

**FOSTER WHEELER MEXICANA, S.A. de C.V.**

Design, Manufacture and Rehabilitation of Direct Fired Heaters

No	Capacity MMBTU/h	Facility	Location	Scope	Year
1	16	Cunduacan, Tabasco	Cunduacan, Tabasco	Fabrication of vertical fluid fired heater	1978
2	16	Cunduacan, Tabasco	Cunduacan, Tabasco	Fabrication of vertical fluid fired heater	1978
3	16	Cunduacan, Tabasco	Cunduacan, Tabasco	Fabrication of vertical fluid fired heater	1978
4	29	Morelos Petrochemical Complex	Coatzacoalcos, Veracruz	Reheater furnace tower	1978
5	29	Cunduacan, Tabasco	Cunduacan, Tabasco	Reheater furnace tower	1978
6	29	Cunduacan, Tabasco	Cunduacan, Tabasco	Reheater furnace tower	1978
7	196	Independencia Petrochemical Complex	San Martin Texmelucan, Puebla	Fabrication of heat media furnace	1979
8	54	Cd. Pemex, Tabasco	Cd Pemex, Tabasco	Fabrication of vertical fluid fired heater	1979
9	738	Salina Cruz Refinery	Salina Cruz, Oax.	Atmospheric plant furnace	1981
10	286	Tula Refinery	Tula, Hidalgo	Vacuum Furnace	1981
11	48	Tula Refinery	Tula, Hidalgo	Fabrication of furnaces for fractioning section of the atmospheric plant	1981
12	61	Morelos Petrochemical Complex	Coatzacoalcos, Veracruz	Steam superheater BA-2301	1984
13	157	Morelos Petrochemical Complex	Coatzacoalcos, Veracruz	Fabrication of charge furnace reactors H-101	1984
14	349	Morelos Petrochemical Complex	Coatzacoalcos, Veracruz	Fabrication of furnace for air regeneration H-102	1984
15	51	Tula Refinery	Tula, Hidalgo	Fabrication of charge fired heater BA-401	1987
16	69	Tula Refinery	Tula, Hidalgo	Fabrication of reheater desbutanizer BA-402	1987
17	23	Tula Refinery	Tula, Hidalgo	Fabrication of reheater tower desisohexanizer BA-303	1987
18	51	Tula Refinery	Tula, Hidalgo	Fabrication of two (2) fractioning tower heaters BA-701 y 708	1987
19	51	Tula Refinery	Tula, Hidalgo	Fabrication of two (2) fractioning tower heaters BA-702 y 802	1987
20	14	Madero Refinery	Cd. Madero Tamaulipas	Fabrication of direct fired heater MA-H-2	1987
21	51	Salina Cruz Refinery	Salina Cruz, Oax.	Fabrication charge heater BA-401	1988
22	69	Salina Cruz Refinery	Salina Cruz, Oax.	Fabrication of debutanizer reheater tower BA-402	1988
23	23	Salina Cruz Refinery	Salina Cruz, Oax.	Fabrication of Reheater for desisohexaner tower BA-403	1988
24	51	Salina Cruz Refinery	Salina Cruz, Oax.	Fabrication of two (2) charge heaters for reactors BA-701 y BA-801	1988
25	51	Salina Cruz Refinery	Salina Cruz, Oax.	Fabrication of two (2) fractioning towe BA-702,802	1988
26	486	Salina Cruz Refinery	Salina Cruz, Oax.	Charge Heater to Reactors BA-501 A/D	1988
27	49	Salina Cruz Refinery	Salina Cruz, Oax.	Fabrication of reheater stabilizing tower BA-502	1988
28	102	Salina Cruz Refinery	Salina Cruz, Oax.	Fabrication of two (2) Viscosity Reducers Fired Heaters BAIIBA-2	1990
29		Cadereyta Refinery	Cadereyta, Nuevo Leon	Fabrication of Reacting Boxes DC-1/DC-2	1990
30	150	Salamanca Refinery	Salamanca, Gto.	Fabrication of three atmospheric fired heater AA/F/1	1991
