Appendix D

Martin GmbH Global WtE Plant Reference List

Kwinana Waste To Energy Project

Public Environmental Review

PHOENIX ENERGY

COVANTA ENERGY

MITSUBISHI HEAVY INDUSTRIES
ENVIRONMENTAL & CHEMICAL ENGINEERING CO., LTD.

John Holland

Thermal waste treatment facilities using MARTIN technologies

Anlagen zur thermischen Abfallbehandlung mit MARTIN Technologien

Usines de traitement thermique des déchets urbains avec les technologies MARTIN

Impianti per il trattamento termico di rifiuti urbani con le tecnologie MARTIN

Country ***Land*** ***Pays*** ***Paese***	Number of plants ***Anzahl Anlagen*** ***Nombre d'usines*** ***Numero impianti***	Number of lines ***Anzahl Linien*** ***Nombre de lignes*** ***Numero linea***	Throughput Mg/d ***Durchsatz*** ***Capacité*** ***Capacità***
Austria	**6**	**10**	**3188**
Azerbaijan	**1**	**2**	**1584**
Belgium	**6**	**11**	**3878**
Brazil	**2**	**4**	**600**
Canada	**3**	**5**	**1156**
China	**30**	**65**	**30334**
Czech Republic	**2**	**3**	**1015**
Denmark	**3**	**3**	**1560**
Estonia	**1**	**1**	**660**
France	**65**	**113**	**28656**
Germany	**30**	**47**	**19609**
Italy	**13**	**22**	**9528**
Japan	**83**	**189**	**33005**
Jersey	**2**	**4**	**654**
Korea, Rep. of	**10**	**17**	**3825**
Luxembourg	**2**	**3**	**720**
Macao	**3**	**6**	**1728**
Monaco	**2**	**3**	**417**
Netherlands	**14**	**33**	**13936**
Norway	**3**	**6**	**1056**
Poland	**1**	**1**	**288**
Portugal	**1**	**2**	**1280**
Russian Fed.	**3**	**5**	**1000**
Singapore	**3**	**17**	**10392**
Slovakia	**1**	**2**	**524**
Spain	**3**	**5**	**1344**
Sweden	**11**	**13**	**4642**
Switzerland	**36**	**45**	**11754**
Taiwan	**7**	**18**	**7400**
Thailand	**1**	**1**	**250**
United Kingdom	**20**	**35**	**13048**
United States	**32**	**72**	**31592**
TOTAL	**400**	**763**	**240624**

MARTIN GmbH
für Umwelt- und Energietechnik
Leopoldstraße 248 • D-80807 München
Tel.: +49 89 356 17-0 • Fax: +49 89 356 17-299
e-mail: mail@martingmbh.de • www.martingmbh.de
seit 1925

MARTIN GmbH
für Umwelt- und Energietechnik
seit 1925

Thermal waste treatment facilities using MARTIN technologies

Anlagen zur thermischen Abfallbehandlung mit MARTIN Technologien
Usines de traitement thermique des déchets urbains avec les technologies MARTIN
Impianti per il trattamento termico di rifiuti urbani con le tecnologie MARTIN

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
1	BR	São Paulo-Ponte Pequena		2	150	300	9.44	18.88	1959	R
2	BR	São Paulo-Vergueiro	*	2	150	300	9.44	18.88	1967	R
3	NL	Rotterdam		4	375	1500	32.00	128.00	1964	R
4	DE	München-Nord, Block 1		2	600	1200	52.34	104.68	1964	R
5	DE	Stuttgart		1	480	480	51.17	51.17	1965	R
6	FR	Paris / Issy-les-Moulineaux		4	408	1632	43.61	174.44	1965	R
7	CH	Zermatt		1	40	40	4.86	4.86	1964	R
8	CH	Limmattal		2	55	110	4.11	8.22	1971	R
9	DE	München-Nord, Block 2	*	1	960	960	87.23	87.23	1966	R
10	DE	Hamburg-Borsigstraße, S1		1	288	288	27.31	27.31	1967	R
11	NL	Amsterdam		4	540	2160	47.10	188.40	1969	R
12	DE	München-Süd, Block 5	*	1	960	960	87.23	87.23	1969	R
13	FR	Rennes		2	120	240	14.53	29.06	1968	R
14	FR	Paris / Ivry	*	2	1200	2400	116.30	232.60	1969	R
15	AT	Wien-Spittelau		2	360	720	31.40	62.80	1971	R
16	FR	Metz		2	144	288	17.44	34.88	1970	R
17	RU	Moscow		2	200	400	14.55	29.10	1975	R
18	GB	Exeter		1	203	203	23.75	23.75	1970	R

