Specification of Clinker Type II

Rayenehdaran

Chemical Analysis			Chemical Requirements		
Compounds	Unit	**Result**	ISIRI 389	EN 197-1	GOST 10178-85
SiO_2	%	21.00 - 21.80	Min. 20	------	------
Al_2O_3	%	4.70 - 5.10	Max. 6.0	------	------
Fe_2O_3	%	3.40 - 3.80	Max. 6.0	------	------
CaO	%	65.0 - 66.0	------	------	------
MgO	%	Max. 1.70	Max. 5.0	------	Max. 5.0
SO_3 (C_3A: Max. 8.0)	%	1.90 - 2.20	Max. 3.0	Max. 3.5	Max. 3.5
K_2O	%	Max. 0.55	------	------	------
Na_2O	%	Max. 0.55	------	------	------
Equivalent Alkalies (Na_2O+0.658K_2O)	%	Max. 0.70	Max. 0.6	------	Max. 1.2
Chloride (Cl^-)	%	Max. 0.002	------	Max. 0.1	------
Loss on Ignition (L.O.I)	%	Max. 1.25	Max. 3.0	Max. 5.0	------
Free Lime (F.CaO)	%	Max. 1.40	------	------	------
Insoluble Rediue (I.R)	%	Max. 0.65	Max. 0.75	Max. 5.0	------
Composition According to Bogue					
C_3S (Tricalcium Silicate)	%	56.0 - 59.0	------	------	------
C_2S (Dicalcium Silicate)	%	16.0 - 21.0	------	------	------
C_3A (Tricalcium Aluminat)	%	5.50 - 7.00	Max. 8.0	------	Max. 8.0
C_4AF	%	10.0 - 11.5	------	------	-----

Physical Properties					Physical Requirements		
Tests			Unit	**Results**	ISIRI 389	EN 197-1	GOST 10178-85
Fineness	Retained on 80 µm Sieve		%	Max. 5.0	------	------	Max. 15.0
	Blaine (Specific Surface)		cm^2/g	3,000 - 3,100	Min. 2800	------	Min. 2800
Specific Gravity			ton/m^3	3.15 - 3.20	------	------	------
Normal Consistency			%	26.0 - 27.0	------	------	------
Setting Time (Vicat Test)	Initial		min.	120 - 130	Min. 45	Min. 45	Min. 45
	Final		min.	210 - 220	Max. 360	------	Max. 600
Soundness Expansion	Autoclave Exp.		%	0.06 - 0.09	Max. 0.8	Max. 0.8	Max. 0.8
	Le Chatelire Exp.		mm	2 -- 3	------	Max. 10	------
	Sulfate Resistance 14 days Exp.		%	------	------	------	------
Heat of Hydration	7 Days		Cal/gr.	65 - 70	Max. 70	------	------
	28 Days		Cal/gr.	------	------	------	------
Compressive strengh *	1 Days		kg/cm^2	------	------	------	------
	2 Days		kg/cm^2	205 - 245	------	Min. 205	------
	3 Days		kg/cm^2	250 - 300	Min. 100	------	------
	7 Days		kg/cm^2	340 - 390	Min. 175	------	------
	28 Days		kg/cm^2	535 - 575	Min. 315	Min. 535	Min. 500

* According to Customer Requests.

For Export

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