31		Tula Refinery	Tula, Hidalgo	Air preheater Sytems for three (3) Fired Heaters	1994
32	66	Tula Refinery	Tula, Hidalgo	Fabrication of Hidrogen Fired Heater BA-3202	1995
33	40	Tula Refinery	Tula, Hidalgo	Fabrication Thermic fired Heater BA-3101	1995
34	66	Tula Refinery	Tula, Hidalgo	Fabrication of Hidrogen Fired Heater BA-3102	1995
35	40	Tula Refinery	Tula, Hidalgo	Fabrication of Thermic fired Heater BA-3201	1995
36	44	Tula Refinery	Tula, Hidalgo	Vacumm Fired Heater BA-3502	1995
37	40	Tula Refinery	Tula, Hidalgo	Design, Procurement and Manufacture of Thermic Fluid Fired Heater (Therminol)	1995
38	80	Cosoleacaque, Veracruz	Cosoleacaque, Veracruz	Design, Procurement and Manufacture of Thermic Fluid Heater (Hot Oil) BB-912 (Therminol 66) for Tereftalatos Mexicanos	1996
39	80	Altamira, Tamaulipas	Altamira, Tamaulipas	Design, Procurement and Fabrication of Thermic Fluid Heater (hot Oil) (Therminol 66) for Tereftalatos Mexicanos Private	1996
40	90	Cadereyta Refinery	Cadereyta, Nuevo Leon	Fabrication of two (2)delayed coke fired heater	1997
41	15	Cadereyta Refinery	Cadereyta, Nuevo Leon	Preheater System for fired heater	1998
42		Cosoleacaque, Veracruz	Cosoleacaque, Veracruz	Revamp for four (4) convection section of Atmospheric Fired Heater	1999
43	90	Cadereyta Refinery	Cadereyta, Nuevo Leon	finishing erection works of two (2) delayed coke fired heaters (Protexa companydoes not finish)	2000
44	102	Tula Refinery	Tula, Hidalgo	Finning pipes for repairing works of two (2) Viscosity Reducer Plant	2001
45	22	Topolobampo, Sinaloa	Topolobampo, Sinaloa	Design, Procurement, Manufacture and Erection at Site of three Hotoil Oil Heaters BA-1/2/3 with recirculation pump GA-1/2/4, forced draft fans EM-1/2/3, expansion vessel FA-1 and oil filters FC-1/2 (Therminol 66) Liquefied Gas Terminal facility of Pemex Gas y Petroquimica Basica	2002
46	90	Madero Refinery	Cd. Madero Tamaulipas	Spare parts fabrication for two (2) years operation of Delayed coke Fired Heaters H31-001 y H31-002	2002

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47	50	Dos Bocas, Tabasco	Dos Bocas, Tabasco	Design, Procurement, Manufacture and Erection of three (3) systems with Hot Oil Heaters CF-01 A/B/C, Storage Vessels TV-01 A/B/C, Expansion vessels TH-01 A/B/C, Pumps BA-07A/B/C/D/E/F, forced Draft Fans BS-01 A/B, BS-02 NB y BS-03 A/B, Interconexión pipes and Automatic controls (Dowtherm G) for ABENGOA	2005
48	9	Minatitlan Refinery	Minatitlan, Veracruz	Fabrication of charge Heater to Reactor H-12001 Hydrodesulphurization of straight-run naphtha	2005
49	8	Minatitlan Refinery	Minatitlan, Veracruz	Fabrication of reheater for Naphta separator towe H-12003 Hidrodesulfur Naphta Plant	2005
50	158	Minatitlan Refinery	Minatitlan, Veracruz	Design, Procurement and Fabrication of two (2) Delayed Coke Heaters H-31001/31002	2005
51	12	Jujo Huimanguillo, Tabasco	Dos Bocas, Tabasco	Design and Fabrication of reheater E-112 A for stabilizing tower	2006
