

## Legend:

### Fuels:

### Burner car:

### Cement type:

### Coolers:

### Valve train:

### Type of Burner:

## M.A.S. KILN BURNER REFERENCES 1998 - 2010

KO....coal / petcoke, SO....heavy fuel oil, EG....natural gas, X....secondary waste fuels

S....suspended, F....floor mounted

P....Portland Cement, W....White Cement, O....others, Leca....Light Weight Extracted Clay Aggregate

CG....grate cooler, CP....planetary cooler, CR....rotary cooler, CQ.....quench cooler

G.... Gas valve train, O....fuel oil valve train, C....electrical control system

M.A.S.=Rotary Kiln Burner (Mono Air Duct System), UNIGAS=Gas Burner,

UNIGRESS=Oil Burner; HG, HR=Hot Gas Generator; UNICAL=Calcliner Burner



Unitherm Cemcon Firingsystems

... a generation ahead

Client	Country	kiln line capacity tpd	Location	Qty	Type of Burner	burner size	Fuels	capacity MW	kiln size ø / L	Cooler	secondary air temperature °C	Cement Type	Burner car S or F	Valve train - control system	Kiln supplier	Order No.
Rohrdorfer Zement	DE	4000	Rohrdorf	1	M.A.S.-D.T.™	7	KO.SO.X	170	5,2 x 80	CG	1000	P				10/2347
Rohrdorfer Zement	DE	4000	Rohrdorf	1	M.A.S.	7	KO.SO.X	170	5,2 x 80	CG	1000	P				10/2347
Cemex Morata	ES	2000	Morata	1	M.A.S.	7	KO.SO.X	77	4,0 x 69	CP	700	P	S			10/2345
Cemex Alcanar kiln 3	ES	2460	Alcanar	1	M.A.S.	7	KO.SO.X	100	4,2 x 71	CP	700	P	F	O	KHD	10/2345
Cemex Alcanar kiln 2	ES	1760	Alcanar	1	M.A.S.	7	KO.SO.X	73	3,8 x 64	CG	900	P	S		KHD	10/2345
Cemex Alcanar kiln 1	ES	1475	Alcanar	1	M.A.S.	7	KO.SO.X	63	3,8 x 64	CG	900	P	S	O	KHD	10/2345
Cemex Castillejo	ES	2300	Castillejo	1	M.A.S.	7	KO.SO.X	95	4,5 x 70	CP	700	P	S			10/2345
Cemex Buñol	ES	2300	Buñol	1	M.A.S.	7	KO.SO.X	102	4,1 x 79	CP	700	P	S			10/2345
Tartous Cement	SY	1760	Tartous	1	M.A.S.	2	SO	80	4,6 x 69	CG	900	P	F		ZAB	10/2343
HC Heidelberg Cement - OJSC KUNDA	RUS	1000	KUNDA	1	M.A.S.	7	KO.SO.X	75	4,5 x 150	CG	500	P	S		Volgocem mash	10/2341
Sharjah Cement	UAE	4200	Sharjah	1	M.A.S.-D.T.™	4	KO.EG	67	4,4 x 68	CG	1100	P			Intercem	10/2335
Sharjah Cement	UAE	2300	Sharjah	1	M.A.S.-D.T.™	3	KO.EG	36	3,6 x 51	CG	1100	P			Intercem	10/2335
Kiasar Cement Co.	IR	2400	Kiasar	1	M.A.S.	4	EG.SO	58		CG	1000	P	S	O,G	KHD	10-2334
AGK Atschinsk	RUS	1600	Atschinsk	2	M.A.S.	5	KO.SO	150	5,0 x 185	CG	500	O	F		Volgocem mash	10-2332
TITAN Cement - Greece	GR	3500	Kamari	1	M.A.S.	8	KO.SO.X	120	5,0 x 80	CG	1100	P	S	O	FLS	10-2331
LAFARGE Perlmooser Austria	AUT	2800	Mannersdorf	1	M.A.S.-D.T.™	6	KO.SO.X	49	4,8 x 80	CG	1100	P	F	O	Voest	09-2324
HOLCIM Alesd	ROM	4000	Alesd	1	M.A.S.	6	KO.SO.X	125	5,2 x 90	CG	850	P	S	O	FLS	09-2322
Sharjah Cement	UAE	4200	Sharjah	1	M.A.S.-D.T.™	4	KO.EG	67	4,4 x 68	CG	1100	P			Intercem	09-2321
Sharjah Cement	UAE	2300	Sharjah	1	M.A.S.-D.T.™	3	KO.EG	36	3,6 x 51	CG	1100	P			Intercem	09-2321
Cemex Buñol	ES	1700	Buñol	1	M.A.S.	6	KO.SO.X	87	4,0 x 65		120	W				09-2319
Dyckerhoff - Suchoj Log	RUS	1700	Sukhoj Log	1	M.A.S.	5	EG.SG	150	5,0 x 185	CG	550	P	S		Volgocem mash	09-2317
Cimpor	TR	845	Sivas	1	M.A.S.	4	KO.SO.X	45	3,6 x 67	CG	950	P	S	O		09/2316
Cimerwa Cement / Rwanda	RWA	220	Cyangugu	1	M.A.S.	4	SO.X	17	2,5 x 78	CG	400	P	S	O		08/2291
Teutonia Zement	D	2500	Hannover	1	M.A.S.	6	KO.SO.X	70	3,8 x 50	CG	1100	P			KHD	08/2287
Lagan Cement	IE	1800	Killaskillen	1	M.A.S.	5	KO.SO.X	40	3,2 x 45	CG	1000	P	S		Babcock	08/2286
Cementownia Warta	PL	1200	Warta	1	M.A.S.	7	KO.SO.X	140	4,4 x 97	CP	1130	P	S			08/2285
HC Heidelberg Cement - Bicaz	RO	3500	Bicaz	1	M.A.S.	6	KO.SO.X	150	5,4 x 97	CG	850	P		G	FLS	08/2283
Kizilkum Cement	UZ	1550	Navoi	3	M.A.S.	5	EG.X	135	3,6 x 120	-	650	P				08/2282
Gharb Torbat	IR	5000	Torbat Jam	1	M.A.S.	5	EG.SO	107	-	-	950	P	F	O,G		08/2280
Nostra Cement	HU	2500	Budapest	1	M.A.S.	6	KO.SO.X	53	4,0 x 60	CG	1000	P	S	G		08/2279
Heidelberg Cement - Burglengenfeld	D	1550	Burg Lengenfeld	1	M.A.S.	6	KO.SO.X	88	4,8 x 70	CG	1150	P	S		KHD	08/2278
LAFARGE Slovenija	SI	1550	Trbovje	1	M.A.S.	6	KO.SO.X	77	4,6	CG	850	P				08/2277