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
19	DE	Heidenheim		1	48	48	6.98	6.98	1970	R
20	GB	Birmingham		2	285	570	36.37	72.74	1971	R
21	US	Chicago-NW, IL		4	363	1452	42.91	171.64	1970	R
22	FR	Cannes / Antibes		2	216	432	23.03	46.06	1969	R
23	CH	Hinwil		1	120	120	12.79	12.79	1970	R
24	FR	Avignon		1	120	120	11.63	11.63	1971	R
25	DE	München-Süd, Block 4	*	1	960	960	87.23	87.23	1971	R
26	SE	Malmö		2	204	408	32.62	65.24	1973	R
27	NL	Leeuwarden		2	144	288	13.96	27.92	1974	R
28	NL	Alkmaar		2	144	288	12.79	25.58	1971	R
29	SE	Halmstad		2	120	240	14.06	28.12	1971	R
30	DE	Neunkirchen		1	120	120	11.63	11.63	1970	R
31	DE	Hamburg-Stellinger Moor	*	2	450	900	33.00	66.00	1972	R
32	US	Harrisburg, PA		2	327	654	39.56	79.12	1972	R
33	FR	Vallée de Chevreuse		1	120	120	13.96	13.96	1972	R
34	GB	Coventry		3	288	864	26.38	79.14	1975	R
35	NL	Dordrecht		3	168	504	16.28	48.84	1972	R
36	GB	Nottingham		2	281	562	27.21	54.42	1973	R
37	FR	Caën / Colombelles		2	180	360	17.44	34.88	1972	R
38	FR	Lens-Liévin		2	161	322	18.70	37.40	1973	R
39	FR	Thiverval/Grignon/Plaisir		2	192	384	22.33	44.66	1974	R
40	CH	Zürich-Hagenholz, OL3		1	400	400	38.38	38.38	1973	R
41	FR	Hénin-Carvin		2	84	168	11.23	22.46	1973	R
42	JP	Kawasaki-Tachibana		3	200	600	18.34	55.02	1974	R
43	JP	Kyoto-Minami		3	200	600	24.13	72.39	1975	R
44	JP	Yokohama-Minami-Sakae		3	500	1500	62.31	186.93	1976	R
45	JP	Kobe-Higashi		3	230	690	24.52	73.56	1975	R
46	CH	Hinwil	*	2	150	300	21.81	43.62	1976	R
47	JP	Tokyo-Katsushika		3	400	1200	50.88	152.64	1976	R

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
48	**CH**	**Zürich-Josefstraße, OL2**	*	**1**	**450**	**450**	**43.61**	**43.61**	**1978**	**R**
49	**LU**	**Luxemburg**		**2**	**240**	**480**	**23.26**	**46.52**	**1976**	**R**
50	**CH**	**Bazenheid**		**2**	**84**	**168**	**12.21**	**24.42**	**1976**	**R**
51	**CH**	**Winterthur**		**1**	**400**	**400**	**43.61**	**43.61**	**1978**	**R**
52	**DE**	**Neunkirchen**	*	**1**	**240**	**240**	**23.26**	**23.26**	**1977**	**R**
53	**CH**	**Genève-Les Cheneviers**		**1**	**460**	**460**	**50.88**	**50.88**	**1978**	**R**
54	**FR**	**Valenciennes**		**3**	**120**	**360**	**12.79**	**38.37**	**1977**	**R**
55	**FR**	**Nice**		**2**	**320**	**640**	**27.91**	**55.82**	**1977**	**R**
56	**FR**	**Denain**		**2**	**120**	**240**	**12.79**	**25.58**	**1977**	**R**
57	**FR**	**Arles**		**1**	**72**	**72**	**7.68**	**7.68**	**1977**	**R**
58	**BE**	**Bruges**		**3**	**216**	**648**	**26.17**	**78.51**	**1981**	**R**
59	**JP**	**Kawasaki-Tsutsumine**	*	**2**	**300**	**600**	**29.08**	**58.16**	**1979**	**R**
60	**JE**	**Jersey**		**2**	**147**	**294**	**16.28**	**32.56**	**1979**	**R**
61	**JP**	**Otokuni**		**1**	**150**	**150**	**13.08**	**13.08**	**1978**	**R**
62	**JP**	**Akita**		**2**	**150**	**300**	**13.08**	**26.16**	**1978**	**R**
63	**NL**	**Alkmaar**	*	**1**	**144**	**144**	**13.96**	**13.96**	**1978**	**R**
64	**JP**	**Nagasaki**		**2**	**200**	**400**	**17.44**	**34.88**	**1979**	**R**
65	**MC**	**Monaco**		**2**	**139**	**278**	**12.84**	**25.68**	**1980**	**R**
66	**FR**	**Hénin-Carvin**	*	**1**	**84**	**84**	**10.18**	**10.18**	**1977**	**R**
67	**JP**	**Koochi**		**3**	**150**	**450**	**14.54**	**43.62**	**1980**	**R**
68	**DE**	**Hamburg-Borsigstraße, S2**	*	**1**	**288**	**288**	**27.91**	**27.91**	**1982**	**R**
69	**DE**	**Nürnberg**		**1**	**480**	**480**	**48.85**	**48.85**	**1979**	**R**
70	**JP**	**Tsushima**		**2**	**150**	**300**	**14.54**	**29.08**	**1983**	**R**
71	**JP**	**Sagamihara**		**3**	**200**	**600**	**19.39**	**58.17**	**1980**	**R**
72	**JP**	**Matsumoto**		**2**	**150**	**300**	**14.54**	**29.08**	**1980**	**R**
73	**JP**	**Tachikawa**		**2**	**90**	**180**	**10.03**	**20.06**	**1979**	**R**
74	**JP**	**Toyohashi**		**2**	**115**	**230**	**10.58**	**21.16**	**1980**	**R**
75	**JP**	**Iwaki**		**2**	**150**	**300**	**17.44**	**34.88**	**1980**	**R**
76	**DE**	**München-Nord, Block 3**	*	**2**	**480**	**960**	**58.15**	**116.30**	**1984**	**R**

