved: Vahid Saffarzadeh																						