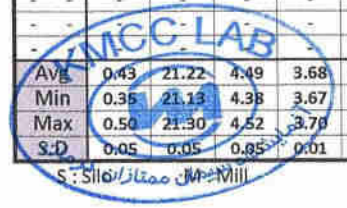




Day	Chemical Compositions & Phases %																	Physical Test											Lab.Code				
	IR	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	SO ₃	K ₂ O	Na ₂ O	Cl	LOSS	C3S	C2S	C3A	C4AF	C4AF+2C3A	F,CaO	Fineness		Setting time		Soundness		Compressive Strength (MPa)						Bend Strength (MPa)			
																		Sieve 90 mic	Blaine (m ² /kg)	INIT (min)	FINAL (min)	LEACHTERLIER (mm)	Auto Clave (%)	1 DAY	2 DAYS	3 DAYS	7 DAYS	28 DAYS		2 DAYS	3 DAYS	28 DAYS	
1	M	0.61	21.31	4.50	3.64	63.61	1.32	2.66	0.59	0.63	0.018	1.96	54.0	20.4	5.8	11.1	22.6	1.55	1.5	295	135	190	1.2	0.14	-	21.1	26.6	35.8	46.5	4.3	5.3	8.0	I-CE-01-203
2	M	0.55	21.10	4.29	3.62	64.31	1.31	2.66	0.59	0.65	0.018	1.96	59.9	15.3	5.2	11.0	21.5	1.80	1.4	292	130	180	1.3	0.17	-	19.3	24.2	34.1	44.6	3.9	4.5	7.3	I-CE-01-205
3	S	0.59	21.09	4.36	3.63	63.95	1.32	2.78	0.59	0.65	0.018	1.85	57.6	17.0	5.4	11.0	21.9	1.50	1.4	311	130	175	1.1	0.11	-	21.4	27.5	36.6	47.4	4.2	5.3	7.7	I-CE-01-206
3	M	0.56	21.07	4.27	3.60	63.94	1.31	2.63	0.59	0.69	0.018	1.94	58.8	16.0	5.2	11.0	21.4	1.55	1.5	295	135	185	1.2	0.14	-	19.8	24.9	34.2	45.1	3.8	4.4	8.3	I-CE-01-207
4	S	0.57	21.10	4.34	3.62	63.85	1.31	2.70	0.59	0.64	0.018	1.88	57.5	17.1	5.4	11.0	21.8	1.45	1.3	314	130	180	1.1	0.11	-	21.3	27.8	36.5	46.3	4.1	5.0	7.9	I-CE-01-208
4	M	0.56	21.18	4.32	3.63	64.23	1.33	2.65	0.59	0.65	0.018	1.91	58.7	16.4	5.3	11.0	21.7	1.75	1.4	292	135	185	1.2	0.14	-	19.5	24.6	34.1	45.3	3.7	4.6	8.1	I-CE-01-209
5	S	0.48	21.19	4.39	3.65	64.23	1.33	2.74	0.59	0.65	0.018	1.85	57.9	17.1	5.5	11.1	22.0	1.45	1.4	311	130	180	1.1	0.11	-	22.7	28.1	38.8	49.6	4.3	5.4	8.2	I-CE-01-210
6	S	0.57	20.95	4.27	3.61	63.92	1.31	2.72	0.59	0.64	0.018	1.92	59.4	15.3	5.2	11.0	21.4	1.50	1.4	314	125	175	1.2	0.11	-	21.9	28.1	37.3	47.8	4.2	5.3	8.1	I-CE-01-211
6	M	0.58	20.93	4.22	3.59	63.88	1.28	2.67	0.59	0.64	0.019	1.89	59.9	14.8	5.1	10.9	21.1	1.90	1.6	295	130	180	1.3	0.17	-	20.6	25.9	35.6	46.1	3.9	4.8	7.7	I-CE-01-212
7	S	0.56	20.89	4.26	3.59	63.84	1.29	2.73	0.59	0.65	0.018	1.69	59.6	14.9	5.2	10.9	21.4	1.90	1.5	314	130	180	1.3	0.17	-	22.7	28.1	37.2	49.0	4.4	5.2	7.9	I-CE-01-213
8	M	0.51	21.05	4.39	3.60	63.66	1.29	2.72	0.59	0.65	0.018	1.92	56.8	17.5	5.5	11.0	22.0	1.75	1.2	298	130	180	1.2	0.14	-	19.3	24.7	34.5	46.5	4.1	4.7	7.6	I-CE-01-215