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
77	JP	Yokohama-Kita	*	3	400	1200	48.38	145.14	1984	R
78	JP	Kobe-Port Island	*	3	150	450	18.14	54.42	1984	R
79	FR	Lille-Sequedin		1	240	240	23.26	23.26	1980	R
80	JP	Naha-Okinawa		2	150	300	16.05	32.10	1981	R
81	JP	Kuki		1	77	77	6.00	6.00	1980	H
82	DE	Bielefeld		3	384	1152	49.60	148.80	1981	H
83	BE	Bruxelles		3	555	1665	53.73	161.19	1985	R
84	FR	Lille-Wasquehal	*	1	240	240	23.26	23.26	1980	R
85	MC	Monaco	*	1	139	139	12.84	12.84	1981	R
86	JP	Kamakura		2	75	150	9.08	18.16	1982	R
87	SE	Uppsala IV		1	264	264	29.00	29.00	1982	H
88	CH	Zürich-Hagenholz, OL1		1	444	444	43.60	43.60	1982	H
89	CH	Buchs, SG		1	202	202	23.30	23.30	1982	H
90	FR	Nice	*	1	320	320	27.91	27.91	1982	R
91	JP	Shizuoka		2	200	400	21.32	42.64	1982	R
92	DE	Schwandorf, OL1-3		3	451	1354	41.00	123.00	1982	H
93	CH	Turgi, OL3		1	163	163	17.40	17.40	1983	H
94	DE	Ingolstadt		1	240	240	29.00	29.00	1983	H
95	US	Pinellas County, FL		2	953	1906	111.65	223.30	1983	R
96	JP	Tokyo-Hikarigaoka	*	2	150	300	20.62	41.24	1983	R
97	SE	Uppsala I	*	1	360	360	43.70	43.70	1983	H
98	DE	Würzburg		2	300	600	29.08	58.16	1984	R
99	SE	Kisa		1	77	77	6.40	6.40	1983	H
100	JP	Akita	*	1	200	200	21.32	21.32	1983	R
101	JP	Himeji		2	150	300	14.54	29.08	1984	R
102	JP	Saitama-Chuubu		3	80	240	7.74	23.22	1984	R
103	CH	Linthgebiet		1	210	210	26.17	26.17	1984	R
104	CH	Buchs, AG		1	222	222	27.91	27.91	1984	R
105	BE	Thumaide		1	163	163	17.40	17.40	1984	H

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
106	ES	Girona		2	72	144	6.98	13.96	1983	R
107	NO	Fredrikstad		2	108	216	13.00	26.00	1984	H
108	FR	Toulon		2	320	640	27.91	55.82	1984	R
109	JP	Komaki-Iwakura		2	150	300	13.08	26.16	1984	R
110	JP	Otokuni	*	1	80	80	8.92	8.92	1984	R
111	NO	Oslo-Klemetsrud		2	240	480	27.80	55.60	1985	H
112	JP	Takayama		2	50	101	4.00	8.00	1986	H
113a	NO	Oslo-Haraldrud I	*	1	180	180	18.90	18.90	1986	H
113b	NO	Oslo-Haraldrud II	*	1	180	180	18.90	18.90	1987	H
114	JP	Nagoya-Yamada		3	150	450	15.99	47.97	1986	R
115	FR	Vallée de Chevreuse	*	1	192	192	16.75	16.75	1984	R
116	FR	Rungis		2	245	490	17.79	35.58	1984	R
117	LU	Luxemburg	*	1	240	240	23.26	23.26	1985	R
118	US	North Andover (NESWC), MA		2	680	1360	72.24	144.48	1985	R
119	CH	Bazenheid	*	1	110	110	12.31	12.31	1984	R
120	JP	Kariya-Chiryu		2	120	240	12.79	25.58	1986	R
121	SG	Singapore-Tuas		5	552	2760	32.81	164.05	1986	R
122	US	Pinellas County, FL	*	1	953	953	111.74	111.74	1986	R
123	US	Tulsa, OK		2	340	680	35.47	70.94	1986	R
124	SE	Stockholm-Högdalen		1	360	360	47.10	47.10	1986	R
125	CH	St. Gallen		2	125	250	13.95	27.90	1987/88	R
126	US	Marion County, OR		2	249	498	26.74	53.48	1986	R
127	JP	Iwatsuki		2	65	130	6.28	12.56	1987	R
128	JP	Toyota-City		2	110	220	12.79	25.58	1987	R
129	FR	Belfort		1	96	96	7.90	7.90	1988	S
130	DE	Rosenheim		1	252	252	27.80	27.80	1988	H
131	US	Warren County, NJ		2	182	365	22.50	45.00	1988	H
132	US	Hillsborough County, FL		3	363	1089	38.89	116.67	1987	R
133	CN	Shenzhen		2	150	300	10.91	21.82	1987	R

