LIST OF REFERENCES

➢ Power & Process Cooling Systems Business Line

- Auxiliary & Process Air Coolers 2
- Indirect Dry and Dry/Wet Cooling Systems 11
- Direct Air Cooled Condensers 17
- Wet Cooling Towers 18
- Hybrid Cooling Towers 20

➢ Power Engineering & Process Technology Business Line

- Conventional heat production Boiler and heating plants 21
- Conventional power production Power and cogeneration plants 23
- Heat recovery units 26
- Nuclear power plant related projects 30
- Water treatment plants 31
- Fuel handling and storage plants 33
- Power plant waste processing and disposal systems (dense slurry systems) 34
- Heat transfer oil boiler plants 36
- Gas engine heating plants 37
- Biomass projects 38
- Independent technical advisory activity 39

LIST OF REFERENCES **AUXILIARY AND PROCESS AIR COOLERS**

Ref. No.	Description	Country	Contracting Year	Remarks
1.	Induced draft lube oil cooling tower Kirchdorf Cement Works	Austria	1962	finned surface: 6000 sqm cooler type: L-60 Forgo plate fin
2. 3. 4.	Forced draft cooling deltas with fans and louvres	Hungary Poland	1960 1965	total finned surface: 6000 sqm cooler type: L-60 Forgo plate fin
5.	Induced draft water cooling tower, Zala Oil Refinery	Hungary	1964	finned surface: 24 000 sqm cooler type: L-60 Forgo plate fin
6.	Induced draft water cooling tower with fans and louvres, Moscow Oil Refinery	Soviet Union	1964	finned surface: 72 000 sqm cooler type: L-60 Forgo plate fin
7. 8. 9.	Generator air coolers For hydro power plants, various sizes	Poland India Nepal	1969 1978	L-60 Forgo plate fin, copper alloy core tubes, removable c. steel headers, finned surface: 15 000 sqm
10. 11.	Forced draft water cooling towers, Katowice Steel Works	Poland	1966	cooler surface: 8000 sqm cooler type: L-60 Forgo plate fin
12.	Induced draft water cooling tower, Borsod Chemical Works	Hungary	1965	cooler surface: 20 000 sqm
13. 14.	Forced draft water cooling towers, Duna Cement Works	Hungary	1969- 1970	cooler surface: 18 000 sqm cooler type: L-60 Forgo plate fin
15.	Forced draft water cooler tower, Miskolc Glass Works	Hungary	1970	cooler surface: 8000 sqm
16.	Transformer oil coolers with fans and accessories, turbulators in the tuber	Hungary	1968 1976	all aluminum structure with welded tube ends, total surface: 10 000 sqm
17. 18. 19. 20.	Forced draft lube oil coolers with control louvres and turbulators in the tuber	Soviet Union	1973 1974 1975 1976	total cooler surface: 1 580 000 sqm
21.	Forced draft water cooler for arc furnace, with demineralizer	Dubai	1974	cooler surface: 2000 sqm
22. 23.	Forced draft units for greenhouse heating, Kashira and Riga	Soviet Union	1976 1986	total cooler surface: 10 000 sqm
24.	Induced draft lube oil coolers with louvres and turbulators in the tubes	Soviet Union	1977	total cooler surface: 300 000 sqm cooler type: T-60 Forgo plate fin
25. 26. 27. 28. 29. 30. 31. 32. 33.	Induced draft lube oil coolers with louvres, turbulators in the tubers, electric heating and air recirculation	Soviet Union	1977 1978 1979 1980 1981 1982 1983 1984 1985	total cooler surface: 5 470 000 sqm cooler type:T-60 Forgo plate fin
34.	Forced draft water coolers for motor test facility, Gödöllô Engineering Works	Hungary	1978	L-60 Forgo plate fin air coolers, total surface: 10 000 sqm
35.	Forced draft water cooler tower with control louvres, Kardoskut Compressor Station	Hungary	1979	cooler type: L-60 Forgo plate fin total cooler surface: 24 000 sqm
36.	Induced draft natural gas coolers, Urdoma Compressor Station	Soviet Union	1979	steel core tube air coolers for 100 bar nominal pressure, total cooler surface: 39 000 sqm cooler type: T-60 Forgo plate fin
37. 38.	Forced draft oil and water cooling tower, Vitkovice steel Works	Czechoslovakia	1979	cooler type: L-60 Forgo plate fin total cooler surface: 31 000 sqm
39.	Forced draft oil coolers with control louvres, Ostrava Steel Works	Czechoslovakia	1978	cooler type: L-60 Forgo plate fin total cooler surface: 41 000 sqm

Ref. No.	Description	Country	Contracting Year	Remarks
40.	Induced draft water cooling tower with adjustable speed fans Kuncice Steel Works	Czechoslovakia	1979	cooler type: T-60 Forgo plate fin total cooler surface: 48 000 sqm
41.	Induced draft water cooler with deluged fins, EVIG Works	Hungary	1980	cooler type: T-60 Forgo plate fin cooler surface: 1000 sqm
42.	Induced draft water cooling tower with adjustable speed fan, Teplice Glass Works	Czechoslovakia	1980	cooler type: T-60 Forgo plate fin total cooler surface: 31 000 sqm
43.	Induced draft water cooling tower with adjustable speed fans, Teplice Glass Works	Czechoslovakia	1982	cooler type: T-60 Forgo plate fin total cooler surface: 62 000 sqm
44.	Replacement bundles for forced draft water cooling towers, Algyô Oil Refinery	Hungary	1980	total cooler surface: 16 000 sqm
45.	Induced draft natural gas coolers, Beregdaróc Compressor Station	Hungary	1980	steel core tube air coolers for 100 bar nominal pressure, total cooler surface: 38 400 sqm
46.	Induced draft gasoline condenser, Algyô Oil Refinery	Hungary	1982	steel core tube air cooler, T-60 Forgo plate fin type, surface: 3200 sqm
47.	Forced draft residual oil cooler, Algyô Oil Refinery	Hungary	1982	steel core tube, extruded aluminum fin air cooler, surface: 1500 sqm
48. 49.	Replacement bundles for natural gas and pentane coolers	Hungary	1987	extruded aluminum fins wit steel core tubes, total surface: 2000 sqm
50.	Induced draft natural gas coolers, Városföld Compressor Station	Hungary	1983	steel core tube air coolers with T-60 Forgo type plate fins, total surface: 19 200 sqm
51.	Induced draft water coolers with control	Czechoslovakia	1983	total cooler surface: 16 000 sqm
52. 53. 54. 55.	Auxiliary water coolers with louvres and water spraying system, Isfahan Power Station	Iran	1984 1986	T-60 Forgo plate fin air coolers, total surface: 192 000 sqm
56. 57.	Induced draft water coolers with deluging system, Duna Cement Works	Hungary	1984	total cooler surface 10 000 sqm
58.	Induced draft natural gas coolers, Tiszaszederkény Compressor Station	Hungary	1984	steel core tubes and T-60 Forgo plate fin, total surface: 38 400 sqm
59.	Induced draft gas and water coolers with control louvres, Szank compressor Station	Hungary	1984	steel core tube, steel fin galvanized air coolers, total surface: 4000 sqm
60.	Induced draft gas and water coolers with control louvres, Algyô Compressor Station	Hungary	1985	steel core tube, steel fin galvanized air coolers, total surface: 4000 sqm
61.	Induced draft water cooling tower for nuclear test reactor, Budapest	Hungary	1987	T-60 Forgo plate fin air coolers, total surface: 76 800 sqm
62.	Forced draft air coolers for various products, Duna Oil Refinery	Hungary	1986	extruded aluminum fin air coolers, total surface: 10 000 sqm
63.	Induced draft coolers for natural gas (CHS) and jacket water cooling with control louvres, Szank Compressor Station	Hungary	1986	extruded aluminum fin air coolers, total surface: 5000 sqm
64.	Induced draft coolers for natural gas (CHS) and jacket water cooling with control louvres, Algyô Compressor Station	Hungary	1987	extruded aluminum fin air coolers, total surface: 5000 sqm
65. 66.	Induced draft auxiliary water coolers with louvres and deluging system, Trakya Combined Cycle Power Plant, Unit A,B	Turkey	1986 1987	steel core tube, T-60 Forgo plate fin coolers, total surface: 24 000 sqm

Ref. No.	Description	Country	Contracting Year	Remarks
67.	Induced draft lube oil coolers with electric heating, control louvres and air recirculation	Soviet Union	1986	T-60 Forgo plate fin aluminum air coolers, total surface: 1 086 000 sqm
68.	Induced draft water cooling tower with adjustable speed fans and control louvres, Rossendorf nuclear test reactor	Germany	1987	T-60 Forgo plate fin aluminum coolers, total surface: 32 000 sqm
69.	Forced draft water coolers with deluging system, Eger Foundry	Hungary	1986	T-60 Forgo plate fin cooler, total surface: 4000 sqm
70. 71. 72.	Induced draft water coolers with electric heating and control louvres for chemical plants	Soviet Union	1986	T-60 Forgo plate fin coolers total surface: 16 000 sqm
73.	Replacement bundles for generators, Oroszlány Power Station	Hungary	1986	copper alloy core tuber and aluminum plate fins, total surface: 2000 sqm
74.	Forced draft natural gas and water coolers, with control louvres, Hajdúszoboszló Compressor Station	Hungary	1987	extruded aluminum fin and steel core tube air coolers for 120 bar nominal pressure, total surface: 4000 sqm
75. 76. 77. 78.	Induced draft lube oil coolers with electric heating, louvres and air recirculation	Soviet Union	1987 1988 1989 1990	T-60 Forgo plate fin coolers with turbulators, total surface: 2 500 000 sqm
79.	Compressed air cooler, Kardoskút Compressor Station	Hungary	1987	copper alloy core tubes and alu fins total surface: 200 sqm
80.	Forced draft natural gas and water cooler, Battonya Compressor Station	Hungary	1987	galvanized steel tube and steel fin air cooler, total surface: 500 sqm
81. 82.	Induced draft auxiliary water coolers with louvres and deluging system, Trakya Combined Cycle Power Plant, Unit C.,D.	Turkey	1988 1988	steel core tube, T-60 Forgo plate fin coolers, total surface: 24 000 sqm
83.	Induced draft auxiliary water coolers with deluging system Shahid Rajai Power Station	Iran	1988 1989	resin coated T-60 Forgo aluminum air coolers, total surface: 72 000 sqm
84.	Forced draft natural gas and water cooler with control louvres, Hajduszoboszló Compressor Station	Hungary	1990	extruded aluminum fin and steel core tube air coolers, total surface: 20 000 sqm
85.	Induced draft auxiliary water coolers with deluging system Shahid Rajai Power Station	Iran	1991	resin coated T-60 Forgo aluminum air coolers, total surface: 72 000 sqm
86.	Induced draft lube oil coolers with electric heating, control louvres and recirculation	Russia	1991	T-60 Forgo aluminum air coolers with turbulators, total surface: 45 000 sqm
87. 88.	Induced draft lube oil coolers with electric heating, control louvres and recirculation	Russia	1992 1993	T-60 Forgo aluminum air coolers with turbulators, total surface: 45 000 sqm
89.	Forced draft generator cooler bundles Sugar Factory, Kaposvár	Hungary	1993	T-60 Forgo aluminum air coolers, total surface: 540 sqm
90.	Forced draft auxiliary water coolers with deluging system, Erbeek	The Netherlands	1993	Resin coated T-60 Forgo aluminum air coolers, total surface: 14 400 sqm
91.	Induced draft auxiliary water coolers with deluging system Neil Simpson Station Unit II.	USA	1994	resin coated T-60 Forgo aluminum air coolers with carbon steel insert tubes, extremely cold climate, total surface: 11 520 sqm
92.	Forced draft gas coolers Zsana Underground Gas Storage	Hungary	1994	extruded aluminum fin and stainless steel core tube air cooler, design pressure: 144 bar, design temperature: 160°C total surface: 3 X 3810 sqm