9	M	0.61	21.01	4.29	3.59	63.87	1.32	2.58	0.58	0.64	0.018	1.89	59.0	15.7	5.3	10.9	21.5	1.85	1.2	301	135	185	1.3	0.17	-	20.5	26.7	35.2	46.0	4.0	5.2	8.1	I-CE-01-217
10	S	0.51	20.93	4.30	3.61	63.88	1.30	2.72	0.58	0.63	0.018	2.02	59.2	15.4	5.3	11.0	21.6	1.70	1.3	308	125	175	1.2	0.14	-	22.3	29.4	38.2	49.5	4.5	5.4	8.1	I-CE-01-218
10	M	0.59	20.95	4.31	3.60	63.36	1.32	2.52	0.60	0.64	0.019	1.76	57.4	16.7	5.3	11.0	21.6	1.70	1.1	301	130	180	1.2	0.14	-	20.2	26.9	35.1	45.7	4.2	5.1	7.9	I-CE-01-219
11	M	0.56	21.02	4.35	3.63	64.05	1.30	2.52	0.57	0.64	0.019	2.04	59.4	15.5	5.4	11.0	21.8	1.90	1.3	305	140	190	1.3	0.17	-	19.9	26.8	35.4	44.6	4.2	4.8	7.9	I-CE-01-221
12	S	0.62	20.95	4.28	3.61	64.16	1.33	2.65	0.58	0.64	0.018	1.67	60.5	14.4	5.2	11.0	21.5	1.80	1.2	314	130	180	1.3	0.17	-	21.9	29.7	37.6	46.2	4.1	4.8	8.3	I-CE-01-222
12	M	0.68	21.12	4.37	3.59	63.72	1.29	2.66	0.59	0.64	0.018	1.99	56.8	17.7	5.5	10.9	21.9	1.85	1.4	301	135	185	1.2	0.17	-	20.8	27.2	35.3	46.4	4.2	4.9	8.1	I-CE-01-223
13	M	0.46	21.20	4.41	3.62	64.14	1.30	2.76	0.60	0.68	0.019	1.70	57.3	17.5	5.6	11.0	22.1	1.70	1.5	295	130	180	1.2	0.14	-	19.9	25.1	35.6	46.1	4.1	4.9	8.3	I-CE-01-225
14	S	0.57	20.98	4.34	3.61	63.73	1.30	2.71	0.58	0.66	0.018	1.62	57.9	16.4	5.4	11.0	21.8	1.75	1.4	317	135	185	1.2	0.14	-	21.4	27.0	37.3	46.0	4.0	5.5	7.6	I-CE-01-226
14	M	0.42	21.17	4.38	3.64	64.23	1.31	2.73	0.58	0.67	0.018	1.77	58.2	16.8	5.4	11.1	22.0	1.60	1.5	301	140	190	1.1	0.11	-	21.3	27.2	36.7	47.2	3.9	5.1	7.9	I-CE-01-227
16	S	0.54	21.08	4.36	3.60	63.80	1.28	2.70	0.59	0.66	0.019	1.94	57.4	17.1	5.5	11.0	21.9	1.65	1.4	305	130	180	1.2	0.14	-	20.3	26.0	36.1	46.5	3.9	4.6	7.4	I-CE-01-229
16	M	0.43	21.19	4.43	3.64	63.75	1.30	2.68	0.57	0.66	0.018	1.89	55.9	18.6	5.6	11.1	22.2	1.50	1.5	301	135	185	1.1	0.11	-	21.3	27.4	36.7	45.4	4.2	4.7	8.3	I-CE-01-230
19	S	0.45	20.93	4.35	3.60	63.78	1.27	2.72	0.59	0.66	0.018	1.75	58.5	15.9	5.4	11.0	21.8	1.70	1.6	314	125	175	1.1	0.14	-	23.3	28.6	38.2	47.8	4.2	4.9	8.0	I-CE-01-231
19	M	0.53	21.07	4.35	3.59	63.61	1.31	2.73	0.60	0.66	0.019	1.91	56.7	17.6	5.5	10.9	21.8	1.70	1.5	298	135	185	1.2	0.14	-	21.5	27.2	36.8	47.2	3.9	4.8	8.3	I-CE-01-232
20	M	0.61	21.31	4.52	3.66	64.03	1.30	2.59	0.59	0.66	0.018	1.78	55.7	19.1	5.8	11.1	22.7	1.70	1.6	301	140	190	1.2	0.14	-	19.5	25.6	34.8	45.6	4.1	4.7	7.4	I-CE-01-234