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
134	CA	Vancouver, BC		2	240	480	29.14	58.28	1988	R
135	JP	Fukushima		2	120	240	14.54	29.08	1988	R
136	JP	Nagasaki east	*	2	150	300	17.44	34.88	1988	R
137	CA	Vancouver, BC	*	1	240	240	29.14	29.14	1988	R
138	JP	Takarazuka		2	160	320	17.84	35.68	1988	R
139	US	Bristol, CT		2	295	590	31.21	62.42	1988	R
140	US	Alexandria, VA		3	295	885	31.21	93.63	1988	R
141	JP	Hiroshima-Minami		2	150	300	15.99	31.98	1988	R
142	FR	Nantes est		2	228	456	20.93	41.86	1987	R
143	US	Tulsa, OK	*	1	340	340	35.47	35.47	1988	R
144	US	Hennepin County, MN		2	552	1104	64.80	129.60	1989	H
145	JP	Okazaki-City		2	120	240	13.38	26.76	1989	R
146	US	Indianapolis, IN		3	714	2142	81.41	244.23	1988	R
147	DE	Coburg		2	264	528	23.26	46.52	1988	R
148	US	Babylon, NY		2	340	680	35.31	70.62	1988	R
149	FR	Colmar		2	144	288	15.35	30.70	1988	R
150	FR	Paris / Saint-Ouen		3	672	2016	65.10	195.30	1990	S
151	JP	Narita		2	91	182	8.80	17.60	1990	H
152	JP	Owase		2	67	134	6.20	12.40	1990	H
153	DE	München-Nord, Block 1	*	2	840	1680	85.48	170.96	1991	R
154	US	Stanislaus County, CA		2	363	726	44.66	89.32	1988	R
155	US	Haverhill, MA		2	748	1496	88.83	177.66	1989	R
156	JP	Tokoname-Taketoyo		2	75	150	7.99	15.98	1990	R
157a	AT	Flötzersteig 1-2		2	240	480	23.20	46.40	1990	H
157b	AT	Flötzersteig 3		1	240	240	23.20	23.20	1991	H
158	CH	Trimmis		1	202	202	21.20	21.20	1990	H
159	US	Kent County, MI		2	284	568	32.49	64.98	1990	R
160	JP	Kitakyushu		3	200	600	24.19	72.57	1991	R
161	JP	Hyuga		2	82	163	6.00	12.00	1991	H

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
162	**FR**	**Lyon sud**		**2**	**320**	**640**	**27.91**	**55.82**	**1989**	**R**
163	**US**	**Fairfax County, VA**		**4**	**680**	**2720**	**91.42**	**365.68**	**1990**	**R**
164a	**NL**	**Dordrecht**	*	**1**	**192**	**192**	**18.61**	**18.61**	**1990**	**R**
164b	**NL**	**Dordrecht**	*	**1**	**192**	**192**	**18.61**	**18.61**	**1992**	**R**
165	**DE**	**Schwandorf, OL4**	*	**1**	**557**	**557**	**67.80**	**67.80**	**1992**	**H**
166	**NL**	**Amsterdam**		**4**	**720**	**2880**	**73.00**	**292.00**	**1992**	**H**
167	**JP**	**Chiba-Sankakucho**		**3**	**200**	**600**	**20.35**	**61.05**	**1996**	**R**
168	**JP**	**Sagamihara-Kita**	*	**3**	**150**	**450**	**20.35**	**61.05**	**1991**	**R**
169	**JP**	**Himeji Itikawa**	*	**2**	**165**	**330**	**20.00**	**40.00**	**1992**	**R**
170	**JP**	**Kanazawa-Tobu**		**2**	**125**	**250**	**16.40**	**32.80**	**1991**	**R**
171	**US**	**Pennsauken, NJ**		**2**	**227**	**454**	**23.85**	**47.70**		**R**
172	**US**	**Huntsville, AL**		**2**	**313**	**626**	**33.15**	**66.30**	**1990**	**R**
173	**CH**	**Zürich-Hagenholz, OL3**	*	**1**	**400**	**400**	**38.38**	**38.38**	**1989**	**R**
174	**US**	**Lake County, FL**		**2**	**240**	**480**	**28.62**	**57.24**	**1991**	**R**
175	**FR**	**Lyon sud**	*	**1**	**320**	**320**	**27.91**	**27.91**	**1990**	**R**
176	**US**	**Lancaster County, PA**		**3**	**363**	**1089**	**43.36**	**130.08**	**1991**	**R**
177	**US**	**Pasco County, FL**		**3**	**318**	**954**	**36.12**	**108.36**	**1991**	**R**
178	**MO**	**Macao**		**2**	**288**	**576**	**23.73**	**47.46**	**1992**	**R**
179	**SG**	**Singapore-Senoko**	*	**6**	**552**	**3312**	**46.31**	**277.86**	**1992**	**R**
180	**US**	**Huntington, NY**		**3**	**227**	**681**	**33.28**	**99.84**	**1991**	**R**
181	**JP**	**Toyohashi**	*	**1**	**150**	**150**	**18.90**	**18.90**	**1991**	**R**
182	**JP**	**Sapporo**		**2**	**300**	**600**	**43.61**	**87.22**	**1992**	**R**
183	**DE**	**Kempten**		**1**	**204**	**204**	**31.63**	**31.63**	**1996**	**R**
184	**MO**	**Macao**	*	**1**	**288**	**288**	**23.73**	**23.73**	**1992**	**R**
185	**TW**	**Shulin**		**3**	**450**	**1350**	**33.84**	**101.52**	**1994**	**R**
186	**DE**	**Augsburg**		**3**	**288**	**864**	**25.60**	**76.80**	**1994**	**H**
187	**JP**	**Wajima**		**2**	**74**	**149**	**8.30**	**16.60**	**1994**	**H**
188	**TW**	**Hsintien**		**2**	**450**	**900**	**33.84**	**67.68**	**1994**	**R**
189	**JP**	**Kasai**		**2**	**48**	**96**	**6.30**	**12.60**	**1995**	**H**

