

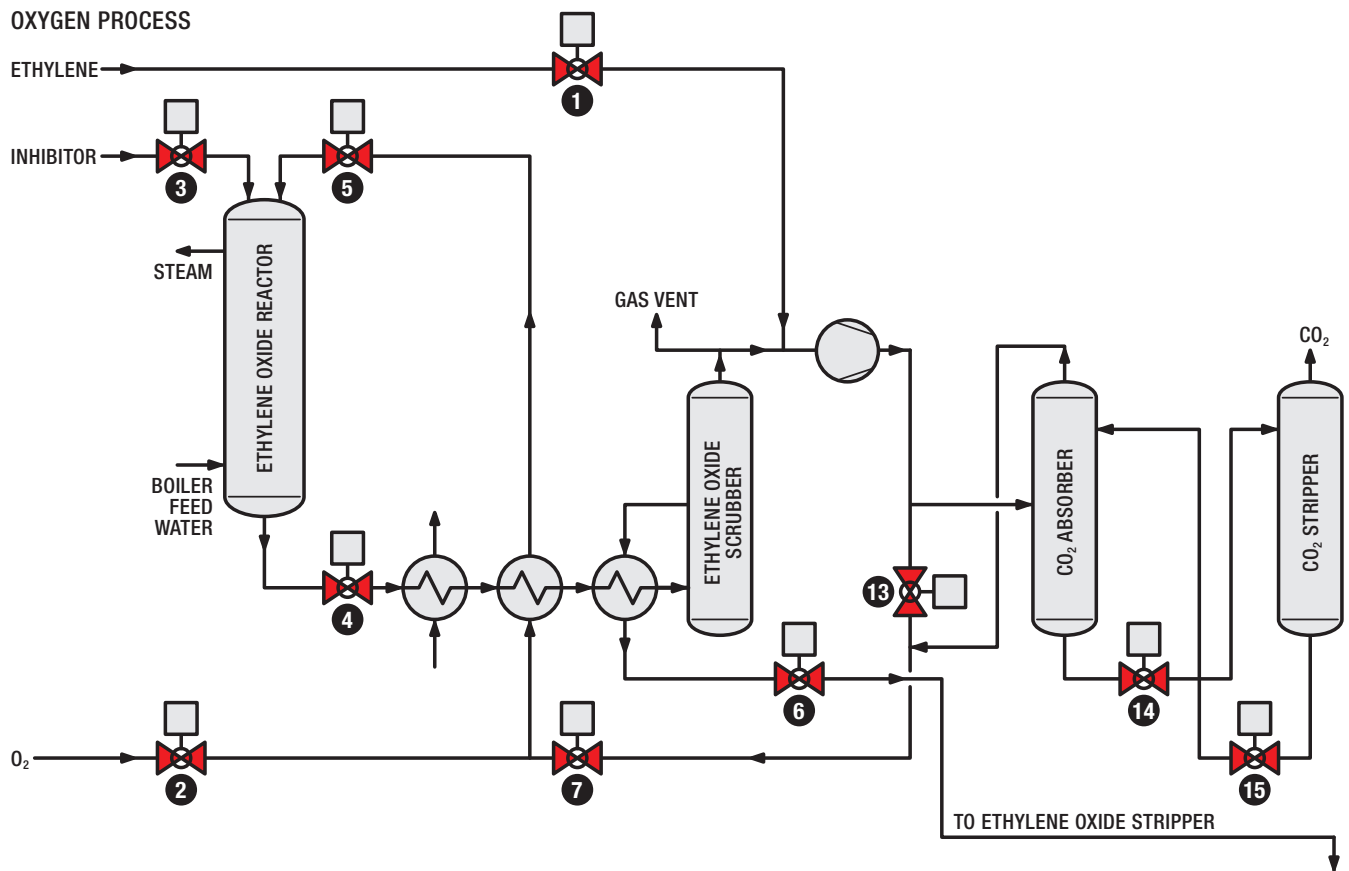
Ethylene Oxide

Process PFD

Ethylene Oxide												
Valve Number	Valve Description	Design Temperature Range		Design Pressure Range		Pipe Size		Recommended Valve				
		deg F	deg C	psig	bar g	in	dn	C-Series	T-Series	G-Series	ISOLATOR 2.0	IRSVIP
1	Ethylene Feed	77	25	725	50	2 – 6	50 – 150		•		•	
2	Air or Pure Oxygen Feed	50 – 200	10 – 93	350 – 450	24 – 31	1 – 4	25 – 100		•		•	
3	Inhibitor (1,2-dichloroethane)	450 – 500	232 – 260	350 – 450	24 – 31	1 – 4	25 – 100		•		•	
4	Ethylene Oxide Reactor	450 – 500	232 – 260	350 – 450	24 – 31	4 – 8	100 – 200	•				
5	Ethylene Oxide Reactor Recirculation	450 – 500	232 – 260	350 – 450	24 – 31	3 – 6	75 – 150	•				
6	Ethylene Oxide Scrubber	75 – 175	24 – 79	350 – 450	24 – 31	4 – 8	100 – 200	•				
7	Ethylene Oxide Scrubber Recirculation	75 – 175	24 – 79	350 – 450	24 – 31	3 – 6	75 – 150	•				
8	Ethylene Oxide Purge Reactor Pump Loop	400 – 500	204 – 260	350 – 450	24 – 31	1 – 4	25 – 100	•				
9	Recirculation Gas	400 – 500	204 – 260	350 – 450	24 – 31	1 – 4	25 – 100				•	
10	Ethylene Oxide Purge Reactor	300 – 400	149 – 204	350 – 450	24 – 31	3 – 6	75 – 150	•				
11	Ethylene Oxide Purge Reactor Recirculation	300 – 400	149 – 204	350 – 450	24 – 31	3 – 6	75 – 150	•				