21	S	0.62	21.06	4.42	3.63	63.92	1.30	2.78	0.59	0.66	0.018	1.87	57.3	17.1	5.6	11.0	22.2	1.70	1.7	314	130	180	1.2	0.14	-	21.4	28.1	36.3	47.8	3.9	5.0	7.8	I-CE-01-235
22	M	0.56	21.48	4.60	3.66	64.12	1.34	2.66	0.59	0.66	0.018	1.82	54.1	20.8	6.0	11.1	23.1	1.65	1.7	295	135	185	1.1	0.14	-	19.7	24.2	34.5	45.1	3.6	4.7	7.6	I-CE-01-236
23	S	0.58	21.04	4.42	3.62	63.75	1.30	2.78	0.59	0.66	0.018	2.10	56.8	17.5	5.6	11.0	22.2	1.75	1.5	317	125	175	1.1	0.11	-	21.8	28.2	38.3	47.9	4.2	5.6	8.3	I-CE-01-237
23	M	0.66	21.39	4.61	3.64	63.54	1.29	2.69	0.59	0.66	0.018	1.86	52.3	21.9	6.1	11.1	23.2	1.70	1.6	301	130	180	1.2	0.14	-	20.7	27.1	36.9	48.2	4.1	5.2	8.4	I-CE-01-238
24	S	0.57	21.14	4.46	3.61	63.51	1.29	2.67	0.59	0.66	0.018	1.89	55.1	19.0	5.7	11.0	22.4	1.65	1.4	320	125	175	1.0	0.11	-	22.3	28.4	39.3	48.4	4.3	5.2	8.2	I-CE-01-239
24	M	0.68	21.13	4.50	3.62	63.33	1.31	2.73	0.59	0.65	0.018	2.03	54.0	19.8	5.8	11.0	22.6	1.50	1.6	298	130	180	1.2	0.14	-	21.5	26.9	37.1	49.3	4.1	5.0	8.5	I-CE-01-240
25	S	0.57	21.09	4.48	3.62	63.62	1.29	2.75	0.59	0.66	0.018	2.02	55.6	18.5	5.7	11.0	22.5	1.65	1.7	314	130	185	1.1	0.14	-	21.6	28.4	36.7	48.1	4.3	5.2	8.3	I-CE-01-241
25	M	0.62	21.35	4.55	3.61	63.50	1.29	2.72	0.58	0.65	0.017	1.86	52.8	21.4	5.9	11.0	22.9	1.60	1.6	301	135	185	1.3	0.17	-	20.3	25.6	36.5	48.5	4.2	4.8	8.4	I-CE-01-242
26	S	0.63	21.24	4.53	3.64	63.92	1.32	2.74	0.59	0.67	0.018	1.83	55.3	19.1	5.8	11.1	22.8	1.55	1.5	311	125	170	1.2	0.14	-	22.1	29.5	37.1	49.6	4.4	5.3	8.4	I-CE-01-243
26	M	0.55	21.34	4.61	3.63	63.48	1.29	2.73	0.58	0.65	0.017	1.90	52.3	21.7	6.1	11.0	23.2	1.40	1.6	298	130	180	1.1	0.11	-	20.9	27.4	38.2	48.6	4.1	5.2	8.3	I-CE-01-244
27	S	0.57	21.31	4.61	3.65	63.44	1.29	2.67	0.60	0.66	0.017	1.73	52.5	21.5	6.0	11.1	23.2	1.35	1.6	317	130	185	1.1	0.14	-	21.6	27.8	38.0	48.6	4.4	5.3	8.6	I-CE-01-245
27	M	0.63	21.31	4.49	3.60	63.58	1.29	2.71	0.60	0.66	0.018	1.97	53.8	20.5	5.8	11.0	22.6	1.60	1.5	298	135	185	1.0	0.11	-	21.1	26.5	36.9	47.5	4.1	4.9	7.7	I-CE-01-246
28	M	0.57	21.38	4.60	3.63	63.52	1.30	2.64	0.59	0.65	0.017	1.73	52.5	21.7	6.0	11.0	23.1	1.70	1.6	295	140	190	1.1	0.14	-	20.2	27.2	37.3	46.8	3.8	4.9	7.7	I-CE-01-248
31	S	0.64	21.23	4.54	3.63	63.47	1.30	2.77	0.58	0.65	0.017	2.05																					