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
190	IT	Cagliari		2	168	336	20.70	41.40	1995	H
191	FR	Nancy-Ludres		2	168	336	16.30	32.60	1995	S
192	CH	Zürich-Josefstrasse, OL1	*	1	449	449	47.80	47.80	1995	H
193	DE	Stuttgart	*	1	480	480	51.17	51.17	1991	R
194	NL	Rotterdam	*	4	324	1296	31.49	125.96	1992/93	R
195	JP	Kobe-City	*	3	200	600	8.00	24.00	1994	R
196	JP	Yokohama-Tsurumi	*	3	400	1200	58.15	174.45	1995	R
197	JP	Tokyo-Rinkai	*	2	200	400	32.56	65.12	1994	R
198	CH	Limmattal	*	2	168	336	17.50	35.00	1993/95	R
199	NL	Nijmegen		1	504	504	78.70	78.70	1995	H
200	AT	Wels		1	192	192	28.70	28.70	1995	H
201	FR	Toulon	*	1	373	373	32.56	32.56	1993	R
202	CH	Winterthur	*	1	384	384	47.99	47.99	1994	R
203	FR	Thiverval/Grignon/Plaisir	*	1	373	373	32.56	32.56	1994	R
204	GB	London (SELCHP)		2	696	1392	68.47	136.94	1994	R
205	US	Union County, NJ		3	435	1305	56.28	168.84	1994	R
206	JP	Osaka		2	300	600	43.61	87.22	1996	R
207	CH	Buchs, AG	*	1	225	225	30.70	30.70	1994	R
208	FR	Nantes ouest		2	168	336	16.29	32.58	1994	R
209	CH	La Chaux-de-Fonds		1	207	207	22.08	22.08	1994	R
210	JP	Chikunan		3	125	374	16.30	48.90	1996	H
211	DE	Bielefeld	*	3	384	1152	49.60	148.80	1996	H
212	CH	Weinfelden		2	192	384	27.80	55.60	1996	H
213	DE	Ingolstadt		2	288	576	38.38	76.76	1996	R
214	AT	Wien-Spittelau	*	2	360	720	38.33	76.66	1993	R
215	JP	Otokuni	*	2	75	150	10.18	20.36	1995	R
216	ES	Mataró		2	240	480	23.26	46.52	1994	R
217	US	Lee County, FL		2	545	1090	65.12	130.24	1995	R
218	FR	Lons-le-Saunier		1	120	120	12.79	12.79	1994	R

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
219	KR	Ilsan		1	300	300	31.98	31.98	1995	R
220	CH	Turgi, OL4	*	1	250	250	32.00	32.00	1996	H
221	US	Onondaga, NY		3	299	897	43.97	131.91	1995	R
222	DE	Neunkirchen	*	2	204	408	27.63	55.26	1999	R
223	CH	Hinwil	*	1	384	384	40.02	40.02	1995	R
224	US	Montgomery County, MD		3	544	1632	72.20	216.60	1995	R
225	CN	Shenzhen	*	1	150	150	10.90	10.90	1996	R
226	FR	Avignon	*	2	144	288	13.96	27.92	1995	R
227	KR	Hae Wun Dae		2	221	442	24.16	48.32	1997	S
228	FR	Pau		1	144	144	14.70	14.70	1997	H
229	FR	Dinan-Taden		2	168	336	16.30	32.60	1997	H
230	JP	Tokyo-Kita	*	1	600	600	84.32	84.32	1998	R
231	JP	Tachikawa	*	1	100	100	13.08	13.08	1997	R
232	JP	Nishinomiya		3	175	525	25.44	76.32	1997	R
233	JP	Shimosuwa		2	55	110	4.70	9.40	1998	H
234	CH	Basel		2	360	720	47.00	94.00	1998	H
235	JP	Oita		3	146	438	19.10	57.30	1997	R
236	IT	Porto Marghera		1	173	173	16.60	16.60	1998	H
237	FR	Cergy-Pontoise		2	252	504	26.87	53.74	1995	R
238	FR	Rennes	*	1	192	192	20.46	20.46	1995	R
239	NL	Twente-Hengelo		2	432	864	50.00	100.00	1997	R
240	CH	Monthey		1	235	235	37.61	37.61	1996	R
241	FR	Bordeaux-Bègles		3	288	864	28.00	84.00	1998	H
242	JP	Bisan		2	100	200	13.58	27.16	1997	R
243	JP	Yokohama-Asahi	*	3	180	540	23.55	70.65	1999	R
244	IT	Brescia		2	1012	2024	88.27	176.54	1998	R
245	FR	Lunel		2	192	384	20.50	41.00	1999	S
246a	IT	Trieste		1	204	204	21.70	21.70	1999	H
246b	IT	Trieste		1	204	204	21.70	21.70	2000	H