Ref. No.	Description	Country	Contracting Year	Remarks
93.	Forced draft auxiliary glycol-water coolers and cooling system Zsana Underground Storage	Hungary	1994	extruded aluminum fins and steel core tube air cooler total surface: 3 X 2 200 sqm
94.	Forced draft methanol condenser	Hungary	1994	Extruded aluminum fin and steel core tube air cooler, total surface: 1140 sqm
95.	Induced draft lube oil coolers with electric heating control louvres and recirculation	Argentina	1994	T-60 Forgo aluminum air coolers with turbulators total surface: 1920 sqm
96.	Induced draft lube oil coolers with electric heating, control louvres and recirculation	Russia	1994	T-60 Forgo aluminum air coolers with turbulators total surface: 4 X 1920 sqm
97.	Spare parts of oil coolers	Uzbegistan	1995	T-60 Forgo aluminum air cooler with turbulators, total surface: 9600 sqm
98. 99.	Spare parts of oil coolers	Ukraine	1995 1996	T-60 Forgo air cooler with aluminum fins, tubes and turbulators, total surface: 31 700 sqm
100.	Cooler for the pump house of emergency feed-water system, Unit I.-II. Paks Nuclear Station	Hungary	1996	T-60 Forgo aluminum air coolers with stainless steel tubes and tube sheets total air side surface: 4 X 60 sqm
101.	Cooler for the pump house of emergency feed-water system, Unit III.-IV. Paks Nuclear Station	Hungary	1997	T-60 Forgo aluminum air coolers with stainless steel tubes and tube sheets total air side surface: 4 X 60 sqm
102.	Transformer oil cooler (100KW) OVIT Transmission Co. Ltd.	Hungary	1996	T-60 Forgo aluminum air coolers with stainless steel tubes and tube sheets total air side surface: 10 X 140 sqm
103.	Induced draft auxiliary oil cooler Brugge CCPP	Belgium	1996	T-60 Forgo air cooler with aluminum fins and copper tubes total air side surface: 5184 sqm
104.	Induced draft auxiliary water cooler, RMVA Köln	Germany	1997	T-60 Forgo air cooler with aluminum fins, carbon steel tubes total air side surface: 13 824 sqm
105.	Forced draft hydrocarbon product condenser refurbishment Algyő	Hungary	1998	extruded aluminum fin tubes, total air side surface: 40 700 sqm
106.	Induced draft high pressure natural gas cooler Nemesbikk	Hungary	1998	extruded aluminum fins, steel core tubes, total air side surface: 11 500 sqm
107.	Forced draft hydrocarbon product condensers and coolers Százhalombatta	Hungary	1998	extruded and embedded aluminum fins, steel core tubes, total air side surface: 39 100 sqm
108.	Induced draft auxiliary water coolers with deluging system, Bursa 1400 MWe CCPP	Turkey	1999	TA-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 61 500 sqm
109.	Induced draft gas turbine water coolers, Virginia Power Company Remington P. P.	USA	1999	TA-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 48 000 sqm
110.	Forced draft gas turbine water coolers, Florida Power Corporation Intercession City	USA	2000	TA-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 21 600 sqm

Ref. No.	Description	Country	Contracting Year	Remarks
111.	Forced draft gas turbine water coolers, Tennessee Valley Authority Lagoon Creek	USA	2000	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 38 400 sqm
112.	Forced draft gas turbine water coolers, SEI#-4, Michigan	USA	2000	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 19 200 sqm
113.	Forced draft gas turbine water cooler, Ray Olinger, Texas	USA	2000	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 3 600 sqm
114.	Forced draft gas turbine water cooler, Doswell, Virginia	USA	2000	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 14 400 sqm
115.	Induced draft gas turbine water coolers, Virginia Power Company Ladysmith P. P.	USA	2000	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 24 000 sqm
116.	Forced draft gas turbine water cooler, West Phoenix Power Plant Arizona	USA	2000	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface:2 400 sqm
117.	Forced draft gas turbine water cooler, ECAR Power Project Ceredo, West Virginia	USA	2000	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface:14 400 sqm
118.	Forced draft auxiliary water coolers Gebze 2 x 770 MWe CCPP	Turkey	2001	TA-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 115 200 sqm
119.	Forced draft auxiliary water coolers Adapazari 770 MWe CCPP	Turkey	2001	TA-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 57 600 sqm
120.	Forced draft gas turbine water coolers, Tristate Brighton	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 9 600 sqm
121.	Forced draft gas turbine water coolers, Tristate Limon	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 9 600 sqm
122.	Forced draft gas turbine water coolers, Linden 07	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 14 400 sqm
123.	Forced draft gas turbine water coolers, First Energy Sumpter	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 19 200 sqm
124.	Forced draft gas turbine water coolers, SEI Mobil	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 9 600 sqm
125.	Forced draft gas turbine water coolers, Dominion (Pleasants)	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 28 800 sqm
126.	Forced draft gas turbine water cooler, Platte River Plant Unit A Arizona	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface:2 400 sqm
127.	Forced draft gas turbine water coolers, Dominion (Troy)	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 57 600 sqm

Ref. No.	Description	Country	Contracting Year	Remarks
128.	Forced draft gas turbine water coolers, Dominion (Armstrong)	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 57 600 sqm
129.	Induced draft auxiliary water coolers with deluging system Wygen Station 1, Unit 3.	USA	2001	resin coated T-60 Forgo aluminum air coolers with carbon steel insert tubes, extremely cold climate, total surface: 11 520 sqm
130.	Forced draft gas turbine water coolers, Tennessee Valley Authority Lagoon Creek II	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 19 200 sqm
131.	Forced draft gas turbine water coolers, Tennessee Valley Authority Kemper	USA	2001	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 19 200 sqm
132.	Forced draft gas turbine water cooler, Platte River Plant Unit B&C Arizona	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface:4 800 sqm
133.	Forced draft gas turbine water coolers, Williams~Memphis Refinery USA	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 4 800 sqm
134.	Forced draft gas turbine water coolers, Morristown Tennessee	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 14 400 sqm
135.	Forced draft gas turbine water coolers, Mirant Portage County Ohio	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes,
136.	Forced draft gas turbine water coolers, Colbun Nehuenco	Chile	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 14 400 sqm
137.	Forced draft gas turbine water coolers, FPL Energy Fort Myers, Florida	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 28 800 sqm
138.	Forced draft gas turbine water coolers, Calhoun Power Co. Calhoun, Alabama	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 57 600 sqm
139.	Forced draft gas turbine water coolers, Blue Spruce Energy Center Aurora, Colorado	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 43 200 sqm
140.	Forced draft gas turbine water coolers, Southern Illionis Power Co. Marion Station, Illionis	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 9 600 sqm
141.	Forced draft gas turbine water coolers, WSP Resources Co. Pulliam, Wisconsin	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 4 800 sqm
142.	Forced draft gas turbine water coolers, Kansas City Power & Light. West Gardner, Kansas	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes
143.	Forced draft gas turbine water coolers, Kansas City Power & Light. Paola, Kansas	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes
144.	Forced draft gas turbine water coolers,Rainey Generation Santee Cooper,South Carolina	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes

Ref. No.	Description	Country	Contracting Year	Remarks
145.	Forced draft gas turbine water coolers, Indiana Municipal P. A. Anderson,Indiana	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes
146.	Forced draft gas turbine water coolers, Corn Belt / Basin Electric Wisdom, Iowa	USA	2002	TA-60 Forgo air cooler with aluminum plate fins and steel tubes
147.	Forced draft auxiliary water coolers for Spalding CCPP; Bechtel Co./Intergen Low noise design	Great Britain	2002	T-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 101 400 sqm
148.	Forced draft auxiliary oil cooler for Hitachi GT-s, LNG plant, Damietta	Egypt	2003	TA-60 Forgo air cooler with aluminum fins and stainless steel tubes
149.	Hydrocarbon products condenser and cooler tube bundles, GEA Luftkühler; MOL GOK-3	Hungary	2003	extruded and embedded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 65 150 sqm
150.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; PCK	Germany	2003	extruded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 26 300 sqm
151.	Induced draft gas turbine water coolers, DOOSAN Co., Rehab Power Plant	Jordan	2004	T-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 9 400 sqm
152.	Induced draft auxiliary oil cooler Sakhalin II. Onshore Processing Facility Project, Sakhalin	Russia	2004	TA-60 Forgo air cooler with aluminum plate fins and tubes, with turbulator total air side surface: 14 040 sqm
153.	Induced draft auxiliary water coolers with deluging system, Sochi	Russia	2004	T-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 7 800 sqm
154.	Forced draft hydrocarbon product condensers and coolers, OTF; MOL-BEK-5	Hungary	2004	extruded and embedded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 38 600 sqm
155.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; BAMAG	Germany	2004	wrap-on aluminum fins, stainless steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 11 000 sqm
156.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; Shin Etsu	Germany	2004	embedded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 47 200 sqm
157.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; Erfurt	Germany	2004	extruded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 11 600 sqm
158.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; Shell & DEA	Germany	2004	wrap-on aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 13 200 sqm
159.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; Alstom	Latvia	2004	extruded and wrap-on aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 49 200 sqm
160.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; NETRA	Germany	2004	extruded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 45 200 sqm
161.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; MAN	Germany	2004	extruded aluminum fins, steel core tubes, expanded tube to tube sheet connections total air side surface: 15 800 sqm
162.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; OMV	Austria	2004	extruded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 27 300 sqm

Ref. No.	Description	Country	Contracting Year	Remarks
163.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; Linde	Ukraine	2004	embedded aluminum fins, steel core tubes, expanded tube to tube sheet connections total air side surface: 12 200 sqm
164.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; BAMAG	Germany	2004	wrap-on aluminum fins, stainless steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 5 500 sqm
165.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; Tebodin	Germany	2004	embedded aluminum fins, stainless steel core tubes, welded and expanded tube to tube sheet connections stainless steel headers total air side surface: 10 900 sqm
166.	Hydrocarbon products cooler tube bundles, GEA Luftkühler; Plock	Poland	2005	embedded aluminum fins, steel core tubes, welded and expanded tube to tube sheet connections total air side surface: 30 900 sqm
167.	Forced draft gas coolers, Zsana Underground Gas Storage	Hungary	2005	extruded aluminum fin and stainless steel core tube air cooler, design pressure: 144 bar, design temperature: 160°C air side surface: 9 100 sqm
168.	Water cooler tube bundles, GEA Luftkühler; Saarstahl	Germany	2005	embedded aluminum fins, steel core tubes, welded tube to tube sheet connections total air side surface: 22 300 sqm
169.	Water cooler tube bundles, GEA Luftkühler; Perstorp	Sweden	2005	L-footed aluminum fins, steel core tubes, welded tube to tube sheet connections total air side surface: 22 700 sqm
170.	Forced draft gas coolers, Algyő Underground Gas Storage	Hungary	2005	extruded aluminum fin and stainless steel core tube air cooler, air side surface: 10 160 sqm
171.	Forced draft auxiliary water coolers Al Nasserieh 510 MWe CCPP	Syria	2006	TA-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 28 000 sqm
172.	Forced draft auxiliary water coolers Zayzoun 510 MWe CCPP	Syria	2006	TA-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 28 000 sqm
173.	Induced draft gas turbine glycol-water coolers, MOL (Hungarian Oil Company), Beregdaróc	Hungary	2006	TA-67 Forgo air cooler with aluminium plate fins and steel core tubes, total air side surface: 1 150 sqm
174.	Induced draft high pressure natural gas cooler, Beregdaróc	Hungary	2006	TA-67 Forgo air cooler with aluminium plate fins and steel core tubes, total air side surface: 27 000 sqm
175.	High pressure natural gas cooler retrofit (changing of extruded finned tubes to TA67 finned tube bundle), Beregdaróc	Hungary	2006	TA-67 aluminium fins, steel core tubes, total air side surface: 27 000 sqm
176.	Induced draft high pressure natural gas cooler, Hajdúszoboszló	Hungary	2006	TA-67 aluminum fins, steel core tubes, total air side surface: 20 250 sqm
177.	Induced draft auxiliary water coolers with deluging system Wygen Station 2, Unit 4.	USA	2006	resin coated T-60 Forgo aluminum air coolers with carbon steel insert tubes, extremely cold climate, total surface: 11 520 sqm
178.	Forced draft auxiliary water cooler for Polk Power Station, Florida	USA	2006	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 18 716 sqm
179.	Forced draft auxiliary water coolers MMDC Moscow City 130 MWe Town heating CCPP	Russia	2007	TA-67 Forgo air cooler with aluminum plate fins and steel core tubes, total air side surface: 36 800 sqm
180.	Modugno CCPP Auxiliary Cooler	Italy	2008	TA-60Forgo air cooler with aluminum plate fins and steel core tube, total air side surface: 76 800 sqm

Ref. No.	Description	Country	Contracting Year	Remarks
181.	Induced draft auxiliary-glycol water coolers with deluging system Tereshkovo Power Station	Russia	2009	resin coated T-60 Forgo aluminum air coolers with carbon steel insert tubes, total surface: 38 400 sqm
182.	Induced draft auxiliary-glycol water coolers with deluging system Kojuhovo Power Station	Russia	2009	resin coated T-60 Forgo aluminum air coolers with carbon steel insert tubes, total surface: 38 400 sqm
183.	Induced draft gas turbine water coolers, Virginia Power Company Ladysmith P. P. Unit 3-4 and Unit 5	USA	2008	TA-60 Forgo air cooler with aluminum plate fins and steel tubes, total air side surface: 36 000 sqm
184.	Induced draft auxiliary water coolers with deluging system Wygen Station 3, Unit 5.	USA	2008	resin coated T-60 Forgo aluminum air coolers with carbon steel insert tubes, extremely cold climate, total surface: 23 040 sqm
185.	Induced draft water coolers with spraying system, Shenhua Sengli Power Station Unit 1-2	China	2009	TA-67 Forgo air cooler with aluminium plate fins and tubes, total air side surface: 320 000 sqm
186.	Induced draft auxiliary water coolers with deluging system, Sochi III	Russia	2010	T-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 7 800 sqm
187.	Tube bundles for corn dryer plant	Hungary	2010	T-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 3 000 sqm
188.	Induced draft auxiliary oil cooler for XKK Kazakhstan oil field project	Kazakhstan	2010	TA-60 Forgo air cooler with aluminum plate fins and tubes, with turbulator total air side surface: 14 040 sqm
189.	Induced draft auxiliary water glycol cooler with deluging system, Dominion Brunswick County Power Station	USA	2013	T-60 Forgo air cooler with aluminum plate fins, tubes and steel core tubes, total air side surface: 116 700 sqm
190.	Forced draft auxiliary water cooler for Fortum, Loviisa Nuclear Power Plant	Finland	2013	TA-60 Forgo air cooler with aluminum plate fins and stainless steel trubes total air side surface: 39 800 sqm

LIST OF REFERENCES **INDIRECT DRY AND DRY/WET COOLING SYSTEMS**

Ref. No.	Description	Country	Turbine Power (MW)	Commis-sioning	Remarks
1.	Pilot plant	Hungary	0,8	1954	Mechanical draft
2.	Dunaújváros Steel Mill	Hungary	16	1962	Natural draft, with louvres
3.	Rugeley Power Station, Unit V.	UK	120	1962	Natural draft Decommissioned in 1994
4.	Eilenburg Chemical Works	Germany	5,3	1964	Mechanical draft
5.	Karaganda Steel Mill, Unit No. 1	Kazakhstan	6	1968	Mechanical draft, with movable shutter
6.	Karaganda Steel Mill, Unit No. 2	Kazakhstan	6	1968	Mechanical draft, with movable shutter
7.	Ibbenbüren Power Station	Germany	150	1967	Natural draft, with louvres
8.	Mátra (Gagarin) Power Station, Unit I.	Hungary	100	1969	Natural draft, with louvres and DC heater
9.	Mátra (Gagarin) Power Station, Unit II.	Hungary	100	1970	Natural draft, with louvres and DC heater
10.	Razdan Power Station, Unit I.	Armenia	210	1970	Natural draft steel tower with louvres
11.	Razdan Power Station, Unit II.	Armenia	210	1971	Natural draft steel tower with louvres
12.	Razdan Power Station, Unit III.	Armenia	210	1971	Natural draft steel tower with louvres
13.	Flötzersteig Incinerator	Austria	3	1970	Natural draft
14.	Mátra (Gagarin) Power Station, Unit IV.	Hungary	220	1972	Natural draft, with louvres and DC heater
15.	Mátra (Gagarin) Power Station, Unit V.	Hungary	220	1972	Natural draft, with louvres and DC heater
16.	Bilibino Nuclear Power Station Unit I.	Russia	12	1972	Mechanical draft , preheating, recirculation, surface condenser
17.	Bilibino Nuclear Power Station, Unit II.	Russia	12	1972	Mechanical draft , preheating, recirculation, surface condenser
18.	Bilibino Nuclear Power Station, Unit III.	Russia	12	1973	Mechanical draft , preheating, recirculation, surface condenser
19.	Bilibino Nuclear Power Station, Unit IV.	Russia	12	1973	Mechanical draft , preheating, recirculation, surface condense
20.	Razdan Power Station, Unit IV.	Armenia	210	1974	Repeat order, see Nos. 10 through 12
21.	Kanegafuchi Chemical Works	Japan	60	1974	Mechanical draft, deluged dry tower
22.	Ivanovo Power Station, Unit V.	Russia	60	1978	Deluged dry tower with louvres
23.	Mátra (Gagarin) Power Station	Hungary	—	1981	LOTHUS system, green house heating

Ref. No.	Description	Country	Turbine Power (MW)	Commis-sioning	Remarks
24	Mátra (Gagarin) Power Station	Hungary	—	1983	LOTHUS system, green house heating
25.	Great Isfahan Power Station, Unit I.	Iran	210	1984	Steel tower with louvres and deluged peak coolers
26.	Great Isfahan Power Station, Unit II.	Iran	210	1985	Steel tower with louvres and deluged peak coolers
27.	Great Isfahan Power Station, Unit III.	Iran	210	1985	Steel tower with louvres and deluged peak coolers
28.	Great Isfahan Power Station, Unit IV.	Iran	210	1986	Steel tower with louvres and deluged peak coolers
29.	Solar Power Station	Ukraine	5	1986	Mechanical draft tower with surface condenser
30.	Trakya Power Station, Unit A.	Turkey	100	1986	One tower for two units deluged peak coolers
31.	Trakya Power Station, Unit B.	Turkey	100	1987	One tower for two units deluged peak coolers
32.	Datong Power Station, Unit V.	China	210	1987	Natural draft concrete tower with preheating system, three condensers per unit
33.	Datong Power Station, Unit VI.	China	210	1988	Natural draft concrete tower with preheating system, three condensers per unit
34.	Shahid Rajai Power Station, Unit I.	Iran	250	1992	Natural draft steel tower, with louvres and deluged peak coolers
35.	Shahid Rajai Power Station, Unit II.	Iran	250	1993	Natural draft steel tower, with louvres and deluged peak coolers
36	Shahid Rajai Power Station, Unit III.	Iran	250	1993	Natural draft steel tower, with louvres and deluged peak coolers
37.	Shahid Rajai Power Station, Unit IV.	Iran	250	1994	Natural draft steel tower, with louvres and deluge coolers
38.	Trakya Power Station, Unit C.	Turkey	100	1988	Repeat order, see Nos 30 and 31
39.	Trakya Power Station, Unit D.	Turkey	100	1988	As above, see Nos 30 and 31
40.	Teshrin Power Station, Unit I.	Syria	210	1993	Natural draft steel tower, with louvres and deluged peak coolers