Day	Chemical Compositions & Phases %																Physical Test											Lab.Code					
	IR	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	SO ₃	K ₂ O	Na ₂ O	Cl	LOSS	C ₃ S	C ₂ S	C ₃ A	C ₄ AF	C ₄ AF +2C ₃ A	F.CaO	Fineness		Setting time		Soundness		Compressive Strength (MPa)					Bend Strength (MPa)				
																		Sieve 90 mic	Blaine (m ² /kg)	INIT (min)	FINAL (min)	LEACHTER (mm)	Auto Clave (%)	1 DAY	2 DAYS	3 DAYS	7 DAYS		28 DAYS	2 DAYS	3 DAYS	28 DAYS	
2	S	0.41	21.20	4.52	3.68	63.58	1.31	2.68	0.59	0.65	0.017	1.22	54.4	19.7	5.8	11.2	22.7	1.35	1.4	305	125	175	1.1	0.11	-	22.1	27.8	36.7	47.5	4.4	5.0	8.2	I-CE-01-204
7	M	0.35	21.22	4.38	3.67	64.11	1.33	2.69	0.59	0.66	0.017	1.12	57.4	17.6	5.4	11.2	22.0	2.00	1.4	295	135	185	1.4	0.17	-	21.6	27.5	37.8	47.1	4.3	5.0	8.2	I-CE-01-214
9	S	0.48	21.22	4.49	3.67	63.72	1.31	2.69	0.59	0.65	0.017	1.12	55.0	19.3	5.7	11.2	22.5	1.40	1.3	308	130	180	1.0	0.09	-	22.6	28.2	39.1	49.7	4.3	5.7	8.0	I-CE-01-216
15	M	0.42	21.30	4.49	3.70	64.01	1.32	2.65	0.58	0.68	0.017	0.90	55.7	19.1	5.6	11.3	22.5	1.55	1.4	301	135	185	1.0	0.11	-	20.7	26.2	37.3	47.2	4.2	4.9	8.1	I-CE-01-228
20	S	0.42	21.13	4.47	3.68	63.75	1.31	2.70	0.58	0.66	0.017	0.88	55.9	18.4	5.6	11.2	22.4	1.75	1.4	305	130	180	1.2	0.14	-	21.4	27.8	36.2	47.7	3.6	5.2	7.6	I-CE-01-233
28	S	0.50	21.18	4.51	3.69	63.80	1.32	2.72	0.58	0.67	0.017	0.90	55.4	18.9	5.7	11.2	22.6	1.55	1.2	305	135	185	1.2	0.14	-	21.4	28.3	38.1	49.3	4.3	5.4	8.5	I-CE-01-247
29	M	0.47	21.27	4.51	3.67	63.63	1.31	2.67	0.58	0.66	0.017	1.07	54.2	20.1	5.7	11.2	22.7	1.60	1.6	295	140	190	1.0	0.11	-	19.7	24.1	34.4	45.2	3.7	4.5	7.6	I-CE-01-249
30	M	0.42	21.22	4.52	3.69	63.70	1.33	2.68	0.57	0.66	0.017	0.93	54.8	19.5	5.7	11.2	22.7	1.55	1.5	298	130	180	1.1	0.11	-	20.7	28.7	37.1	48.7	4.2	4.9	8.4	I-CE-01-251
AVE		0.43	21.22	4.49	3.68	63.79	1.32	2.69	0.58	0.66	0.017	1.02	55.4	19.1	5.7	11.2	22.5	1.59	1.4	302	133	183	1.1	0.12	-	21.3	27.3	37.1	47.8	4.1	5.1	8.1	-
Min		0.35	21.13	4.38	3.67	63.58	1.31	2.65	0.57	0.65	0.017	0.88	54.2	17.6	5.4	11.2	22.0	1.35	1.2	295	125	175	1.0	0.09	-	19.7	24.1	34.4	45.2	3.6	4.5	7.6	-
Max		0.50	21.30	4.52	3.70	64.11	1.33	2.72	0.59	0.68	0.017	1.22	57.4	20.1	5.8	11.3	22.7	2.00	1.6	308	140	190	1.4	0.17	-	22.6	28.7	39.1	49.7	4.4	5.7	8.5	-
S.D		0.05	0.05	0.05	0.01	0.18	0.01	0.02	0.01	0.01	0.000	0.13	1.01	0.80	0.12	0.03	0.24	0.20	0.12	5.01	4.63	4.63	0.14	0.03	-	0.9	1.5	1.4	1.4	0.3	0.4	0.3	-