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
247	DK	Horsholm		1	288	288	34.90	34.90	1999	H
248	RU	Moscow	*	2	200	400	14.54	29.08	1999	R
249	KR	Kwa Cheon		1	84	84	6.90	6.90	1999	H
250	FR	Chartres		2	180	360	19.20	38.40	1999	S
251	FR	St Germain-en-Laye		2	180	360	21.40	42.80	1999	S
252	JP	Tokyo-Minato	*	3	300	900	46.52	139.56	1999	R
253	DK	Roskilde		1	552	552	65.00	65.00	1999	H
254	JP	Akashi		3	161	482	21.20	63.60	1999	H
255	FR	Avignon	*	1	144	144	13.96	13.96	1997	R
256	JP	Itoman-Tomigusuku		2	100	200	16.24	32.48	1998	R
257	GB	Stoke-on-Trent		2	312	624	30.84	61.68	1997	R
258	TH	Phuket		1	250	250	24.50	24.50	1998	R
259	FR	Monthyon		2	168	336	17.91	35.82	1997	R
260	KR	Su-Won		2	300	600	33.43	66.86	1999	R
261	TW	Kaohsiung south		4	450	1800	54.52	218.08	1999	R
262	GB	Dudley		2	144	288	15.35	30.70	1998	R
263	GB	Wolverhampton		2	168	336	17.90	35.80	1998	R
264	IT	Milano-Silla		3	482	1447	61.00	183.00	2000	H
265	FR	Creteil		2	360	720	38.40	76.80	2000	H
266	FR	Nice	*	1	432	432	41.87	41.87	1998	R
267	FR	Chaumont / Haute-Marne		2	120	240	11.63	23.26	1998	R
268	SG	Singapore-Tuas south	*	6	720	4320	87.49	524.94	2000	R
269	FR	Blois		2	132	264	14.10	28.20	2000	S
270	TW	Ren Wu		3	450	1350	50.13	150.39	1999	R
271	PT	Oporto		2	640	1280	52.76	105.52	1999	R
272	IT	Busto Arsizio		2	252	504	30.60	61.20	2000	H
273	JP	Iwaki-Nambu	*	3	130	390	17.64	52.92	2000	R
274	JP	Tsushima-Yatomi	*	3	110	330	15.99	47.97	2002	R
275	FR	Toulouse - Bessières		2	274	547	30.50	61.00	2000	S

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
276	FR	Metz	*	2	192	384	20.50	41.00	2001	S
277	FR	Lille		3	348	1044	37.10	111.30	2001	S
278	JP	Nagoya-Gojougawa		2	280	560	40.71	81.42	2004	R
279	JP	Koochi	*	3	200	600	26.17	78.51	2002	R
280	CN	Shanghai-Pudong		3	365	1094	25.60	76.80	2001	S
281	JP	Ryuusen-En		3	106	317	14.30	42.90	2001	H
282	FR	Melun		2	192	384	21.90	43.80	2001	H
283	BE	Thumaide		2	384	768	37.78	75.56	2001	R
284	KR	Kang Nam		3	300	900	29.00	87.00	2001	H
285	KR	Jang-Yu		1	199	199	16.40	16.40	2001	H
286	CH	Fribourg		1	384	384	39.99	39.99	2001	R
287	SE	Göteborg		1	396	396	45.00	45.00	2001	R
288	JP	Hiroshima-Naka		3	200	600	26.16	78.48	2003	R
289	JP	Otokuni	*	1	75	75	10.92	10.92	2002	R
290	DE	Mainz 1-2		2	367	734	44.33	88.66	2003	R
291	FR	Belfort		2	148	296	15.26	30.52	2002	R
292	KR	Incheon		2	250	500	27.82	55.64	2001	R
293	KR	Guri		2	100	200	10.43	20.86	2001	R
294	IT	Piacenza		2	180	360	22.68	45.36	2002	R
295	JP	Tokyo-Itabashi	*	2	300	600	42.20	84.40	2002	H
296	SK	Bratislava		2	262	524	24.97	49.94	2002	R
297	SE	Malmö	*	1	600	600	86.79	86.79	2003	R
298	JP	Hitoyoshi		2	46	91	5.10	10.20	2002	H
299	AT	Arnoldstein		1	260	260	29.79	29.79	2004	R
300	JP	Niihama		3	67	202	9.40	28.20	2002	H
301a	FR	Villefranche sur Saône		1	156	156	16.90	16.90	2002	R
301b	FR	Villefranche sur Saône		1	108	108	11.70	11.70	2002	R
302	GB	Chineham		1	288	288	30.66	30.66	2002	R
303	FR	Villers Saint Paul		2	240	480	26.30	52.60	2004	H