Ref. No.	Description	Country	Turbine Power (MW)	Commis-sioning	Remarks
41.	Teshrin Power Station, Unit II.	Syria	210	1993	Natural draft steel tower, with louvres and deluged peak coolers
42.	Fengzhen Power Station, Unit III.	China	210	1993	Built by the Chinese licensee
43.	Fengzhen Power Station, Unit IV.	China	210	1994	Built by the Chinese licensee
44.	Privodino Compressor Station	Russia	15.8	1995	Mechanical draft with louvres
45.	Great Isfahan Power Station Extension, Unit V.	Iran	210	1995	Natural draft concrete tower with louvres
46.	Fengzhen Power Station, Unit V.	China	210	1995	Built by the Chinese licensee
47.	Fengzhen Power Station, Unit VI.	China	210	1996	Built by the Chinese licensee
48.	Great Isfahan Power Station Extension, Unit VIII.	Iran	210	1997	Natural draft concrete tower
49.	Kanegafuchi Chemical Works	Japan	60	1997	T60 heat exchangers, 62 000m²
50.	Kanegafuchi Chemical Works	Japan	60	1998	T60 heat exchangers, 62 000m²
51.	Mátra Power Station	Hungary	220	1998	Retrofitting
52.	Great Isfahan Power Station Extension, Unit VI.	Iran	210	1998	Natural draft concrete tower
53.	Great Isfahan Power Station Extension, Unit VII.	Iran	210	1999	Natural draft concrete tower
54.	Razdan Power Station Unit V.	Armenia	300	1999	Natural draft steel tower for 2x300=600 MW with deluged peak coolers
55.	Razdan Power Station Unit VI.	Armenia	300	2000	Natural draft steel tower for 2x300=600 MW with deluged peak coolers
56.	Bursa Power Station Unit A.	Turkey	240	1999	Natural draft concrete tower for 700 MW CCPP with louvres and deluged peak coolers
57.	Bursa Power Station Unit B.	Turkey	240	1999	Natural draft concrete tower for 700 MW CCPP with louvres and deluged peak coolers
58.	Arak Power Station Unit I.	Iran	325	1999	Natural draft concrete towers with louvres designed by EGI, built by others
59.	Arak Power Station Unit II.	Iran	325	1999	Natural draft concrete towers with louvres designed by EGI, built by others
60.	Arak Power Station Unit III.	Iran	325	2000	Natural draft concrete towers with louvres designed by EGI, built by others

Ref. No.	Description	Country	Turbine Power (MW)	Commis-sioning	Remarks
61.	Arak Power Station Unit IV.	Iran	325	2001	Natural draft concrete towers with louvres designed by EGI, built by others
62.	Montazer Ghaem Unit I.	Iran	105	1999	Natural draft concrete tower for 320 MW CCPP designed by EGI, built by others
63.	Montazer Ghaem Unit II.	Iran	105	2000	Natural draft concrete tower for 320 MW CCPP designed by EGI, built by others
64.	Montazer Ghaem Unit III.	Iran	105	2001	Natural draft concrete tower for 320 MW CCPP designed by EGI, built by others
65.	Al-Zara Power Station Unit I.	Syria	220	2001	Natural draft steel tower for 220 MW
66.	Al-Zara Power Station Unit II.	Syria	220	2001	Natural draft steel tower for 220 MW
67.	Al-Zara Power Station Unit III.	Syria	220	2001	Natural draft steel tower for 220 MW
68.	Újpest 100 MW CCPP	Hungary	36	2001	Forced mechanical draft dry/ deluged seasonal and auxiliary cooling tower
69.	Gebze 770 MW CCPP Unit I.	Turkey	270	2002	Natural draft concrete tower for 770 MW CCPP with louvres
70.	Gebze 770 MW CCPP Unit II.	Turkey	270	2002	Natural draft concrete tower for 770 MW CCPP with louvres
71.	Adapazari 770 MW CCPP Unit I.	Turkey	270	2002	Natural draft concrete tower for 770 MW CCPP with louvres
72.	CAN 160 MW CFB based Thermal Power Station, Unit 1.	Turkey	160	2004	Natural draft single concrete tower shell for 2 units, with louvres and deluged peak coolers
73.	CAN 160 MW CFB based Thermal Power Station, Unit 2.	Turkey	160	2004	Natural draft single concrete tower shell for 2 units, with louvres and deluged peak coolers
74.	Vértes CHP Seasonal Cooler	Hungary	18	2004	Forced mechanical draft dry seasonal cooling tower
75.	Sochi 72 MW CHP Unit 1.	Russia	24	2004	Induced draft steel tower with supplementary spraying
76.	Yangcheng Phase II. Unit 7 600 MW Plant Extension	China	600	2007	Natural draft concrete cooling tower with louvers and surface condenser
77.	Yangcheng Phase II. Unit 8 600 MW Plant Extension	China	600	2007	Natural draft concrete cooling tower with louvers and surface condenser
78.	MMDC Moscow City 130 MW Town heating CCPP	Russia	46	2008	Forced draft steel tower with TA-67 fins, winterization louvers and surface condensers
79.	Al Nasserieh 510 MW CCPP	Syria	160	2008	Natural draft steel tower for 160 MW with DC Jet Condenser
80.	Zayzoun 510 MW CCPP	Syria	160	2008	Natural draft steel tower for 160 MW with DC Jet Condenser

Ref. No.	Description	Country	Turbine Power (MW)	Commis-sioning	Remarks
81.	Modugno 800 MW CCPP	Italy	300	2009	Low noise induced draft steel tower with DC Jet Condenser
82.	Deir Ali 750 MW CCPP	Syria	250	2009	Natural draft steel tower with DC Jet Condenser
83.	Tereshkovo 340 MW CHP PS	Russia	70	2011	Induced draft steel tower with TA-67 fins, winterization louvers and surface condenser
84.	Kojuhovo 340 MW CHP PS	Russia	70	2014	Induced draft steel tower with TA-67 fins, winterization louvers and surface condenser; Under construction
85.	Szakoly 20 MW Biomass Power Plant	Hungary	20	2009	Low noise induced draft steel tower with DC Jet Condenser
86.	Strogino 130 MW CCPP Unit 1.	Russia	42	2009	Induced draft steel tower with winterization louvers and surface condenser
87.	Strogino 130 MW CCPP Unit 2.	Russia	42	2009	Induced draft steel tower with winterization louvers and surface condenser
88.	Bao Ji 660 MW SC PP Unit 5.	China	660	2010	Natural draft concrete cooling tower with louvers; DC jet condensers also serving the boiler feed pump turbines; FGD in tower.
89.	Bao Ji 660 MW SC PP Unit 6.	China	660	2011	Natural draft concrete cooling tower with louvers; DC jet condensers also serving the boiler feed pump turbines; FGD in tower.
90.	Pervomaysk 180 MW PP Unit 1.	Russia	66	2010	Supply of Heller dry cooling system of special outfit to the extension of Pervomaysk District Heating Plant No. 14 of St. Petersburg - 3 winter, 1 summer fan - cell rows for 2 units
91.	Pervomaysk 180 MW PP Unit 2.	Russia	66	2010	Supply of Heller dry cooling system of special outfit to the extension of Pervomaysk District Heating Plant No. 14 of St. Petersburg - 3 winter, 1 summer fan - cell rows for 2 units
92.	Sochi 72 MW CHP Unit 3.	Russia	24	2010	Induced draft steel tower with supplementary system
93.	Shanyin 300 MW PP, Unit 1	China	300	2012	Single natural draft concrete cooling tower for 2 units with louvers; DC jet condensers also serving the boiler feed pump turbines; FGD in tower.
94.	Shanyin 300 MW PP, Unit 2.	China	300	2012	Single natural draft concrete cooling tower for 2 units with louvers; DC jet condensers also serving the boiler feed pump turbines; FGD in tower.
95.	Shuidonggou 660 MW SC PP Unit 1.	China	660	2011	Natural draft concrete cooling tower with supplementary spraying, louvers and surface condenser
96.	Shuidonggou 660 MW SC PP Unit 2.	China	660	2011	Natural draft concrete cooling tower with supplementary spraying, louvers and surface condenser
97.	Novy Urengoy 120 MW CCPP	Russia	40	2013	Induced draft steel tower with winterization louvers and surface condenser; Under construction
98.	Adler 180 MW CCPP Unit 1.	Russia	60	2012	Induced draft steel tower with supplementary spraying
99.	Adler 180 MW CCPP Unit 2.	Russia	60	2012	Induced draft steel tower with supplementary spraying
100.	Deir Ali II 750 MW CCPP	Syria	250	2013	Natural draft steel tower with DC Jet Condenser; Under construction

LIST OF REFERENCES **INDIRECT DRY AND DRY/WET COOLING SYSTEMS**

Ref. No.	Description	Country	Turbine Power (MW)	Commis-sioning	Remarks
101.	Tishreen 200 MW PP, Unit 3	Syria	200	2015	Natural draft steel tower with DC Jet Condenser; Under construction
102.	Tishreen 200 MW PP, Unit 4	Syria	200	2015	Natural draft steel tower with DC Jet Condenser; Under construction
103.	Tufanbeyli 150 MW PP Unit 1.	Turkey	150	2015	Single natural draft concrete cooling tower for 3 units, DC jet condensers, peak coolers, CFB gases exhausted via cooling tower; Under construction
104.	Tufanbeyli 150 MW PP Unit 2.	Turkey	150	2015	Single natural draft concrete cooling tower for 3 units, DC jet condensers, peak coolers, CFB gases exhausted via cooling tower; Under construction
105.	Tufanbeyli 150 MW PP Unit 3.	Turkey	150	2015	Single natural draft concrete cooling tower for 3 units, DC jet condensers, peak coolers, CFB gases exhausted via cooling tower; Under construction
106.	Jinchang 330 MW PP Unit 1.	China	330	2014	Natural draft concrete cooling tower with louvers, supplementary spraying and surface condenser; Under construction
107.	Jinchang 330 MW PP Unit 2.	China	330	2014	Natural draft concrete cooling tower with louvers, supplementary spraying and surface condenser; Under construction
108	Shengle 350MW PP Unit 1.	China	350	2015	Natural draft concrete cooling tower with louvers and surface condenser; FGD-in-tower Under construction
109	Shengle 350MW PP Unit 2.	China	350	2015	Natural draft concrete cooling tower with louvers and surface condenser; FGD-in-tower Under construction
110	Ordos 330 MW PP Unit 1.	China	330	2015	Natural draft concrete cooling tower with louvers and surface condenser; FGD-in-tower Under construction
111.	Ordos 330 MW PP Unit 2.	China	330	2015	Natural draft concrete cooling tower with louvers and surface condenser; FGD-in-tower Under construction
112.	Ordos 330 MW PP Unit 3.	China	330	2015	Natural draft concrete cooling tower with louvers and surface condenser; FGD-in-tower Under construction
113.	Ordos 330 MW PP Unit 4.	China	330	2015	Natural draft concrete cooling tower with louvers and surface condenser; FGD-in-tower Under construction

Ref. No.	Description	Country	Steam Flow and Pressure (t/h and bara)	Ambient air temp. (°C)	Commis-sioning	Remarks
1.	HEBEL, Zehdenick	Germany	12 t/h 1 bara	28°C	1995	extruded aluminum fins with carbon steel core tube
2.	Nowra Plant	Australia	15 t/h 0.15 bara	26°C	2002	Single row, all aluminum heat exchanger (SKYVE)
3.	Dorog Waste Incineration Plant	Hungary	12 t/h 1 bara	20°C	2002	extruded aluminum fins with carbon steel core tube
4.	Szentendre	Hungary	8 t/h 0.1 bara	25°C	2005	single row, all aluminum heat exchanger (SKYVE)
5.	Dorog Waste Incineration Plant	Hungary	8.6 t/h 1.2 bara	30°C	2006	TA-67 Forgo-type aluminum fins
6.	Levice	Slovakia	69.5 t/h 0.082 bar	12°C	2006	OPTIMAIR System Single row, all aluminum condenser tubing (Skyve)