**Legend:**

**M.A.S. KILN BURNER REFERENCES 1998 - 2010**



**Unitherm Cemcon Firingsystems**

... a generation ahead

**Fuels:** KO....coal / petcoke, SO....heavy fuel oil, EG....natural gas, X....secondary waste fuels  
**Burner car:** S....suspended, F....floor mounted  
**Cement type:** P....Portland Cement, W....White Cement, O....others, Leca....Light Weight Extracted Clay Aggregate  
**Coolers:** CG....grate cooler, CP....planetary cooler, CR....rotary cooler, CQ.....quench cooler  
**Valve train:** G.... Gas valve train, O....fuel oil valve train, C....electrical control system  
**Type of Burner:** M.A.S.=Rotary Kiln Burner (Mono Air Duct System), UNIGAS=Gas Burner, UNIGRESS=Oil Burner; HG, HR=Hot Gas Generator; UNICAL=Calcliner Burner

Client	Country	kiln line capacity tpd	Location	Qty	Type of Burner	burner size	Fuels	capacity MW	kiln size ø / L	Cooler	secondary air temperature °C	Cement Type	Burner car S or F	Valve train - control system	Kiln supplier	Order No.
LAFARGE Czech	CZ	2750	Cizkovize	1	M.A.S.	6	KO.SO.X	77	4,6 x 72	CG	1100	P				08/2276
CEMEX Croatia	HR	3300	Sv. Juraj	1	M.A.S.	5	KO.SO.X	120	4,6 x 70	CG	950	P				08/2275
Iranian Refractories	IR	160	Birjand	1	M.A.S.	3	EG.SO	17	2,3 x 78	CR	750	O	F	O,G	Alarko	08/2274
CEMEX Tamuin Kiln2	MEX	3000	Tamuin	1	M.A.S.	7	KO.SO.X	114	5,2 x 85	CP	700	P	S	O	KHD	08/2273
LAFARGE Wössingen	D	2000	Wössingen	1	M.A.S.	6	KO.EG.SO.X	35	3,8 x 60	CG	900	P	F			08/2272
CEMEX Philippines	RP	6000	Antipolo	1	M.A.S.	8	KO.SO.X	133		CG	900	P	S			08/2271
Al Bana	UAE	2400	Fujeirah	1	M.A.S.	6	KO.EG.SO	60		CG	900	P	S	O		08/2268
HC Heidelberg Cement - OJSC Cesla	RUS	1200	Slantsy	1	M.A.S.	3	KO.EG.SO.X	53	4,0 x 60	CG	850	P	S	G	Volgocem mash	08/2266
VICAT	FR	1500	Xeuilley	1	M.A.S.	6	KO.SO.X	65	4,4 x 82	CG	850	P	F		KHD	08/2265
CEMEX Lloseta	ES	1150	Lloseta	1	M.A.S.	6	KO.SO.X	53	3,6 x 50	CG	800	P	S			08/2259
CEMEX Panama, Kiln1	PR	1400	Bayano	1	M.A.S.	6	KO.SO.X	58	4,1 x 58	CP	500	P	F		FLS	08/2257
Ivano Frankivsk Cement	UA	400	Ivano-Frankivsk	1	M.A.S.	3	KO.EG	42	3,6 x 90	CP	450	P	F			08/2256