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
304	FR	Nîmes		1	336	336	35.80	35.80	2003	S
305	FR	Le Havre		2	288	576	30.70	61.40	2004	H
306	CH	Monthey	*	1	291	291	37.72	37.72	2003	R
307	JP	Tochigi		2	119	237	17.24	34.48	2003	R
308	JP	Sendai		3	200	600	28.69	86.07	2005	R
309	TW	Taichung-Wujih		2	450	900	50.16	100.32	2004	R
310	FR	Toulouse - Mirail		2	240	480	26.75	53.50	2003/04	R
311	ES	Bilbao		1	720	720	70.83	70.83	2004	R
312	GB	Marchwood		2	288	576	30.66	61.32	2004	R
313	RU	Moscow	*	1	200	200	14.50	14.50	2004	R
314	IT	Brescia	*	1	1012	1012	100.00	100.00	2004	R
315	IT	Trieste III	*	1	204	204	21.75	21.75	2004	H
316	CN	Bing Jiang		3	150	450	13.00	39.00	2004	R
317	TW	Lihtser		2	300	600	33.44	66.88	2005	R
318	AT	Wels		1	576	576	80.00	80.00	2005	R
319	FR	Est Anjou		1	360	360	34.89	34.89	2004	R
320	JP	Miyazaki		3	193	579	24.32	72.96	2005	R
321	JP	Kagoshima		2	265	530	30.37	60.74	2006	R
322	CN	Tongxing		2	660	1320	48.61	97.22	2005	S
323	GB	Portsmouth		2	288	576	30.66	61.32	2005	R
324	CN	Guangzhou Likeng		2	450	900	39.06	78.12	2005	R
325	DE	Zella-Mehlis		1	518	518	60.00	60.00	2007	R
326	KR	Jeon Ju		2	200	400	27.10	54.20	2006	S
327	GB	Sheffield		1	672	672	71.60	71.60	2005	R
328	NL	Amsterdam	*	2	806	1612	93.30	186.60	2007	H
329	TW	Miaoli		2	250	500	27.90	55.80	2006	R
330	FR	Châlons en Champagne		1	360	360	34.89	34.89	2005	R
331	FR	Toulouse - Mirail	*	1	240	240	30.50	30.50	2007	R
332	CN	Zhongshan		2	350	700	32.40	64.80	2006	R

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
333	CH	Zürich-Hagenholz, 2K1/2K3	*	2	460	920	48.10	96.20	2008/10	R
334	CH	Giubiasco		2	322	644	33.50	67.00	2009	R
335	US	Lee County, FL	*	1	635	635	68.72	68.72	2007	R
336	CN	Zhongshan	*	1	350	350	32.40	32.40	2006	R
337	FR	Avignon	*	1	211	211	20.50	20.50	2007	R
338	FR	Bourgoin Jallieu		2	264	528	32.00	64.00	2007	R
339	CN	Fuzhou		2	660	1320	48.61	97.22	2007	S
340	SE	Malmö	*	1	696	696	90.00	90.00	2008	R
341	MO	Macao	*	3	288	864	23.73	71.19	2007/08	R
342	FR	Marseille		2	480	960	63.20	126.40	2008	R
343	IT	Pozzilli		1	322	322	49.90	49.90	2007	V
344	NL	Twente-Hengelo	*	1	792	792	91.70	91.70	2008	R
345	IT	Padova		1	375	375	43.60	43.60	2008	H
346	DE	Mainz 3	*	1	427	427	48.00	48.00	2009	R
347	BE	Thumaide	*	1	317	317	39.05	39.05	2009	R
348	US	Hillsborough County, FL	*	1	544	544	64.85	64.85	2009	R
349	CZ	Brno		2	336	672	42.80	85.60	2010	R
350	NL	Dordrecht	*	1	720	720	75.00	75.00	2010	R
351	SE	Göteborg	*	1	377	377	43.60	43.60	2010	R
352	GB	Nottingham	*	2	281	562	27.21	54.42	2009/10	R
353	CN	Baoding		2	600	1200	48.61	97.22	2010	S
354	JE	Jersey		2	180	360	19.20	38.40	2010	R
355	CH	Winterthur	*	1	324	324	38.00	38.00	2012	R
356	CN	Chengdu, Phase II		3	600	1800	48.61	145.83	2011	S
357	CN	Foshan Nanhai II		3	500	1500	40.50	121.50	2011	R
358	US	Honolulu		1	997	997	105.60	105.60	2011	R
359	BE	Thumaide	*	1	317	317	39.00	39.00	2011	R
360	CH	Bern		1	480	480	57.20	57.20	2012	R
361	KR	Asan		1	200	200	29.08	29.08	2011	R