LIST OF REFERENCES

WET COOLING TOWERS

Ref. No.	Description	Country	Water flow rate m^3/h	Inlet/outlet water temp. °C/°C	Wet bulb temp./ relative humidity °C/%	Year of commissioning	App-roach °C	Remark
1	Cold Store, Győr	Hungary	780	32/27	22/60	1986	5	
2	Cold Store, Székesfehérvár	Hungary	700	32/27	23/30	1986	4	
3	Steel Work, Dunaújváros	Hungary	2 500	42/27	19/50	1986	8	Natural draft
4	Gas Storage, Pusztaederics	Hungary	600	37/27	21/40	1987	6	
5	Canning Factory, Nagyatád	Hungary	850	40/27	18/50	1989	9	Natural draft
6	Cold Store, Békéscsaba	Hungary	1 170	30,6/25,6	20/40	1990	5,6	
7	Cold Store, Dunakeszi	Hungary	330	32/26	20/40	1990	6	
8	Cold Store, Székesfehérvár	Hungary	700	32/27	23/30	1991	4	
9	Gas Storage, Pusztaederics	Hungary	600	32/27	21/40	1991	6	
10	Oxigen Works, Budapest	Hungary	700	37/27	22/40	1991	5	
11	Cold Store, Dunakeszi	Hungary	330	32/26	20/40	1992	6	
12	Mátra Power Plant, Visonta	Hungary	6 x 600	38,5/28,5	20/40	1993	8,5	
13	Mátra Power Plant, Visonta	Hungary	600	38,5/28,5	20/40	1993	8,5	
14	Mátra Power Plant, Visonta	Hungary	12 x 600	38,5/28,5	20/40	1994	8,5	
15	Coal Mine, Mecsek	Hungary	200	40/30	22/40	1994	8	
16	Mátra Power Plant, Visonta	Hungary	6 x 600	38,5/28,5	20/40	1995	8,5	
17	MOL Rt Gas Field, Algyő	Hungary	500	32/25	22/40	1995	3	
18	Mátra Power Plant, Visonta	Hungary	9 x 600	38,5/28,5	20/40	1996	8,5	
19	Mátra Power Plant, Visonta	Hungary	9 x 600	38,5/28,5	20/40	1997	8,5	
20	Pars Oil, Tehran	Iran	550	45/28	24/28	1998	4	Earthquake exposed area
21	Mátra Power Plant, Visonta	Hungary	9 x 600	38,5/28,5	20/40	1998	8,5	
22	MOL Rt Gas Field, Algyő	Hungary	280	32/27	22/40	2000	5	
23	Borsod Chemical Works	Hungary	5 200	36/26	22/40	2001	4	
24	Kispest Power Plant Seasonal Cooler	Hungary	1695	75/38	21/37	2003	17	
25	Kispest Power Plant Auxiliary Cooler	Hungary	846	36,5/30,4	21/37	2003	9,4	
26	Tiszaújváros Chemical Works	Hungary	15400	38,4/25,5	21.5/65	2003	4,5	
27	Borsod Chemical Works, VCM Plant	Hungary	2000	36/26	23/35	2004	3	
28	Borsod Chemical Works, MDI Plant	Hungary	6000	36/26	23/40	2004	3	
29.	Wet Cooling Tower for Linde Gas, Hyco II.	Hungary	3400	38/26	22/40	2005	4	
30	Borsod Chemical Works, Chlorine Plant	Hungary	4000	36/26	23/40	2005	3	
31	Hungrana, Szabadegyháza	Hungary	1332	34/26	23/40	2005	3	
32	Pét, Nitrogen Chemical Works	Hungary	5 x 3000	36/26	21.6/30	2006	4.6	

Ref. No.	Description	Country	Water flow rate m^3/h	Inlet/outlet water temp. °C/°C	Wet bulb temp./ relative humidity °C/%	Year of commissioning	App-roach °C	Remark
33	Matra PS - Performance enhancement of unit 4 and 5 for a four cell WTC	Hungary	18000	47.3/31.3	20/40	2006/2007	11.3	
34	Borsod Chemical Works, Concrete Structure Wet Cooling Tower for the MDI Plant, extension	Hungary	3000	36/26	23/40	2007	3	
35.	Borsod Chemical Works, Cooling Tower for Hydrochloric Acid Plant	Hungary	6000	37/27	23/40	2008	4	
36	Wet cooling tower for Hungrana Bioetanol Unit	Hungary	400	38/27	23/40	2010	4	
37.	Borsod Chemical Works, Cooling Tower for Nitric Acid Plant	Hungary	6000	37/27	23/40	2012	4	
38	Wet cooling tower for Linde Gas Hyco III.	Hungary	2200	38/28	22/38	2012	6	
39	Wet cooling tower for Auxiliary Cooling of Tishreen 200MW PP Unit 3	Syria	2000	44/38	29.3/46	2013	8.7	
40	Wet cooling tower for Auxiliary Cooling of Tishreen 200MW PP Unit 4	Syria	2000	44/38	29.3/46	2013	8.7	

HYBRID COOLING TOWERS

Ref. No.	Description	Country	Water flow rate m^3/h	Inlet/outlet water temp. °C/°C	Wet bulb temp./ relative humidity °C/%	Year of commissioning	App-roach °C	Remark
1	Dalmine CCPP, Dry Section of Hybrid Cooling Tower	Italy	2094	29.1/26.5	0.9/0.2	2006	25.6	

CONVENTIONAL HEAT PRODUCTION
BOILER AND HEATING PLANTS

Ref. No.	Description	Country	Year	Remarks
1.	Boiler plant, Óbuda	Hungary	1970	2x6 t/h, 2,50 Gcal/h, 150/70 °C 1x100 Gcal/h, 150/70 °C n. gas
2.	Boiler plant, Benatky	Czechoslovakia	1970	3x10 t/h 10 bar oil
3.	Boiler plant, Blankenburg	Germany	1971	3x10 t/h 12 bar oil
4.	Boiler plant, Zugló	Hungary	1971	2x6 t/h 3x50 Gcal/h, 150/70 °C n. gas
5.	Boiler plant, Újpalota	Hungary	1971	2x6 t/h 3x50 Gcal/h, 150/70 °C n. gas
6.	Extension of boiler plant, Debrecen	Hungary	1974	3x50 Gcal/h 150/70 °C oil or n. gas
7.	Boiler plant, Branderburg	Germany	1975	3x12 t/h, 12 bar oil
8.	District Heating plant, Észak-Buda	Hungary	1977 1979 1977	2,6 t/h 1x50 Gcal/h, 150/70 °C n. gas 2x50 Gcal/h, 150/70 °C 2x 10.000 m^3 oil storage tank
9.	Boiler plant, Pesterzsébet	Hungary	1977	2x50 Gcal/h, 150/70 °C oil or n. gas
10.	Boiler plant, Pesterzsébet	Hungary	1977	4x 6 t/h, 1x50 Gcal/h, 150/70 °C n. gas
11.	Boiler reconstruction, cogeneration plant, Halle	Germany	1981	3x125 t/h 102 bar/525 °C n. gas
12.	Extension of boiler plant, Szekszárd	Hungary	1982	2x35 Gcal/h 150/70 °C oil
13.	Extension of boiler plant, Alkaloida Works, Tiszavasvári	Hungary	1982	50 t/h 38 bar/420 °C oil
14.	Heat transfer oil boiler plant, Forestry, Szombathely	Hungary	1982	1.6 Gcal/h 285 °C oil
15.	Boiler reconstruction, cogeneration plant, Premnitz	Germany	1983	2x125 t/h 102 bar/525 °C oil or inert gas
16.	Boiler reconstruction, Dresden	Germany	1983	4x10 t/h 12 bar/525 °C oil or n.gas
17.	Boiler reconstruction, Elsterwerda	Germany	1983	3x10 t/h 12 bar n. gas
18.	Boiler plant, Mosonmagyaróvár	Hungary	1983	3x4 t/h 12 bar coal
19.	Extension of district heating plant, Debrecen	Hungary	1983	2x50 t/h 38 bar/420 °C 1x100 Gcal/h 150/70 °C oil or n.gas
20.	Boiler reconstruction, cogeneration plant, Halle	Germany	1984	2x100 Gcal/h oil or inert gas or n.gas
21.	Extension of boiler plant, Kőbánya Brewery	Hungary	1986	50 t/h 38 bar/420 °C n. gas

Ref. No.	Description	Country	Year	Remarks
22.	Extension boiler plant, Hodsusa Hamre	Czechoslovakia	1986	12 t/h 8 bar n. gas
23.	Extension boiler plant, Banska Stiavnica	Czechoslovakia	1987	7 t/h 8 bar n. gas
24.	Boiler plant, Pesterzsébet Paper Works	Hungary	1988	12 t/h n.gas
25.	District Heating Plant Csepel	Hungary	1988	10 t/h 16 bar/240 °C sunflower seed shell
26.	Boiler plant, AGROFERM	Hungary	1989	2x2.8 t/h oil
27.	Boiler plant, Ball Bearing Works, Debrecen	Hungary	1989	3x12 t/h n.gas
28.	Boiler plant, Ball Bearing Works, Diósd	Hungary	1989	3x12 t/h n.gas
29.	Boiler plant, HAGE, Kaba	Hungary	1990	4x20 t/h 2x23 t/h oil or n. gas
30.	Boiler plant, Szentendre Paper Works	Hungary	1990	16 t/h oil
31.	Extension of boiler plant, Behovice	Czechoslovakia	1990	25 t/h 37 bar/450 °C n. gas
32.	Boiler plant, Znojmo Canning Works	Czechoslovakia	1990	2x20 t/h 1x16 t/h 16 bar/230 °C n. gas oil or n. gas
33.	Boiler plant, Dunaújváros Steel Works	Hungary	1990	100 t/h 42 bar/450 °C oil n. gas Furnace gas or chamber gas
34.	Boiler plant, Dunaújváros Steel Works	Hungary	1991	100 t/h 42 bar/450 °C
35.	Boiler plant reconstruction, Dunaferr Steel Works	Hungary	1994	75 t/h 46 bar/450 °C oil n. gas furnace gas or chamber gas
36.	Boiler plant reconstruction, Dunaferr Steel Works	Hungary	1995	75 t/h 46 bar/450 °C oil n. gas furnace gas or chamber gas
37.	Boiler plant, Planetárium Budapest	Hungary	2003	n.gas
38.	Boiler plant reconstruction Debrecen, Power Plant	Hungary	2004	circulation pump installation
39.	Boiler plant reconstruction Nyíregyháza, Power Plant	Hungary	2005	N°9, N°10 n.gas fired boilers reconstruction

Ref. No.	Description	Country	Year	Remarks
1.	Extension of cogeneration plant, Mosonmagyaróvár Alumina Works	Hungary	1952	7 x 212 t/h 12 bar/310 °C coal
2.	Power station Marosújvár Soda Works	Rumania	1954	3 x 50 t/h, 8,2 MW 40 bar/430 °C n.gas
3.	Power stations (several units)	China	1954-56	10t/h, 0,4 to 1,5 MW (each) 22 bar/390 °C coal
4.	Cogeneration plant, Budapest, Textile Works	Hungary	1955	18+14 t/h, 1,6 MW 29 bar/390 °C coal
5.	Cogeneration plant, Nyergesújfalu, Chemical Works	Hungary	1957	20 t/h, 0,7 MW 17 bar/350 °C coal
6.	Cogeneration plant, Nagykanizsa Brewery	Hungary	1957	20t/h, 0,2 MW 23 bar/390 °C coal
7.	Cogeneration plant, Hungarian Chemical Works	Hungary	1958	2x14 t/h, 2,8 MW 41 bar/450 °C coal
8.	Extension of Wang Ting Power Station	China	1958	120 t/h, 25 MW 37 bar/450 °C coal
9.	Cogeneration plant, Hida Coal-cake Works	Hungary	1960	2x14 t/h, 2,1 MW 37 bar/450 °C coal
10.	Cogeneration plant, Csepel Paper Works	Hungary	1960	2x50 t/h, 12,6 MW 116 bar/500 °C coal
11.	Cogeneration plant, United Pharmaceutical Works	Hungary	1960	2x14 t/h, 2 MW 41 bar/450 °C coal
12.	Cogeneration plant, Budapest, Distillation Works	Hungary	1961	52 t/h, 4,5 MW 41 bar/450 °C coal
13.	Power Station Csepel Works	Hungary	1961	48 t/h, 4,6 MW 41 bar/450 °C coal
14.	Cogeneration plant extension, Kőbánya Brewery	Hungary	1961	2x24 t/h, 4,5 MW 41 bar/450 °C coal
15.	Cogeneration plant, Mohács Wood-fibred Works	Hungary	1961	2x22 t/h, 1,8 MW 40 bar/450° C coal
16.	Cogeneration plant, Kispest	Hungary	1961	2x50 t/h, 12,6 MW 116 bar/500 °C coal
17.	Cogeneration plant, Sopron	Hungary	1962	2x16 t/h, 4,4 MW 31 bar/390 °C coal
18.	Cogeneration plant, Hungarian Wool Works, Budapest	Hungary	1962	21 t/h, 0,8 MW 23 bar/380 °C coal
19.	Cogeneration plant, Nitrochemical Works, Fűzfő	Hungary	1962	2x25 t/h, 4,5 MW 41 bar/450 °C coal
20.	Power Station, Tanh-Hoa	Vietnam	1962	2x10 t/h, 2x1,5 MW 22 bar/390 °C coal
21.	Power Station, Tura	India	1962	2x18 t/h, 2x1,5 MW 37 bar/400 °C coal
22.	Power Station, Lasi	Rumania	1963	3x120 t/h, 2x28 MW 101 bar/540 °C oil or n. gas
23.	Cogeneration plant, Szolnok Paper Factory	Hungary	1964	24 t/h, 2,5 MW 41 bar/450 °C coal
24.	Cogeneration plant, Kőbánya	Hungary	1964	4x50 t/h, 2x12,7 MW, 1x2,1 MW 116 bar/500 °C oil or n. gas

Ref. No.	Description	Country	Year	Remarks
25.	Cogeneration plant, LANG Engineering Works	Hungary	1964	2x33 t/h, 10,6 MW, 41 bar/450 °C coal
26.	Power Station, Site not disclosed	Vietnam	1964	2x25 t/h, 2x4,5 MW, 41 bar/450 °C coal
27.	Extension of cogeneration plant, Kőbánya	Hungary	1965	2x50 Gcal/h 150/80 °C oil
28.	Cogeneration plant, Szerencs Sugar Works	Hungary	1967	2x32 t/h, 8,4 MW, 46 bar/420 °C oil
29.	Cogeneration plant, Szolnok Sugar Works	Hungary	1968	2x40 t/h, 10,5 MW, 45 bar/420 °C oil
30.	Cogeneration plant, Magyaróvár Alumina Works	Hungary	1968	2x35 t/h, 10,7 MW, 70 bar/500 °C coal
31.	Extension of cogeneration plant, Kispest	Hungary	1970	2x50 t/h, 12,6 MW, 116 bar/500 °C coal
32.	Extension of power station, Almásfüzitő Aluma Works	Hungary	1971	35 t/h 70 bar/500 °C coal
33.	ETIBANK power Station	Turkey	1971	8x13,2 MW gas turbine n.gas
34.	Extension of cogeneration plant, Nyíregyháza	Hungary	1973	2x60 t/h, 8,5 MW 43 bar/430 °C oil or n. gas
35.	Extension of power station, Devnia	Bulgaria	1974	5x220 t/h, 2x21,3 MW, 101 bar/540 °C n. gas
36.	Extension of cogeneration plant, Sopron	Hungary	1976	2x35 t/h, 10,5 MW 37 bar/450 °C oil
37.	Extension of cogeneration plant, Győr	Hungary	1976	2x50 Gcal/h, 150/70 °C n. gas
38.	Power station, Sirte	Libya	1976	3x10 MW, gas turbine n. gas
39.	NESTE power station	Finland	1977	1x30 MW gas turbine n. gas
40.	Power station, Obrovac Aluminia Works	Yugoslavia	1987	3x80 t/h, 17,5 MW 100 bar/535 °C n. gas
41.	Power station, Paros island	Greece	1978	3x2,6 MW oil diesel
42.	Power station, Kalymnos island	Greece	1979	4x2,6 MW and 2x5,2 MW diesel oil
43.	Pre-heater plant, Schönwalde	Germany	1984	200+105 t/h water flue gas
44.	Power station boilers, Neyveli	India	1986	3x670 t/h 163 bar/540 °C lignite
45.	Condensate water polishing system Datong Power Plant	China	1988	2x550 t/h
46.	Extension of power station, Dorog	Hungary	1989	50 t/h 40 bar/450 °C coal
47.	Reconstruction of IC system, Sopron Power Station	Hungary	1989	2x35 t/h 40 bar/425 °C oil or n.gas
48.	Boiler plant, Szentendre Paper Works	Hungary	1990	16 t/h oil

Ref. No.	Description	Country	Year	Remarks	
49.	Reconstruction of I&C system, Győr Power Station	Hungary	1990	2x35 t/h 40 bar/425 °C	oil or n. gas
50.	I&C system in power plant, Petőháza Sugar Works	Hungary	1990	60 t/h 40 bar/450 °C	oil or n. gas
51.	Boiler reconstruction, Tatabánya Power Station	Hungary	1991	2x55 t/h 31 bar/415 °C	oil
52.	Extension of Győr power plant	Hungary	1991	75 t/h 40 bar/425 °C	oil or n. gas
53.	I&C system, Győr power plant	Hungary	1991	75 t/h 40 bar/425 °C	oil or n. gas
54.	Combined cycle plant extension, boiler plant Debrecen, (PFS, FS, DSI)	Hungary	1993	80 MWe	
55.	Fluidized bed combustion boiler extension, Pécs power station	Hungary	1993	85-100 MWe	coal
56.	Circulating fluidized bed combustion boiler and steam turbine extension, Inota power station, (PFS, FS, DSI)	Hungary	1993	150 MWe	coal
57.	Circulating fluidized bed combustion boiler and steam turbine extension, Borsod power station (PFS)	Hungary	1993	150 MWe	coal
58.	Combined cycle plant extension, cogeneration plant Kispest (CS)	Hungary	1993	60-140 MWe	n. gas
59.	Retrofit of 215 MW units of Dunamenti power station (CS)	Hungary	1995	215 MWe	n. gas or oil
60.	Ash conditioning system, Dunamenti Power Station	Hungary	1995	ammonia dosage and dust processing	
61.	Hydro Power Plant, Ghamashiab	Iran	1997	2x1,5 MWe	
62.	Back pressure Power Station, Dunaferr	Hungary	1997	5,6 MWe 35 bar/400 °C	
63.	Auxiliaries for gas turbine plant, Sajószöged	Hungary	1998	oil system, water system I&C, civil works, etc.	
64.	Auxiliaries for gas turbine plant, Litér	Hungary	1998	oil system, water system I&C, civil works, etc.	
65.	Desulfurization plant, Mátra Power Station	Hungary	2000	joint venture with Deutsche Babcock Anlagen for 636 MWe capacity	
66.	Auxiliaries for secondary reserve gas turbine plant, Lőrinci	Hungary	2000	170 MWe	
67.	Installation of steam turbine and generator unit, Onyx Kft. waste incineration	Hungary	2002	857 kW_e, 10 t/h; 16 bar/260°C	
68.	Boiler plant reconstruction Nyíregyháza, Power Plant	Hungary	2005	oil system, water system, steam system, etc.	
69.	North Buda gas turbine cogeneration Heating plant	Hungary	2007 2007 2008 2008	9,88 MWe 9,88 MWe 30.22 MWe 49.98 MWe	
70.	Ajka OCGT plant (BOP)	Hungary	2010	2x58 MWe gas turbines	

Ref. No.	Description	Country	Year	Remarks	
1.	Cogeneration plant, Tisza Chemical Works	Hungary	1963	42 t/h, 4,5 MW 41 bar/450 °C	waste heat boiler
2.	Boiler plant, Orosháza Glass Factory	Hungary	1972	5x3,6 t/h 16 bar/320 °C	waste heat boiler
3.	Boiler plant, Orosháza Glass Factory	Hungary	1974	10 t/h 16 bar/320 °C	waste heat boiler
4.	Boiler plant, Salgótarján Glass Factory	Hungary	1974	1,5 Gcal/h 130/110 °C	waste heat boiler
5.	Boiler plant, Tokod Glass Factory	Hungary	1977	3 t/h, 12 bar	waste heat boiler
6.	Boiler plant, Salgótarján Glass Factory	Hungary	1979	4,5 t/h 7 bar	waste heat boiler
7.	Boiler plant, Százhalombatta Oil Refinery	Hungary	1979	5,7 t/h 12 bar	waste heat boiler
8.	Boiler plant, Dunaújváros Metallurgical Works	Hungary	1979	26 t/h 18 bar/320 °C	waste heat boiler
9.	Combinated cycle power plant, Aliaga	Turkey	1980	4x60 t/h, 2x30 MW 37 bar/450 °C	waste heat boiler
10.	Boiler plant, Miskolc Metallurgical Work	Hungary	1980	12 t/h 11 bar	waste heat boiler
11.	Boiler plant, Martfű Shoe Factory	Hungary	1980	6,5 t/h 14 bar	waste heat boiler
12.	Boiler plant, Pulmonological Institute, Budakeszi	Hungary	1981	1,5 t/h 6 bar	waste heat boiler
13.	Waste heat recovery boiler plant, CEREOL Veg.Oil Factory, Martfű	Hungary	1981	3x15 t/h 30 bar/380 °C	sunflower sees shell
14.	Waste heat recovery boiler plant, Kecskemét	Hungary	1981	6 t/h 12 bar	sawdust& cuttings
15.	Waste heat recovery boiler plant, CEREOL Veg.Oil Factory, Győr	Hungary	1981	10 t/h 16 bar 240 °C	sunflower seed shell
16.	Boiler plant, TUNGSRAM, Nagykanizsa	Hungary	1982	4,1 t/h 4 bar	waste heat boiler
17.	Boiler plant Salgótarján Glass Factory	Hungary	1982	1 Gcal/h 130/110 °C	waste heat boiler
18.	Waste heat recovery boiler plant, Budavidék Forestry, Budakeszi	Hungary	1982	2x2 t/h 12 bar	chips of woods

Ref. No.	Description	Country	Year	Remarks	
19.	Waste heat recovery boiler plant, Nagykunság Forestry, Nagykőrös	Hungary	1982	2x4 t/h 12 bar	wood-waste
20.	Boiler plant, Ajka Glass Works	Hungary	1983	2.4 t/h 2 bar	waste heat boiler
21.	Waste heat recovery boiler plant, Délalföld Forestry, Szeged	Hungary	1983	10 t/h 12 bar	wood-waste
22.	Waste heat recovery boiler plant, Pilis State Forestry, Visegrád	Hungary	1983	2x4 t/h 12 bar	wood-waste
23.	Boiler plant, Nemsova Glass Works	Czechoslovakia	1984	3x1.5 t/h 4 bar	waste heat boiler
24.	Boiler plant, Dunaújváros Steel Works	Hungary	1984	4x15.5 t/h 18 bar/320 °C	waste heat boiler
25.	Boiler plant, Light Metal Works, Székesfehérvár	Hungary	1984	12 t/h 8 bar/220 °C	waste heat boiler
26.	Waste heat recovery boiler plant, CEREOL Veg.Oil Factory Nyírbátor	Hungary	1984	10 t/h 16 bar/240 °C	sunflower seed shell
27.	Waste heat recovery boiler plant, CEREOL Veg.Oil Factory Győr	Hungary	1984	10 t/h 16 bar/240 °C	sunflower seed shell
28.	Waste heat recovery boiler plant, CEREOL Veg.Oil Factory Budapest	Hungary	1984	10 t/h 16 bar/240 °C	sunflower seed shell
29.	Waste heat recovery boiler plant, Textile Plant, Nagylak	Hungary	1984	10 t/h 12 bar	wood-waste & hemp tow
30.	Boiler plant, Glass Works, Dubravka	Czechoslovakia	1985	1.5 t/h 5 bar	waste heat boiler
31.	Boiler plant, Glass Works, Salgótarján	Hungary	1986	2.2 Gcal/h 130/110 °C	waste heat boiler
32.	Boiler plant, Moravian Glass Works, Kvetna	Czechoslovakia	1986	1 t/h 6 bar	waste heat boiler
33.	Waste heat recovery boiler plant, Furniture Works, Rousinov	Czechoslovakia	1986	2x6 t/h 12 bar	wood waste

Ref. No.	Description	Country	Year	Remarks	
34.	Waste heat recovery boiler plant, Timber Plant, Bystrice pod Hostinem	Czechoslovakia	1986	8 t/h 12 bar	sawmill waste
35.	Boiler plant, Petroleum Refinery, Tiszaújváros	Hungary	1987	4.5 t/h 12 bar	waste heat boiler
36.	Boiler plant, Metallurgical Works, Diósgyőr	Hungary	1987	25 t/h 36 bar 430 °C	waste heat boiler
37.	Waste heat recovery boiler plant, CEREOL Veg.Oil Factory. Rákospalota, Budapest	Hungary	1987	10 t/h 16 bar/240 °C	sunflower seed shell
38.	Waste heat recovery boiler plant, CEREOL Veg. oil Factory Kőbánya, Budapest	Hungary	1987	10 t/h 16 bar/240 °C	sunflower seed shell
39.	Boiler plant, Petroleum Refinery, Százhalombatta	Hungary	1988	5 t/h 16 bar/270 °C	waste heat boiler
40.	Boiler plant, Blass Factory, Lednicke Rovne	Czechoslovakia	1988	2x1.5 t/h 6 bar	waste heat boiler
41.	Boiler plant, Petroleum Refinery, Százhalombatta	Hungary	1988	16 t/h 16 bar/270 °C	waste heat boiler
42.	Waste heat recovery Boiler plant CEREOL Veg.Oil Factory, Martfű	Hungary	1988	15 t/h 30 bar/380 °C	sunflower seed shell
43.	Boiler plant, Chemical Factory, Breclav	Czechoslovakia	1989	6 t/h 25 bar	waste heat boiler
44.	Boiler plant, Slovakian Glass Factory Nemsova	Czechoslovakia	1989	2x1.5 t/h 3 bar	waste heat boiler
45.	Boiler plant, Glass Factory Poltar	Czechoslovakia	1989	0.9 Gcal/h 130/90 °C	waste heat boiler
46.	Boiler plant, Glass Factory, Jaroslaw	Poland	1989	2x1.5 t/h 4 bar	waste heat boiler
47.	Waste heat recovery boiler plant FALCO Timber Processing Plant, Körmend	Hungary	1989	2x4 MW 110/90 °C	mixed wood
48.	Waste heat recovery boiler plant, Furniture Works Trebic	Czechoslovakia	1989	4 t/h 10 bar	cuttings & sawdust
49.	Waste heat recovery boiler plant, CEREOL Veg. Oil Factory Nyírbátor	Hungary	1989	10 t/h 16 bar/240 °C	sunflower seed shell

Ref. No.	Description	Country	Year	Remarks	
50.	Boiler plant, Glass Works, Torgau	Germany	1990	13 t/h 16 bar/240 °C	waste heat boiler
51.	Boiler plant, Glass Factory, Jaroslaw	Poland	1990	2x1,5 t/h 4 bar	waste heat boiler
52.	Heat recovery unit for autoclaves, HEBEL Zehdenick	Germany	1995		
53.	Steam recovery, BorsodChem Kazincbarcika	Hungary	2005		waste heat boiler
54.	Waste heat recovery boiler plant, Villeroy & Boch Magyarország Zrt.	Hungary	2007	460 kW 110/90°C	waste heat boiler
55.	Waste heat recovery boiler plant, Villeroy & Boch Magyarország Zrt.	Hungary	2007	220 kW 110/100°C	waste heat boiler
56.	Heat recovery unit MOL, Szeged	Hungary	1999		waste heat recovery unit for gas turbine (Type Taurus 70 Solono)

Ref. No.	Description	Country	Year	Remarks
1.	Extension of aux. Emergency cooling water system and relocation of aux. feed-water pumps, Paks nuclear power station (BDE)	Hungary	1994	
2.	Vibration dampeners for feed-water pipelines, Paks nuclear power station (BDE)	Hungary	1994	
3.	Maintains Training Center Paks, nuclear power station (BDE)	Hungary	1994	
4.	„Easy Fix" structures for seismic safety, Paks nuclear power station (DE)	Hungary	1995	
5.	Pulsation dampers, Compressor Station Zsana	Hungary	1995	18 pcs. Vessels for 160 bar
6.	Education and Maintenance Center, Paks Nuclear Power Station	Hungary	1994-1996	civil, mechanical and electrical engineering
7.	Feed-water system, Paks Nuclear Power Station Units 1 and 2	Hungary	1995-1996	reconstruction of emergency feed water system
8.	Feed-water system, Paks Nuclear Power Station Units 3 and 4	Hungary	1997-1998	reconstruction of emergency feed water system
9.	Overpressure protection Paks, N.P.P.	Hungary	2002	primary circuit
10.	Blocks 1-4 planning pressure relief Injection system Preparation of implementation plans	Hungary	1999-2002	Paks N.P.P.
11.	Conversion of foam extinguishing system in turbine machine room Engineering implementation plan	Hungary	2001-2002	Paks N.P.P.
12.	Diesels in Blocks replacement of thermoregulators in the internal cooling water and lubricating oil circle Theoretical conversion, preparation of licensing document	Hungary	2005	Paks N.P.P.
13.	Installation of armatures in the fire-extinguishing water system (elimination of single malfunction)	Hungary	2006	Paks N.P.P.
14.	Block 1-4 high pressure pre-heaters, increase of 108% performance. Technical review study and safety analysis	Hungary	2006-2007	Paks N.P.P.
15.	10-40TN01, TN02, TL02 replacement if iodine filters implementation planning	Hungary	2006-2008	Paks N.P.P.

Ref. No.	Description	Country	Year	Remarks
1.	Condensate water polishing system Datong Power Plant	China	1988	2x550 m^3/h
2.	Reactor reconstruction for the Water Treatment Plant in the BORSOD PP.	Hungary	1993	Reconstruction 250 m^3/h Turn-key
3.	Water Treatment RO Plant, Oroszlány P.S.	Hungary	1994	Reconstruction 2 x 25 m^3/h Ultra filter Reverse osmosis Turn-key
4.	Water Treatment RO Plant, Debrecen P. P.	Hungary	1995	New 180 m^3/h (softener) 4 x 60 m^3/h demineraliser 2 x 170 m^3/h mixed-bed Turn-key
5.	Water Treatment Plant, LITÉR Gas turbine P.P MVM (Hungarian Electricity Board)	Hungary	1998	New 2 x 70 m^3/h RO + Mixed-bed Turn-key
6.	Water Treatment Plant, SAJÓSZÖGED Gas turbine P.P MVM (Hungarian Electricity Board)	Hungary	1998	New 2 x 70 m^3/h RO + Mixed-bed Turn-key
7.	Extension of Water Treatment Plant Plant at Richter Gedeon Co. Ltd (Pharmaceutics Factory), Budapest	Hungary	1998	Extension 60 m^3/h RO Desalination with biological cleaning
8.	Renovation of the pre-treatment of the settled Alkaline Water Treatment Plant at Balti P.P	Narva Estonia	1999	New 3 x 75 m^3/h sand filter 2 x 150 m^3/h active carbon filter 2 x 50-55 m^3/h RO Turn-key
9.	Water Treatment Plant, LŐRINCI Gas turbine P.P MVM (Hungarian Electricity Board)	Hungary	2000	New 2 x 80 m^3/h Ultra filter 2 x 36 m^3/h reverse osmosis 4 x 36 mixed bed Turn-key
10.	Water treatment plant at Narva P.P	Narva Estonia	2001	New 2 x 150 m^3/h softener 2 x 80 m^3/h demineralizer 2 x 120 m^3/h mixed bed Turn-key
11.	Extension of the Water Treatment Plant, of the settled alkaline water, Balti P.P	Narva Estonia	2002	New 140 m^3/h Clarifier, Gravel filter, Active carbon filter Reverse osmosis Turn-key
12.	TVK Water Treatment Plant Tisza WTP Ltd.	Hungary	2004	New 450 / 560 m^3/h ultra filter, reverse osmosis, mixed bed Turn-key