Lucky Cement	PK	4000	Karachi	1	M.A.S.	6	KO.SO.EG.X	82	4,3 x 64	CG	1100	P	F	O	HEFEI	08/2254
HC Heidelberg Cement/Ukraine	UKR	4200	Kryvyj Rih	1	M.A.S.	5	KO.EG	79	4,5 x 80	CG	800	P	S	G	Volgocem mash	08/2253
HC Heidelberg Cement/Ukraine	UKR	672	Amwrosievka	4	M.A.S.	5	KO.EG	55	3,6 x 150	CP	500	P	S	G	Volgocem mash	08/2253
CNBM Derba Midroc	ET	5000	Derba	1	M.A.S.	5	KO.SO	76	5,2 x 78	CG	1000	P	F	O		07/2250
HC Heidelberg Cement/Ukraine	UKR	1700	Amwrosievka	2	M.A.S.	6	KO.EG	153	5,0 x 184	CG	500	P	S	G	Volgocem mash	
CRH/Podilsk/Ukraine	UKR	1700	Kameniz-Podilsk	1	M.A.S.	6	KO.EG.X	153	5,0 x 185	CG	500	P	S		Volgocem mash	07/2249
Cimentos de Mocambique	MZ	2000	Matola	1	M.A.S.	6	KO.EG.SO	82	4,8 x 72	CG	900	P	F			07/2245
Magnezit	RUS	350	Satka	1	M.A.S.	3	EG.SG	40	3,5 x 90	CR	300	O				07/2241
PMO Komex	PL	3	Katovice	1	M.A.S.	0	EG.X	24	3,0 x 100	CR	400	O				07/2239
CEMEX Panama, Kiln2	PR	3600	Bayano	1	M.A.S.	7	KO.SO.X	79	4,6 x 54	CG	900	P	S		KHD	07/2238
SAO "Univers Lizing Co."	RUS	3000	Spassk	1	M.A.S.	5	KO.SO	150	6,4 x 80	CG	900	P	S			07/2236
CEMEX Atatonilco	MEX	2500	Atatonilco	1	M.A.S.	7	KO.SO.X	107	5,1 x 75	CG	920	P				07/2235
CEMEX Poland	PL	1000/5000	Rudniki / Chelm	4	M.A.S.	7	KO.SO.EG.X	52	3,5 x 140	CG	900	P				07/2234
CYCNA Concretos	MEX	3000	Aquascalientes	2	M.A.S.	4	KO.SO	57	4,4 x 60	CG	1000				Polysius	07/2232
CEMEX Tepeaca	MEX	10000	Tepeaca	1	M.A.S.	8	KO.SO.X	200	6,1 x 90	CG	1200	S	S	O	FLS	07/2231
LAFARGE Ukraine	UKR	800	Mykolaiv	5	M.A.S.	5	KO.EG.X	61	4,0 x 150	CR	200	S				07/2229
HC Heidelberg Cement / Mokra	CZ	2000	Mokra	1	M.A.S.	6	KO.EG.SO.X	80	4,4 x 68	CG	950	P	S		KHD	07/2228
AS Cimento	TR	8000	Buzak	1	M.A.S.	7	KO.SO.X	163	5,6 x 58	CG	1100	P	S	O	CITIC-China	07/2227
CEMEX Puerto Rico	USA	4000	Puerto Rico	1	M.A.S.	6	KO.SO.X	78	4,9 x 68	CG	1000	P	S	O		07/2222
CEMEX Alicante	ES	3400	Alicante	1	M.A.S.	7	KO.SO.X	93	4,6 x 71	CG	950	P	F			07/2221
Metox	TR	300	Iskanderun	1	UNICAL-KO-EG		KO.EG	8		CQ	20	O	S			07/2220
Ekbatan Cement	IR	500	Ekbatan	1	M.A.S.	3	EG		3,2 x 45	CG	950					07/2219

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Unitherm Cemcon Firingsystems

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Florida Rock K2 / Polysius	USA	2300	Newberry	1	M.A.S.	5	KO.EG.SO.X	50	4,0 x 48	CG	1000	P	S	O	Polysius	07/2218
CEMEX Barrientos	MEX	2200	Barrientos, Kiln 8	1	M.A.S.	7	KO.SO.X	96	4,8 x 75	CG	950-1100	P	S			06/2216
Kostukowichi Cement	BEL	950	Kostukowichi	1	M.A.S.	5	KO.EG.SO	81	75	CG	500	P	S			06/2115
CEMEX Gualelajara	MEX	3000	Guadelajara	1	M.A.S.	7	KO.EG.SO.X	87	4,1 x 58	CG	900-1100	P	S			06/2214
Carmeuse Lime kiln	SK	500	Kosice	1	M.A.S.	5	KO.EG.SO.X	39	3,8 x 65	Shaft	400	O	F	G		06/2213
CEMEX Venezuela Maracaibo	VE	825	Maracaibo	1	M.A.S.	6	EG.SO.X	64	3,6 x 137	CG	900	P	S			06/2212
HC Heidelberg Cement - Anneliese	D	1200	Paderborn	1	M.A.S.	5	KO.SO.X	60	4,0 x 60	CG	900	P	S			06/2211
CEMEX Yaqui	MEX	3600	Hermosillo, Kiln 2	1	M.A.S.	7	KO.SO.X	77	4,5 x 68	CG	1100	P	S	O	KHD	06/2208
Cementownia Warta	PL	1200	Warta	1	M.A.S.	7	KO.SO.X	140	4,4 x 97	CP	1130	P	S			06/2207
CEMEX Monterrey	MEX	1600	Monterrey, Kiln 8	1	M.A.S.	7	KO.EG.SO.X	82	4,5 x 68	CP	700	P	S			06/2206
CEMEX Valles	MEX	660	Valles, Kiln 1	1	M.A.S.	5	KO.SO.X	43	2,9 x 76	CQ	25	W	S	O		06/2205
Nasice Cement	HR	2600	Nasice	1	M.A.S.	7	KO.EG.SO.X	80	4,4 x 70	CG	800	P	F	G, O	KHD	06/2202
HOLCIM France	FR	1400	Lumbres	1	M.A.S.	7	KO.SO.X	105		CP	950	P	S		Polysius	06/2201
CEMEX Ost / Germany	D	6000	Rüdersdorf	1	M.A.S.	7	KO.SO.X	100		CG	950	P	F		KHD	06/2200
Cruz Azul Cimento	MEX	870	Lagunas, kiln 3	1	M.A.S.	6	KO.SO.X	40	3,8 x 105	CG	950	P	S		Polysius	06/2198
Cruz Azul Cimento	MEX	4400	Lagunas, kiln 4	1	M.A.S.	6	KO.SO.X	100	4,8 x 75	CG	950	P	S		Polysius	06/2198
Cruz Azul Cimento	MEX	2800	Hidalgo, kiln 8	1	M.A.S.	6	KO.SO.X	111	5,2 x 82	CG	950	P	S		FLS	06/2197
Cruz Azul Cimento	MEX	4400	Hidalgo, kiln 9	1	M.A.S.	6	KO.SO.X	100	4,8 x 75	CG	1000	P	S		Polysius	06/2197
Cruz Azul Cimento	MEX	1400	Hidalgo, kiln 6	1	M.A.S.	6	KO.EG.SO.X	62	4,4 x 70	CG	1000	P	S			06/2197
CEMEX Venezuela	VE	3500	Pertigalete, kiln 7	1	M.A.S.	6	EG.SO.X	55	4,5 x 64	CG	800	P	S			06/2196
Rustavi Cement	GE	800	Rustavi	3	M.A.S.	5	KO.EG.SO.X	65	4,0 x 123	CR	400	P	S		Volgocem mash	06/2194
Kaspi Cement	GE	1000	Kaspi	3	M.A.S.	5	KO.EG.SO.X	75	4,0 x 150	CR	400	P	S		Volgocem mash	06/2194
AGK Atschinsk	RUS	1600	Atschinsk	2	M.A.S.	5	KO.SO	150	5,0 x 185	CG	500	O	F		Volgocem mash	06/2193
Kavir Kashan Cement	IR	1800	Kashan	1	M.A.S.	3	EG.SO	51	3,8 x 48	CG	900	P	F	G, O		06/2191
Cemag Zliten	LAR	3200	Zliten	1	M.A.S.	4	EG.SO	76	4,4 x 52	CG	900	P	S	G, O	Cemag	06/2190
Strojindustria	UKR	500	Bahchisarai	2	M.A.S.	5	KO.EG.SO.X	42	3,6 x 100	CR	400	P	F		Volgocem mash	06/2189
HC Heidelberg Cement - OJSC KUNDA	RUS	1000	KUNDA	1	M.A.S.	7	KO.SO.X	75	4,5 x 150	CG	500	P	S		Volgocem mash	06/2188
Dewan Hattar Cement	PK	2400	Saadi	1	M.A.S.	4	KO.EG.SO	40	3,8 x 59	CG	900	P	S	G		06/2185
Dewan Cement	PK	3300	Pakland	2	M.A.S.	5	KO.EG.SO	73	4,1 x 59	CG	1000	P	F	G	Technip Cle	06/2184
EUROCEMENT	RUS		Lipezk	1	M.A.S.	3	EG.SG	36		CR	400	P	S		Volgocem mash	06/2183
AGK Atschinsk	RUS	1600	Atschinsk	1	M.A.S.	5	KO.SO	150	5,0 x 185	CG	500	O	F		Volgocem mash	06/2181
SCANCEM	NG	1600	Sokoto	1	M.A.S.	5	SO.X	74	4,6 x 71	CP	700	P	S	O	O & K	05/2179
Titan Cement	BG	1500	Zlatna Panega	1	M.A.S.	6	KO.EG.SO.X	75	4,0 x 60	CG	950	P	F		Polysius	05/2174
Votorantim / St. Marys	USA	4350	Charlevoix	1	M.A.S.	6	KO.SO.X	99	5,7 x 108	CG	1050	P	S			05/2173

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Unitherm Cemcon Firingsystems

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Italcementi	BG	850	Devnya	1	M.A.S.	5	KO.EG.SO.X	35	3,6 x 150	CP	500	P	S			05/2172
China National Building Materials Co	BURMA	300	Yangon	1	UNIGAS	4000	EG	35	3,0 x 125	CG	400	P	S	G,C		05/2171
Votorantim / St. Marys	CND	3000	St. Mary	1	M.A.S.	6	KO.EG.SO.X	117	4,7 x 75	CG	1000	P	S			05/2169
Spassk Cement	RUS	3000	Spassk	1	M.A.S.	5	KO.SO	150	6,4 x 80	CG	900	P	S			05/2168
HC Heidelberg Cement / Mokra	CZ	2000	Mokra	1	M.A.S.	6	KO.EG.SO.X	76	4,4 x 68	CG	950	P	S		KHD	05/2167
CEMEX Philippines	RP	6000	Antipolo	1	M.A.S.	8	KO.SO.X	133		CG	900	P	S			05/2165
Dyckerhoff	RUS	1700	Sukhoj Log	1	M.A.S.	5	EG.SG	150	5,0 x 185	CG	550	P	S		Volgocemmach	05/2164
Arabien Cement Company / ACC	Saudi Arab	6000	Rabigh	1	M.A.S.	5	SO.(X)			CG	950	P	F	O	FLS	05/2163
HOLCIM AG Laeagerdorf	D	4300	Laeagerdorf	1	M.A.S.	7	KO.SO.X	80	4,8 x 65	CG	850	P	F		Polysius	05/2162
AGK Atschinsk	RUS	1600	Atschinsk	1	M.A.S.	5	KO.SO	150	5,0 x 185	CG	500	O	F		Volgocemmach	05/2161
CEMEX Yaqui	MEX	3600	Yaqui	1	M.A.S.	7	KO.SO.X	77	4,5 x 68	CG	950	P	S			05/2160
LAFARGE Romania	MOL	4000	Rezina	1	M.A.S.	8	KO.EG.SO.X	130	6,4 x 95	CG	900	P	F		Volgocemmach	05/2159
Gmundner Zement	A	1900	Gmunden	1	M.A.S.	6	KO.EG.SO.X	75	4,2 x 90	CP	800	P	S		Polysius	05/2158
CEMEX Torreon	MEX	3000	Torreon	1	M.A.S.	7	KO.EG.SO.X	75	4,1 x 58	CG	950	P	S		FLS	05/2153
Krasnoselsk Cement	BEL	850	Krasnoselsk	2	M.A.S.	5	EG.X	70	4,5 x 150	CG	500	P	S	G	Volgocemmach	05/2152
Bestway Cement Limited	PK	4200	Bestway	1	M.A.S.	5	KO.EG.SO	70	4,4 x 68	CG	1000	P	S			05/2151
Florida Rock	USA	2300	Newberry	1	M.A.S.	5	KO.EG.SO.X	57	4,0 x 48	CG	980	P	S		POLYSIUS	05/2150
Qatar National Cement / QNCC II	Q	4000	Umm Bab	2	M.A.S.	3	EG.SG	70		CG	950	P	F	G	FCB	05/2149
HC Heidelberg Cement - OJSC Cesla	RUS	1200	Slantsy	1	M.A.S.	6	KO.EG.SO.X	60	4,0 x 60	CG	850	P	S	G	Volgocemmach	05/2148
Cementos Guapan	EC	1300	Guapan	1	M.A.S.	3	SO.X	67	4,1 x 58	CG	850	P	S	O		05/2147
Thatta Cement	PK	1000	Thatta	1	M.A.S.	4	KO.EG.SO	52,5		CG	800	P	S			04/2143
Italcementi	BG	850	Devnya	1	M.A.S.	5	KO.EG.SO.X	35	3,6 x 150	CP	500	P	S			04/2141
Cemmac	SK	1000	Horne Smie	1	M.A.S.	5	KO.EG.SO.X									04/2138
CEMEX Germany	D	3100	Beckum	1	M.A.S.	8	KO.SO.X	140	5,3 x 80	CR	750	P	S		KHD	04/2137
Buzzi UNICEM	USA	3900	Cape Girardeau	1	M.A.S.	5	KO.SO.X	87	2,4 x 72	CG	950	P	S		Allis Chalmers	04/2132
Salonit Anhovo JSC Cement	SLO	2200	Anhovo	1	M.A.S.	6	KO.EG.SO.X	86	5,0 x 82	CP	600	P	F	G,O,C	PSP	04/2131
Lucky Cement	PK	4000	Karachi	2	M.A.S.	5	KO.SO.X	82	4,3 x 64	CG	1100	P	F	O	HEFEI	04/2129
Lucky Cement	PK	4000	Karachi	2	M.A.S.	5	KO.EG.SO.X	82	4,3 x 64	CG	1100	P	F	O	HEFEI	04/2129
CEMEX Venezuela	VE	3200	Pertigalete, kiln 6	1	M.A.S.	6	EG.SO.X	130		CG	900	P	F		Polysius	04/2128
Quimica del Rey	MEX	1000	Torreon	1	M.A.S.	4	KO.EG.SO	45	3,0 x 81	CP	550	W	S			04/2124
Krasnoselsk Lime Kiln	BEL	480	Krasnoselsk	1	M.A.S.	3	EG.SG	40		CR	400	O	F			04/2123
Dyckerhoff	RUS	1700	Sukhoj Log	1	M.A.S.	5	EG.SG	150	5,0 x 185	CG	550	P	S		Volgocemmach	04/2121
Solhofer Portland Zement	D	1500	Solnhofen	2	M.A.S.	7	KO.SO.X	64	3,8 x 50	CG	1100	P	S	O	KHD	04/2122
CEMEX Mexico	MEX	3000	Monterray Kiln 10	1	M.A.S.	5	KO.EG.SO.X	81	4,1 x 58	CG	900	P	S			04/2120
CEMEX Mexico	MEX	1600	Monterray Kiln 9	1	M.A.S.	5	KO.EG.SO.X	81	4,6 x 68	CP	700	P	S			04/2120
Gorka Zement	PL	192	Trzebinia	1	UNIGAS	2000	EG	25	2,2 x 85	CP		W	S	G,C		04/2116

## Legend:

**Fuels:** KO....coal / petcoke, SO....heavy fuel oil, EG....natural gas, X....secondary waste fuels  
**Burner car:** S....suspended, F....floor mounted  
**Cement type:** P....Portland Cement, W....White Cement, O....others, Leca....Light Weight Extracted Clay Aggregate  
**Coolers:** CG....grate cooler, CP....planetary cooler, CR....rotary cooler, CQ.....quench cooler  
**Valve train:** G.... Gas valve train, O....fuel oil valve train, C....electrical control system  
**Type of Burner:** M.A.S.=Rotary Kiln Burner (Mono Air Duct System), UNIGAS=Gas Burner, UNIGRESS=Oil Burner; HG, HR=Hot Gas Generator; UNICAL=Calcliner Burner



**Unitherm Cemcon Firing Systems**

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Client	Country	kiln line capacity tpd	Location	Qty	Type of Burner	burner size	Fuels	capacity MW	kiln size ø / L	Cooler	secondary air temperature °C	Cement Type	Burner car S or F	Valve train - control system	Kiln supplier	Order No.
Naujasis Kalcitas	LT	350	Akmenes	1	M.A.S	3	KO.EG.SO	22	2,7 x 53	CG	400	O	S		Volgocem mash	03/2113
Krasnoselsk Cement	BEL	1600	Krasnoselsk	2	M.A.S.	5	EG.X	100	5 x 150	CG	550	P	S	G	Volgocem mash	03/2111
HOLCIM AG Laegerdorf	D	4300	Laegerdorf	1	M.A.S.	7	KO.SO.X	80	4,8 x 65	CG	850	P	F		Polysius	03/2112
ADO Cimento	TR	3300	Antalya	1	M.A.S.	4	KO.SO	91	4,2 x 60	CG	---	P	F			03/2109
HOLCIM AG - Cementos Caribe	VE	3000	Cumarebo	1	M.A.S.	7	KO.EG.SO.X		5,2 x 82	CP	700	P				03/2108
HC - Duna Drava / Vaz	HU	3500	Vaz	2	M.A.S.	6	KO.EG.SO.X	80	4,2 x 55	CG	900	P	S	G,O,C	Polysius	03/2107
HOLCIM Hrvatska (TC Koromacno)	HR	1800	Koromacno	1	M.A.S.	6	KO.SO.X	78	4,0 x 64	CG	1000	P	F	O	KHD	03/2106
AGK Atschinsk	R	1600	Atschinsk	1	M.A.S	5	KO.SO	150	5,0 x 185	CG	500		F		Volgocem mash	03/2099
LAFARGE Beocinska Cementa	YU	4000	Beocin	1	M.A.S.	5	KO.EG.SO.X	100		CP	800	P	S	C	FLS	03/2098
HC-Tvornica Cement Kakanj	BIH	1500	Kakanj	1	M.A.S.	6	KO.EG.SO.X	75	4,0 x 60	CG		P	F	C	KHD	03/2097
Ekbatan Cement	IR	1000	Ekbatan	1	M.A.S	3	EG.SO			CG						03/2095
Kirchdorfer Zement / Lafarge	A	1000	Kirchdorf	1	M.A.S.	6	KO.EG.SO.X	40	3,0 x 46	CG	1000	P	S			03/2093
Lafarge Karsdorfer Cement	D	1100	Sötenich	1	M.A.S.	6	KO.SO.X			CG		P	S		KHD	02/2092
Acmenes Cementas (RMC)	LT	1700	Acmenes	1	M.A.S.	6	KO.SO.X	153	5,0 x 185	CG	800	P	F		Volgocem mash	02/2089
Lukavac Cement	BIH	2000	Lucavac	2	M.A.S.	4	KO.SO	46	4,0 x 64	CG	900	P	F	O,C	KHD	02/2088
OA0 "Puschka"	UA	480	Kramatorsk	3	M.A.S.	4	KO.EG.X	42	3,6 x 110	CG	550	P	S		Volgocem mash	02/2087
Kavir Kashan Cement	IR	1800	Kashan	2	UNIGAS-CAL	3000	EG	23	3,8 x 48	CG	800	P		G,C		02/2085
Kavir Kashan Cement	IR	1800	Kashan	1	M.A.S.	3	EG.SG	42	3,8 x 48	CG	800	P		G,C		02/2085
Hyundai Cement	ROK	4600	Dan Yang	1	M.A.S.	8	KO.SO.X	85		CG		P				02/2084
Hyundai Cement	ROK	6000	Young Wol	2	M.A.S.	8	KO.SO.X	113		CG		P			Onoda	02/2083
Lipezk	RUS	500	Lipezk	2	M.A.S.	3	EG.SG	36		CR	400	X	S		Volgocem mash	02/2082
Benvid White Cement	IR	400	Naeen	1	M.A.S.	3	EG.SO	30		CG		W	S	G,O,C		02/2079
HOLCIM a.s. Cesko	CZ	3000	Prachovice	1	M.A.S.	9	KO.EG.SO.X			CG		P			PSP	02/2078
Zhejiang Huaquiang	VR	2000	Huaquiang	1	M.A.S.	2	KO.SO			CG		P				02/2076
Fecto Cement Ltd.	PK	2000	Taxila	1	M.A.S.	4	KO.EG.SO	33	4,1 x 58	CG	900	P			Fuller	02/2073
Bosenberg Portland Cement	D	550	Ahlen	1	M.A.S.	3	KO.SO.X	23	3,0 x 40	CG		P			Polysius	02/2072
SIN-MIN Cement	BUR	300	Myanmar	1	UNIGAS	4000	EG	35	3,0 x 125	CG	400	P	S	G,C		02/2071
Zaman Cement Ltd.	PK	3800	Zaman	1	M.A.S.	3	KO.SO			CG		P				02/2070
HOLCIM AG - Cementos Caribe	VE	2800	San Sebastian	1	M.A.S.	6	EG.SO.X	46	4,2 x 49	CG	750	P			FLS	02/2068
HC-Inland Cement	CDN	3640	Edmonton	1	UNICAL		KO.EG	106	4,11 x 58	CG		P		G,C	Fuller	01/2066
HC-Inland Cement	CDN	3640	Edmonton	1	M.A.S.	5	KO.EG	83	4,11 x 58	CG		P	S	G,C	Fuller	01/2066
HC-Zlatna Panega Plant	BG	1500	Zlatna Panega	1	M.A.S.	6	KO.EG.SO.X	75	4,0 x 60	CG		P	F		Polysius	01/2065
Zhejiang-Jurong Cement	VR	2000	Zhejiang	1	M.A.S.	2	KO.SO			CG		P			Polysius	01/2064
Lafarge - Cizkovice Plant	CZ	2000	Cizkovice	1	M.A.S.	5	KO.SO.X			CG	1100	P	F	O,C	PSP	01/2063
Odessa Cement	UA	400	Odessa	2	M.A.S.	3	KO.EG	42	3,6 x 96	CP	450	P	F		Volgocem mash	01/2061
HOLCIM AG - Siggenthal Plant	CH	1800	Siggenthal	1	M.A.S.	6	KO.SO.X	82		CG		P			Polysius	01/2060

## Legend:

## M.A.S. KILN BURNER REFERENCES 1998 - 2010



Unitherm Cemcon Firingsystems

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<b>Fuels:</b>	KO....coal / petcoke, SO....heavy fuel oil, EG....natural gas, X....secondary waste fuels
<b>Burner car:</b>	S....suspended, F....floor mounted
<b>Cement type:</b>	P....Portland Cement, W....White Cement, O....others, Leca....Light Weight Extracted Clay Aggregate
<b>Coolers:</b>	CG....grate cooler, CP....planetary cooler, CR....rotary cooler, CQ.....quench cooler
<b>Valve train:</b>	G.... Gas valve train, O....fuel oil valve train, C....electrical control system
<b>Type of Burner:</b>	M.A.S.=Rotary Kiln Burner (Mono Air Duct System), UNIGAS=Gas Burner, UNIGRESS=Oil Burner; HG, HR=Hot Gas Generator; UNICAL=Calcliner Burner