52	22	Topolobampo, Sinaloa	Topolobampo, Sinaloa	Drying, commissioning of thre (3) complete Hot Oil Heaters for PEMEX Gas y Petroquimica Basica	2006
53	158	Minatitlan Refinery	Minatitlan, Veracruz	Erection at site about two (2) Coke Fired Heaters H-31001&31-002 Delayed Coke Plant	2007
54	300	Tula Refinery	Tula, Hidalgo	Design, Manufacture of Two (2) New Convection Zone for Atmospheric fired Heaters AB-1/2 (upgrading)	2008
55		Chevron CCR	Chevron CCR, Pascagoula Mississippi USA	Fabrication, Procurement, Shop Test for Delayed Coque Direct Fired Heater	2008
56	344	Cangrejera, Veracruz	Tula, Hidalgo	Design, Procurement, Manufacture, Final Acceptance Test, Transport, delivery at site, Provisional Acceptance Test, Erection at Site, Training for Operation & Maintenance Personnal for Fired Heater and Steam Water Package of the Platforming- CCR of PEMEX Cangrejera Petrochemical Complex	2009
57	250	Cadereyta Refinery	Cadereyta, Nuevo Leon	Design, Procurement, Manufacture, Spare parts, Final Acceptance Test, Transportation, Provisional Acceptance Test, Training for Operation&Maintenance Personnel for CDHDS Heater Reboiler BA-3201 with Air Preheating System for ULSG 1 (U-3000)	2010
58	122	Madero Refinery	Cd. Madero Tamaulipas	Design, Procurement, Manufacture, Spare parts, Final Acceptance Test, Transportation, Provisional Acceptance Test, Training for Operation&Maintenance Personnel for CDHDS Heater Reboiler BA-4201 & BA-7201 with Air Preheating System for ULSG 1&2 (U-4000)	2010
59	42.5	Cadereyta Refinery	Cadereyta, Nuevo Leon	Revamp for two direct fired heaters, BA701&801 charge to reactor at HDD plant, part of ULSD DUBA2 for PEMEX	2013
60	84.44	Cadereyta Refinery	Cadereyta, Nuevo Leon	Design, Procurement, Manufacture, Final Acceptance Test, Transport, delivery at site, Provisional Acceptance Test, Training for Operation & Maintenance Personnal for Fired Heater of the Charge Heater BA4801 and Stabilizing Tower Reboiler Heater BA4802	2014
61	27.78	Madero Refinery	Cd. Madero Tamaulipas	Design, Procurement, Manufacture, Spare parts, Final Acceptance Test, Transportation, Provisional Acceptance Test, Training for Operation&Maintenance Personnel for two Direct Fired Heaters Cilindrical CF50301&401 Charge Heaters ULSD	2014
62		Tula Refinery	Tula, Hidalgo	Engineering design review for Direct Fired Heaters at Combined Plants I & II	2014
63	84.44	Cadereyta Refinery	Cadereyta, Nuevo Leon	Erection of 2 Direct Fired Heaters BA4801 & 4802 of F402	2015
64	198	Dos Bocas Refinery	Dos Bocas, Tabasco	Design and Fabrication of a Direct Fired Air Heater Single Shell Single Air Inlet type with a Multi Staged Fuel Process Burner including Ignition Panel. Tag BA-21001. Unit Fluidized Catalytic Desintegration Plant.	2019
65		Dos Bocas Refinery	Dos Bocas, Tabasco	Design and Fabrication of six direct fired heaters vertical cillindrical for Naphta Hidrotreating plant: BA-61001&62001 Guard Reactor Feed Heater, BA-61002&62002 Stabilizer Reboiler and BA-61003&62003 Splitter Reboiler	2020