Ref. No.	Description	Country	Year	Remarks
13.	GYŐR District heating station	Hungary	2007	10 m^3/h Fe, Mn filter RO Na ion exchanger
14.	Szakoly P.P	Hungary	2008	1 x 17.6 m^3/h Methane deareator 2 x 8.8 m^3/h gravel filter 2 x 8.8 m^3/h Fe, Mn separator 2 x 5 m^3/h RO (single pass) Cooling make-up water 2 x 5.5 m^3/h RO (double pass) 2 x 5.5 m^3/h membrane CO_2 deareator 2x50 m^3/h condensate polishing plant 2x5.0 m^3/h EDI boiler make-up water 5 m^3/d drinking water treatment

FUEL HANDLING AND STORAGE PLANTS

Ref. No.	Description	Country	Year	Remarks
1.	Oil storage tanks, co-generation plant, Tatabánya	Hungary	1991	2x10.000 m^3
2.	Oil storage tank and auxiliaries, Oroszlány Power Station	Hungary	1992	1x10.000 m^3
3.	Tank farm, Dunamenti Power Station	Hungary	1994	3x30.000 m^3 oil storage tanks
4.	Fuel oil and gas supply system for Kelenföldi combined cycle plant (CS)	Hungary	1995	2x2.500 m^3 I. oil n. gas
5.	Tank farm, Tiszai power station	Hungary	1995	4x20.000 m^3 tanks with pump stations
6.	Fuel oil tanks at various power plants	Lithuania	1996	11 pcs oil tanks for 105 000 m^3 over all capacity
7.	Light oil storage plant Sajószöged	Hungary	1998	2x1000 m^3
8.	Light oil storage plant Litér	Hungary	1998	2x1000 m^3
9.	Light oil storage plant Lőrinci	Hungary	2000	2x2000 m^3
10.	Railway heavy oil reloading station Komoró (Hungarian State Railway)	Hungary	2001	daily 10 wagon capacity 55 m^3/h
11.	Gas oil handling plants for MÁV Zrt. (Hungarian Railway)	Hungary	2002-2008	44 pcs. plants on different places
12.	Quench oil unloading station for TVK Nyrt. (Chemical plant)	Hungary	2008	Daily 5 wagon unloading capacity

Ref. No.	Description	Country	Year	Remarks
1.	Pécs Power Plant 200 MWe Dense slurry plant	Hungary	1991	3 x 100 tons/h dry solids mixing units (slag/flash) Intermittent (Emulgat) mixing technology 2 km slurry transport distance Fly ash storage system extension
2.	Tatabánya Power Station 30 MWe Dense slurry plant	Hungary	1993	2 x 20 tons/h of dry solids mixing units (flash) CIRCMIX continuous mixing technology 0.5 km slurry transport distance
3.	Borsod Power Plant 200 MWe Dense slurry plant	Hungary	1996	2 x 102 tons/h dry solids mixing units (slag/flash) CIRCMIX continuous mixing technology 2 x 100 m^3/h piston type slurry pump 3 sets of dense slurry transport lines 3 km slurry transport distance
4.	Mátra Power Plant 836 MWe Dense slurry plant	Hungary	1998	4 x 160 tons/h of dry solids mixing units (slag/flash/ FGD gypsum) CIRCMIX continuous mixing technology 2 x 750 m^3/h slag slurry thickener 3 x 240 m^3/h transport lines 3 sets of centrifugal type slurry pumps in series per transport line 3.6 km slurry transport distance
5.	Jacksonville Northside 600 MWe Generating Station, CFB Unit 1 & 2 / Dense slurry mixers	USA, Florida	2001	2 x 62.5 tons/h of fly ash + 2 x 62.5 t/h of fly ash slurry + bed ash mixing units (high $CaSO_4$ fly ash / high CaO bed ash) CIRCUMIX continuous mixing technology/ high concentration slurry 2 sets of piston diaphragm type slurry distance transport pumps (supplied by GEHO under separate contract for the Client)
6.	Timisoara Sud Power Plant 270 MWe Dense slurry plant extension	Romania	2001/2007	18 t/h of solids mixing units (low CaO ash) CIRCUMIX continuous mixing technology Slag transfer system (by Client) 30 m^3/h transport lines (by Client) 2 sets of membrane diaphragm type piston pumps for distance slurry transport (supplied by GEHO / ABEL under separate contracts for the Client) 7 km slurry transport distance 10 m geodetic level difference
7.	Craiova-II Power Plant Dense Slurry Plant 300 MWe energetic units (+8 district heating boilers)	Romania	2010	3 x 60.2 t/h of dry solids (9.2 t/h bottom ash + 51 t/h fly ash) mixing units CIRCUMIX continuous mixing technology 3 x120 m^3/h transport slurry lines (by Client) 3 sets of FELUVA membrane diaphragm slurry pumps for distance transport (by Client) 9400 m transport distance 90 m geodetic level difference
8.	Isalnita Power Plant Dense Slurry Plant 630 MWe (2x510 t/h) boilers gas unit	Romania	2010	4x57 t/h of dry solids (7t/h bottom ash +50 t/h fly ash) mixing units (low CaO ash + FGD gypsum) CIRCUMIX continuous mixing technology 2 x 120 m^3/h transport slurry lines (by Client) – 2 ash fields; 4 sets of Warman centrifugal pump groups (3 pumps/group) for distance transport (by Client) 4600 m transport distance 45 m geodetic level difference

Ref. No.	Description	Country	Year	Remarks
9.	Rovinari Power Plant / Dense Slurry Plant 1320 MWe	Romania	2012	4 x 190 t/h at dry solids (30 t/h bottom ash + 127 t/h fly ash + 33 t/h dry gypsum) mixing units (low CaO ash + FGD gypsum) CIRCUMIX continuous mixing technology 4 x 270 m^3/h transport slurry lines (by Client) 4 sets of Warman centrifugal pump groups (3 pumps) for distance transport (by Client) 5600 m transport distance 32 m geodetic level difference
10.	Turceni Power Plant / Dense Slurry Plant 2310 MWe	Romania	2013	140 t/h at dry solids (30 t/h bottom ash + 110 t/h fly ash + 80 t/h dry gypsum) mixing units CIRCUMIX continuous mixing technology 6 sets of Warman centrifugal pump groups (24 pumps) for distance transport 5000 m transport distance 24 m geodetic level difference

Ref. No.	Description	Country	Year	Remarks	
1.	Heat-transfer oil boiler plant, Geisweld	Germany	1971	2x4 Gcal/h 32 bar	n. gas
2.	Heat-transfer oil boiler plant, Forestry Szombathely	Hungary	1975	2x0,6 Gcal/h, 285 °c	oil
3.	Heat-transfer oil boiler plant, Oil Refinery, Tiszaújváros	Hungary	1976	2x4 Gcal/h,	oil or n. gas
4.	Heat-transfer oil boiler plant, KEMIKAL Building Materials Factory, Barcs	Hungary	1978	2x0,7 MW	gas
5.	Heat-transfer oil boiler plant, Chemical Industries, Kedzierzyn	Poland	1980	2x1,6 Gcal/h 300 °C	n. gas
6.	Heat-transfer oil boiler plant, KEMIKAL Insulation Products, Újkigyós	Hungary	1983	1.6 Gcal/h 0.6 Gcal/h 285 °C	oil
7.	Heat-transfer oil boiler plant, Chemical Products, Zalaegerszeg	Hungary	1983	0.6 Gcal/h 300 °C	n. gas
8.	Heat transfer oil boiler plant, Petroleum Refinery, Nyírbogdány	Hungary	1984	0.6 Gcal/h 300 °C	oil
9.	Heat-transfer oil boiler plant, NITROIL Chemical Works, Várpalota	Hungary	1985	0.6 Gcal/h 300 °C	oil
10.	Heat-transfer oil boiler plant, Petroleum Refinery, Tiszaújváros	Hungary	1986	4 Gcal/h	n.gas or oil
11.	Heat-transfer oil boiler plant, Oil industries, Almásfűzitő	Hungary	1987	1.6 Gcal/h 285 °C	oil
12.	Heat-transfer oil boiler plant, MIRELITE Refrigerating Industries, Miskolc	Hungary	1988	1.6 Gcal/h 300 °C	n. gas
13.	Heat-transfer oil boiler plant, PEVDI Chemical & Plastic Factory Gyömrő	Hungary	1988	1 Gcal/h 320 °C	oil

Ref. No.	Description	Country	Year	Remarks
1.	Elektric Work (Sub-contractor)	Greece Paros Island	1978	3 x 2600 kWe
2.	Elektric Work (Sub-contractor)	Greece Kalymnos Island	1978	4 x 2600 kWe 2 x 5200 kWe
3.	Gas Engine Heating Plant Szentes	Hungary	2003	1170 kWe
4.	Gas Engine Heating Plant Region of Miskolc, Tatár Str.	Hungary	2003	5 x 3900 kWe
5.	Gas Engine Heating Plant Region of Miskolc, Diósgyőr	Hungary	2003	1 x 3900 kWe
6.	Gas Engine Heating Plant Region of Miskolc, Bulgárföld	Hungary	2004	1 x 1011 kWe
7.	Gas Engine CHP Plant Tatabánya Power Plant	Hungary	2004	3 x 6000 kWe
8.	Gas Engine CHP Plant Újpalota – Budapest	Hungary	2005	3 x 7700 kWe

Ref. No.	Description	Country	Year	Remarks
1.	Biofuel production, Visonta	Hungary	2007	40.000 t/year rape-seed oil production plant
2.	Biomass-fired power plant Szakoly	Hungary	2009	biomass-fired combined cycle power plant plant capacity: 20 MWe
3.	Zöldforrás Biogas Power Plant, Szeged	Hungary	2012	biogas-fired cogeneration power plant biogas production: 3.88 Mm^3/year

Ref. No.	Description	Country	Year	Remarks
1.	CIB Bank Zrt. Biogas Project – Zero Report	Hungary	2003	The project was suspended.
2.	OTP Bank Nyrt. Biopower Project	Hungary	2004	Due Diligence Report; Construction Monitoring
3	Dresdner Bank AG Gas Engine Plant	Hungary	2004	Zero Report; (EGI became EPC Contractor)
4.	OTP Bank Nyrt. Project	Hungary	2007	Due Diligence Report; Construction Monitoring; Completion Report; Commercial Operation Monitoring 2 years
5.	OTP Bank Nyrt. Wind Power Project	Hungary	2008	Due Diligence Report; Construction Monitoring (the project is suspended); Completion Report; Commercial Monitoring 2 years