Client	Country	kiln line capacity tpd	Location	Qty	Type of Burner	burner size	Fuels	capacity MW	kiln size ø / L	Cooler	secondary air temperature °C	Cement Type	Burner car S or F	Valve train - control system	Kiln supplier	Order No.
Kohat Cement	PK	2000	Kohat	1	M.A.S.	6	KO.EG.SO.X	50	4,0 x 64	CG	750	P				01/2058
Ivano Frankivsk Cement	UA	400	Ivano-Frankivsk	1	M.A.S.	3	KO.EG	42	3,6 x 90	CP	450	P	F	S	Volgocem mash	01/2056
G.M.M.S.A. Larco	GR	1000	Larymna	1	M.A.S.	3	KO.SO.X			CG		X	F	O,C		01/2049
Wietersdorfer & Peggauer Zement	A	1200	Peggau	1	M.A.S.	6	KO.EG.SO.X			CG		P	S		Polysius	01/2047
RMC Readymix Group	LV	1000	Broceni	1	M.A.S.	5	EG.SO.X	80	4,5 x 150	CG	500	P	S	G	Volgocem mash	00/2046
Maxit Optiroc Group A.S.	P	500	Avelar	1	M.A.S.	4	KO.SO.X	20	4,0 x 60	CG	850-900	Leca	S	O,C		00/2045
HC-Ceskomoravske Cement	CZ	1500	Radotin	2	M.A.S.	2	KO.SO.X			CG		P		G,C	PSP	00/2044
HC-Moldocim S.A.	RO	3500	Bicaz	1	M.A.S.	7	KO.EG.SO.X	151	5,8 x 97	CG	900	P	S	G,O,C	IMG	00/2042
HC-Duna Drava Cement	H	1800	Beremend	3	M.A.S.	6	KO.EG.SO.X			CG		P		G,O,C	KHD	00/2041
Acmenes Cementas (RMC)	LT	1700	Acmenes	1	M.A.S.	7	KO.SO.X	120	5,0 x 185	CG	500	P	F		Volgocem mash	00/2040
Bestway Cement Limited	PK	3300	Shadi-Haripur	1	M.A.S.	3	SO.EG			CG		P		G,C	Mitsubishi	00/2037
HC-Lehigh Portland Cement	U.S.A.	6500	Union Bridge	1	M.A.S.	6	KO.SO	155	5,2 x ?	CG		P	F	O,C	Polysius	00/2035
HC-Casial S.A.Deva Cement	RO	4000	Hunedoara	1	M.A.S.	7	KO.EG.SO	151	5,8 x 97	CG	900	P	S	G,O,C		00/2034
Beocinska Cementa	YU	500	Beocin	2	M.A.S.	4	KO.SO	45	3,8 x 135	CG	900	P	S	O	FLS	00/2032
Ivano Frankivsk Cement	UA	500	Ivano-Frankivsk	1	M.A.S.	3	SO.EG	42	3,6 x 90	CP	450	P	F		Volgocem mash	00/2028
Italcementi	BG	580	Vulcan Cement	1	M.A.S.	4	KO.EG.SO	50	3,16x110	CP	550	P	F		FLS	00/2027
Italcementi	BG	450	Vulcan Cement	1	M.A.S.	4	KO.EG.SO	39	2,6 x 105	CP	550	P	F		FLS	00/2027
Zhangqiu Cement Corp.	VR	2000	Zhangqiu	1	M.A.S.	2	KO.SO			CG		P				99/2026
HC Heidelberg Cement Leimen	D	1550	Leimen	1	M.A.S.	5	KO.SO.X	60	4,2x?	CG	900-1100	P	S			99/2024
Zementwerk Warta	PL	2800	Dzialoszyn	1	M.A.S.	5	KO.SO	112		CP		P				99/2023
GLINOZEM	RUS	1500	Pikalevo	1	M.A.S.	3	EG.SG	80	4,5x150	CG	500	P	S		Volgocem mash	99/2021
CEMMAC	SK	1000	Horne Srnie	2	M.A.S.	2	KO.EG			CG		P				99/2016
Schwenk Zement	D	3000	Karlstadt	1	M.A.S.	5	KO.SO.X			CG		P				98/2013
HC-Gorazde Plant	PL	3000	Gorazde	2	M.A.S.	4	KO.SO	146		CP		P	S			97/2003
Ukraine Common Enterprise	UA	400	Ivano-Frankivsk	1	M.A.S.	3	SO.EG	42	3,6x90	CP	450	P	F	O	Volgocem mash	97/2001
Gorka Zement	PL	1200	Trzebinia	1	UNIGAS	2000	EG	25	2,2 x 85	CP		X	S	G,C		22/7004
Zementwerk Odra	PL		Opole	1	M.A.S.	2	KO.SO.X			CG		P	S			22/6038
Zementwerk Wittekind	D		Erwitte	1	M.A.S.	2	KO.SO.X			CR		P				22/6034
Lucky Cement	RC		Puhsin	1	M.A.S.	2	KO.SO			CG		P				22/6030
G.M.M.S.A. Larco	GR		Larco	1	M.A.S.	2	SO.EG					X				22/0028
Yazd Cement	IR		Yazd	1	M.A.S.	3	SO.EG			CG		P	F	O,C		12/0387
HC-Ceskomoravske Cement-Beroun	CZ		Beroun	1	M.A.S.	1	KO.EG.SO			CG		P			PSP	12/0358