12	Ethylene Oxide Purge Scrubber	400 – 500	204 – 260	350 – 450	24 – 31	3 – 6	75 – 150	•				
13	Ethylene Oxide Purge Scrubber Recirculation	400 – 500	204 – 260	350 – 450	24 – 31	3 – 6	75 – 150	•				
14	CO ₂ Absorber	400 – 500	204 – 260	350 – 450	24 – 31	1 – 4	25 – 100				•	
15	CO ₂ Stripper	400 – 500	204 – 260	350 – 450	24 – 31	1 – 4	25 – 100				•	
16	Ethylene Oxide Stripper	150 – 200	65 – 93	350 – 450	24 – 31	4 – 8	100 – 200	•	•		•	
17	Ethylene Glycol	150 – 200	65 – 93	350 – 450	24 – 31	3 – 6	75 – 150		•		•	
18	Light Ends Stripper	150 – 200	65 – 93	350 – 450	24 – 31	1 – 4	25 – 100		•		•	
19	Light Ends	150 – 200	65 – 93	350 – 450	24 – 31	1 – 4	25 – 100		•		•	
20	Ethylene Oxide Distillation Tower	150 – 200	65 – 93	350 – 450	24 – 31	4 – 8	100 – 200		•		•	
21	Ethylene Oxide + Water	150 – 200	65 – 93	350 – 450	24 – 31	3 – 6	75 – 150		•		•	
22	Ethylene Oxide	150 – 200	65 – 93	350 – 450	24 – 31	3 – 6	75 – 150		•		•	
	Heat Exchanger	300 – 1000	149 – 538	200 – 600	14 – 41	1/2 – 2	13 – 50					•
	General Ball Valves	600 – 700	41 – 48	100 – 600	6.9 – 41	1 – 3	25 – 75			•		

Ethylene Oxide

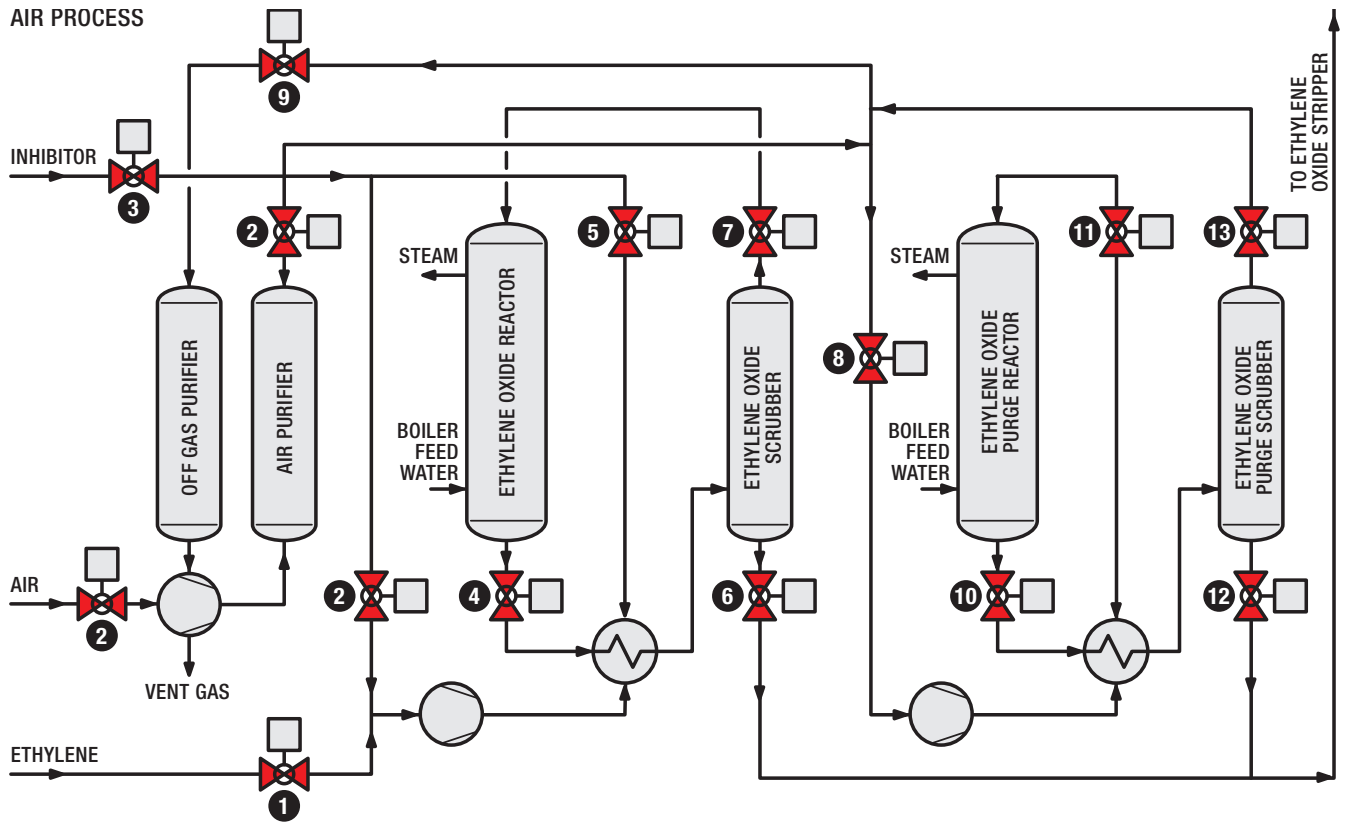
Process PFD



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Ethylene Oxide

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Process PFD

