

FAC 8332 INCINERATOR

FY24 SUC:	\$1,448.53 / TH
Source:	Calculated using R.S. Means CostWorks 2023 Qtr 4 component prices

FAC 8332 INCINERATOR

Release 2023 Qtr 4
Zip Code Prefix 222
Type MR

UM TH
Design Life 45
Average Size 12.0

SUC \$1,448.53

Adjusted Occurrences are the occurrences remaining after subtracting Repair/Replacement Overlaps. Overlap reduction removes a repair when it occurs the same year as a replacement.

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Clean trap	3	4.00 Ea.	\$36.02	\$45.10	15.0000	15	15	\$676.44	\$676.44
Replace threaded steel pipe and fittings, 3/4"	75	440.00 L.F.	\$10,844.80	\$13,177.11	0.6000	0	0	\$0.00	\$0.00
Check gas pressure natural gas, pressure reducing valve	5	4.00 Ea.	\$40.58	\$50.79	9.0000	9	9	\$457.14	\$457.14
Replace pressure regulator 1/2" diam. pipe natural gas	14	4.00 Ea.	\$604.32	\$710.49	3.2143	3	3	\$2,131.48	\$2,131.48
Repair boiler, gas, 2000 MBH	7	2.00 Ea.	\$11,469.59	\$13,370.29	6.4286	6	6	\$80,221.76	\$80,221.76
Replace boiler, gas, 2000 MBH	30	2.00 Ea.	\$81,177.87	\$95,116.86	1.5000	1	1	\$95,116.86	\$95,116.86
Replace metal flue, all fuel SS, 20" diameter metal flue / chimney	15	2.00 L.F.	\$647.25	\$750.91	3.0000	3	3	\$2,252.73	\$2,252.73
Repair spreader, pneumatic coal	10	1.00 Ea.	\$11,163.05	\$12,879.94	4.5000	4	4	\$51,519.76	\$51,519.76
Repair fuel oil equipment, pump	10	2.00 Ea.	\$985.05	\$1,216.92	4.5000	4	4	\$4,867.69	\$4,867.69
Replace fuel oil 25 GPH pump / motor set	15	2.00 Ea.	\$5,180.59	\$5,971.06	3.0000	3	3	\$17,913.19	\$17,913.19
Repair fan, induced draft, 6700 CFM	10	2.00 Ea.	\$638.38	\$779.34	4.5000	4	4	\$3,117.37	\$3,117.37
Replace fan, induced draft, 6700 CFM	20	2.00 Ea.	\$13,214.07	\$15,224.67	2.2500	2	2	\$30,449.35	\$30,449.35
Inspect sprinkler system	1	1.00 Ea.	\$36.17	\$45.28	45.0000	45	45	\$2,037.80	\$2,037.80
Replace sprinkler head	20	14.00 Ea.	\$1,227.07	\$1,514.13	2.2500	2	2	\$3,028.25	\$3,028.25
Replace fire pump / electric motor assembly 100 H.P.	25	1.00 Ea.	\$48,011.97	\$55,351.32	1.8000	1	1	\$55,351.32	\$55,351.32
Maintenance and repair motor starter, up to 600 V	5	2.00 Ea.	\$525.64	\$638.99	9.0000	9	9	\$5,750.89	\$5,750.89
Maintenance and inspection motor starter, up to 600 V	0.5	2.00 Ea.	\$113.76	\$142.53	90.0000	90	90	\$12,827.29	\$12,827.29
Replace starter motor starter, up to 600 V	18	2.00 Ea.	\$1,682.04	\$2,001.49	2.5000	2	2	\$4,002.99	\$4,002.99
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$42.34	\$53.05	15.0000	15	15	\$795.77	\$795.77
Maintenance and repair breaker, molded case, 480 V, 1 pole	20	4.00 Ea.	\$303.36	\$380.07	2.2500	2	2	\$760.14	\$760.14
Maintenance and inspection circuit breaker, molded case, 480 V, 1 pole	0.5	4.00 Ea.	\$136.51	\$171.03	90.0000	90	90	\$15,392.75	\$15,392.75
Maintenance and inspection circuit breaker, molded case, 480 V, 3 pole	0.5	2.00 Ea.	\$68.26	\$85.52	90.0000	90	90	\$7,696.37	\$7,696.37
Replace circuit breaker molded case, 480 V, 3 pole circuit breaker	50	2.00 Ea.	\$2,726.68	\$3,151.47	0.9000	0	0	\$0.00	\$0.00
Maintenance and repair safety switch general, 3 pole	8	2.00 Ea.	\$84.69	\$106.10	5.6250	5	5	\$530.51	\$530.51
Maintenance and inspection safety switch, 3 pole	1	2.00 Ea.	\$84.69	\$106.10	45.0000	45	45	\$4,774.60	\$4,774.60
Repair heat detector	10	6.00 Ea.	\$375.62	\$462.31	4.5000	4	4	\$1,849.25	\$1,849.25
Check operation heat detector	1	6.00 Ea.	\$102.01	\$127.80	45.0000	45	45	\$5,750.90	\$5,750.90
Replace heat detector	15	6.00 Ea.	\$1,062.64	\$1,300.95	3.0000	3	3	\$3,902.86	\$3,902.86
Check and repair manual pull station	10	1.00 Ea.	\$89.88	\$110.75	4.5000	4	3	\$442.99	\$332.24
Replace manual pull station	15	3.00 Ea.	\$626.27	\$755.29	3.0000	3	3	\$2,265.87	\$2,265.87

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Replace lightning protection general wiring system	25	1.00 M.L.F.	\$12,548.36	\$14,875.43	1.8000	1	1	\$14,875.43	\$14,875.43	
Maintenance and repair lightning ground rod	1	1.00 Ea.	\$92.28	\$115.32	45.0000	45	44	\$5,189.47	\$5,074.15	
Replace lightning ground rod	25	1.00 Ea.	\$245.60	\$303.67	1.8000	1	1	\$303.67	\$303.67	
			\$206,187.43	\$241,092.10				MR Subtotal	\$436,026.84	
									MR Per Year	\$9,392.37
									PM Total	\$7,990.04
									Subtotal	\$17,382.41
									Total Per Unit	\$1,448.53

FAC 8332 INCINERATOR

SUC \$1,448.53

Release 2023 Qtr 4

UM TH

Zip Code Prefix 222

Design Life 45

Type PM

Average Size 12.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Fire dampers, annualized	2.00	2.31	\$18.01	\$146.50	\$0.00	\$164.51	\$210.26	\$256.91
Fan, axial, up to 5,000 CFM, annualized	1.00	1.24	\$8.30	\$66.71	\$0.00	\$75.01	\$95.85	\$117.11
Fan, axial, 5,000 to 10,000 CFM, annualized	1.00	1.29	\$31.88	\$68.89	\$0.00	\$100.77	\$124.62	\$150.07
Extinguishing system, deluge / preaction, annualized	1.00	11.59	\$49.59	\$728.12	\$0.00	\$777.71	\$1,001.10	\$1,226.98
Fire pump, electric motor driven, annualized	0.75	35.81	\$28.08	\$2,239.95	\$0.00	\$2,268.03	\$2,942.83	\$3,619.02
Panelboard, 225 A and above, annualized	1.00	0.44	\$22.00	\$30.41	\$0.00	\$52.42	\$63.74	\$76.16
Motor control center, over 400 A, annualized	1.00	0.39	\$22.00	\$26.81	\$0.00	\$48.81	\$59.05	\$70.39
Light, emergency, hardwired system, annualized	4.00	1.00	\$35.92	\$63.10	\$0.00	\$99.02	\$121.54	\$145.86
Ejector pump, annualized	1.00	0.97	\$49.24	\$50.28	\$0.00	\$99.52	\$119.52	\$141.99
Grit drive, annualized	1.00	1.09	\$38.84	\$56.19	\$0.00	\$95.03	\$115.77	\$138.45
Fuel oil storage tank, above ground, annualized	1.00	3.28	\$23.44	\$169.84	\$0.00	\$193.29	\$246.58	\$301.05
Pump, boiler fuel oil, annualized	2.00	2.46	\$195.32	\$156.09	\$0.00	\$351.40	\$417.76	\$493.89
Valve, motor operated, above 4", annualized	2.00	2.00	\$33.19	\$107.26	\$0.00	\$140.45	\$175.95	\$213.10
Oxygen monitor, annualized	1.00	5.00	\$490.82	\$265.96	\$0.00	\$756.78	\$885.65	\$1,039.06
						\$5,222.73	\$6,580.22	\$7,990.04

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Modeled Component List
CostWorks Release 2023 Qtr 4

D30 HVAC

Boiler, Gas, 2000 MBH	2.0 Ea.
Metal Flue / Chimney, 6" diameter	2.0 L.F.
Draft Fan, 6700 CFM	2.0 Ea.

D40 Fire Protection

Sprinkler System, Fire Suppression, sprinkler head	14.0 Ea.
Fire Pump Electric Motor	1.0 Ea.
Fire Pump, Electric, annualized	0.75 Each

D50 Electrical

Motor Starter, Up To 600 V	2.0 Ea.
Load Center, 100 A, maintenance & inspection	1.0 Ea.
Circuit Breaker, molded case, 480 V, 3 pole	2.0 Ea.
Heat Detector	6.0 Ea.
Manual Pull Station	3.0 Ea.
Lightning Protection System	1.0 M.L.F.
Lightning Ground Rod	1.0 Ea.

G30 Site Mechanical Utilities

Grit Drive, annualized	1.0 Each
Fuel Oil Storage Tank, annualized	1.0 Each

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Sustainment by Year
CostWorks Release 2023 Qtr 4