No. *Nr* *N°* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
362	AZ	Baku		2	792	1584	77.92	155.84	2011/12	R
363	CN	Dongguan Hengli II		3	600	1800	48.61	145.83	2011	S
364	FR	Arques		1	300	300	33.40	33.40	2011	R
365	CN	Langfang		2	500	1000	38.77	77.54	2012	R
366	CN	Taizhou City		2	500	1000	37.56	75.12	2012	R
367	IT	Torino		3	618	1855	68.75	206.25	2012	R
368	CN	Yuxi		2	200	400	16.20	32.40	2012	S
369	CN	Taixing		1	300	300	24.30	24.30	2012	S
370	IT	Bozen		1	509	509	58.86	58.86	2012	R
371	CN	Cangzhou		2	400	800	32.41	64.82	2012	S
372	SE	Brista 2		1	864	864	80.00	80.00	2013	V
373	CN	Shijiazhuang		2	500	1000	40.51	81.02	2013	S
374	CN	Fengsheng		4	600	2400	48.61	194.44	2013	S
375	DK	Roskilde KN6	*	1	720	720	81.30	81.30	2013	V
376	EE	Maardu		1	660	660	80.21	80.21	2013	R
377	CH	Buchs, AG	*	1	259	259	30.00	30.00	2014	R
378	GB	North Hykeham (Lincolnshire)		1	509	509	49.70	49.70	2013	R
379	GB	Four Ashes (Staffordshire)		2	506	1012	51.11	102.22	2013	R
380	CN	Beijing Shougang		4	750	3000	65.36	261.44	2012	R
381	CN	Liaocheng		2	300	600	24.30	48.60	2013	S
382	CA	Durham, ON		2	218	436	29.80	59.60	2014	R
383	CN	Dongguan Downtown		3	600	1800	48.61	145.83	2013	S
384	GB	Ardley (Oxfordshire)		2	552	1104	51.75	103.50	2014	R
385	GB	Great Blakenham (Suffolk)		2	417	834	43.00	86.00	2014	R
386	JP	Ishinomaki		3	300	900	43.60	130.80	2012	R
387	CN	Foshan Nanhai I	*	3	500	1500	40.51	121.53	2013	R
388	GB	Cardiff		2	636	1272	64.00	128.00	2014	V
389	CN	Dali		1	600	600	48.61	48.61	2013	S
390	CH	Bazenheid	*	1	228	228	31.00	31.00	2014	R

No. *Nr* *N °* *N.*	Country *Land* *Pays* *Paese*	Plant *Anlage* *Usine* *Impianto*		Number of lines *Anzahl Linien* *Nombre de lignes* *Numero linee*	Throughput [Mg/d] *Durchsatz* *Capacité* *Capacità*		Thermal capacity [MW] *Thermische Leistung* *Puissance thermique* *Potenza termica*		Start-up *Inbetriebsetzung* *Mise en service* *Messa in servizio*	Grate technology *Rosttechnologie* *Technologie de grille* *Technologia griglia*
					per stream	*total plant*	*per stream*	*total plant*		
391	**CN**	**Kunming Konggang**		**2**	**400**	**800**	**32.41**	**64.82**	**2013**	**S**
392	**GB**	**Shrewsbury (Shropshire)**		**1**	**312**	**312**	**30.67**	**30.67**	**2015**	**R**
393	**CN**	**Dongying**		**1**	**600**	**600**	**48.61**	**48.61**	**2014**	**S**
394	**CN**	**Chuzhou**		**1**	**350**	**350**	**28.36**	**28.36**	**2015**	**S**
395	**CN**	**Chenzhou**		**2**	**350**	**700**	**28.36**	**56.72**	**2015**	**S**
396	**CN**	**Guigang**		**2**	**300**	**600**	**24.30**	**48.60**	**2015**	**S**
397	**JP**	**Kitakami**		**2**	**91**	**182**	**9.30**	**18.60**	**2015**	**R**
398	**PL**	**Konin**		**1**	**288**	**288**	**28.30**	**28.30**	**2015**	**V**
399	**CZ**	**Plzeň**		**1**	**343**	**343**	**34.40**	**34.40**	**2015**	**V**
400	**GB**	**Leeds**		**1**	**492**	**492**	**51.25**	**51.25**	**2016**	**R**

LEGEND
Legende
Légende
Leggenda

*** Repeat order**
** Folgeauftrag*
** Commande réitérée*
** Ordinazione successiva*

R = Reverse-acting grate
R = Rückschub-Rost
R = Grille à recul
R = Griglia a spinta inversa

V = Reverse-acting grate Vario
V = Rückschub-Rost Vario
V = Grille à recul Vario
V = Griglia a spinta inversa Vario

H = Horizontal grate
H = Horizontal-Rost
H = Grille horizontale
H = Griglia orizzontale

S = SITY 2000
S = SITY 2000
S = SITY 2000
S = SITY 2000