مدیر کارخانه: محمد رضا ابوالشیرازی ۱۴۰۱/۷/۱

مدیر کنترل کیفی و آزمایشگاهها:

رئیس آزمایشگاهها:

کارشناس آزمایشگاه: محمد زاهد



Day	Chemical Compositions & Phases %																	Physical Test										Lab.Code					
	IR	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	SO ₃	K ₂ O	Na ₂ O	Cl	LOSS	C3S	C2S	C3A	C4AF	CAAF+2C3A	F.CaO	Fineness		Setting time		Soundness		Compressive Strength (MPa)					Bend Strength (MPa)				
																		Sieve 90 mic	Blaine (m ² /kg)	INIT (min)	FINAL (min)	LEACHTER (mm)	Auto Clave (%)	1 DAY	2 DAYS	3 DAYS	7 DAYS		28 DAYS	2 DAYS	3 DAYS	28 DAYS	
11	S	-	28.53	8.89	4.06	51.25	1.19	2.03	0.94	1.20	0.017	1.87	-	-	-	-	-	1.45	1.7	361	140	195	1.1	0.11	-	15.8	20.6	28.2	40.2	3.2	4.1	7.4	I-CE-01-220
13	S	-	26.59	7.73	3.94	54.32	1.25	2.21	0.90	1.19	0.017	1.82	-	-	-	-	-	1.40	1.6	364	135	190	1.0	0.11	-	20.0	22.8	32.5	41.2	3.5	4.2	7.5	I-CE-01-224
30	S	-	26.40	7.70	3.91	54.80	1.23	2.21	0.90	1.21	0.018	1.60	-	-	-	-	-	1.30	1.2	367	140	195	0.9	0.07	-	17.4	22.1	31.2	42.3	3.2	4.6	7.5	I-CE-01-250
Avg			27.17	8.11	3.97	53.46	1.22	2.15	0.91	1.20	0.017	1.76	-	-	-	-	-	1.38	1.5	364	138	193	1.0	0.10	-	17.7	21.8	30.6	41.2	3.3	4.3	7.5	-
Min			26.40	7.70	3.91	51.25	1.19	2.03	0.90	1.19	0.017	1.60	-	-	-	-	-	1.30	1.2	361	135	190	0.9	0.07	-	15.8	20.6	28.2	40.2	3.2	4.1	7.4	-
Max			28.53	8.89	4.06	54.80	1.25	2.21	0.94	1.21	0.018	1.87	-	-	-	-	-	1.45	1.7	367	140	195	1.1	0.11	-	20.0	22.8	32.5	42.3	3.5	4.6	7.5	-
S.D			1.18	0.68	0.08	1.93	0.03	0.10	0.02	0.01	0.001	0.14	-	-	-	-	-	0.08	0.26	3.00	2.89	2.89	0.10	0.02	-	2.1	1.1	2.2	1.1	0.2	0.3	0.1	-



مدیر کارخانه: محمد رضا ابراهیم ۱۴۰۱/۷/۱-۹

مدیر کنترل کیفی و آزمایشگاهها:

رئیس آزمایشگاهها:

کارشناس آزمایشگاه: