High Density Polyethylene (HDPE)

Slurry Loop Process

HDPE – Slurry Loop Process

Valve Number	Valve Description	Design Temperature Range		Design Pressure Range		Pipe Size		Recommended Valve [1]						
		deg F	deg C	psig	bar g	in	dn	C-Series	T-Series	G-Series	ISOLATOR 2.0	iRSVP	Watson Series	FlexStream®
1	Fresh Solvent	50 – 100	10 – 65	100 – 200	6.9 – 13.8	1 – 3	25 – 75				•			
2	Fresh Comonomer	50 – 100	10 – 65	100 – 200	6.9 – 13.8	1 – 3	25 – 75				•			
3	Recycle Solvent	100 – 150	38 – 93	300 – 400	20.7 – 27.6	2 – 4	50 – 100				•			
4	Fresh Ethylene Feed	50 – 100	10 – 65	100 – 200	6.9 – 13.8	2 – 4	50 – 100				•			
5	Hydrogen	50 – 100	10 – 65	100 – 200	6.9 – 13.8	1/2 – 2	13 – 50				•			
6	Fresh Catalyst	50 – 100	10 – 65	100 – 200	6.9 – 13.8	1 – 3	25 – 75				•			
7	Nitrogen	50 – 100	10 – 65	100 – 200	6.9 – 13.8	1/2 – 2	13 – 50				•			
8	Pressurised Nitrogen	100 – 150	38 – 93	400 – 600	27.6 – 41.4	1/2 – 2	13 – 50				•			
9	Polimersization Reactor	150 – 250	65 – 121	850 – 950	58.6 – 65.5	4 – 8	100 – 200	•						
10	Flash Tank Isolation	150 – 200	65 – 93	850 – 950	58.6 – 65.5	2 – 4	50 – 100				•			
11	Recycle Condenser Isolation	150 – 250	65 – 121	700 – 900	48.3 – 62.0	2 – 4	50 – 100				•			
12	Recycle Solvent Tank Isolation	100 – 150	38 – 93	850 – 950	58.6 – 65.5	2 – 4	50 – 100				•			
13	Purge Column Isolation	150 – 200	65 – 93	850 – 950	58.6 – 65.5	4 – 8	100 – 200				•			
14	Heavys Inlet Column Isolation	150 – 200	65 – 93	500 – 600	34.5 – 41.4	2 – 4	50 – 100				•			
15	Nirgogen Recovery Unit Isolation	150 – 200	65 – 93	850 – 950	58.6 – 65.5	2 – 4	100 – 200				•			
16	Heavies Solvent Isolation	150 – 200	65 – 93	300 – 500	20.7 – 34.5	2 – 4	50 – 100				•			
17	Lights Solvent Isolation	150 – 200	65 – 93	500 – 600	34.5 – 41.4	2 – 4	50 – 100				•			
18	Lights Outlet Column Isolation	150 – 200	65 – 93	500 – 600	34.5 – 41.4	2 – 4	50 – 100				•			
19	Heavys Outlet Column Isolation	150 – 200	65 – 93	300 – 500	20.7 – 34.5	2 – 4	50 – 100				•			
20	Final Polyethylene Powder Isolation	100 – 150	38 – 93	100 – 200	6.9 – 13.8	4 – 8	100 – 200				•			
	Heat Exchanger – Steam	300 – 1500	150 – 815	200 – 900	13.8 – 62.0	1/2 – 2	13 – 50					•		
	General Ball Valves	25 – 900	-4 – 482	25 – 600	1.7 – 41.4	1 – 3	25 – 75			•				

[1] Recommend ISOLATOR 2.0 or T-Series if size, pressure and temperature conditions are met.

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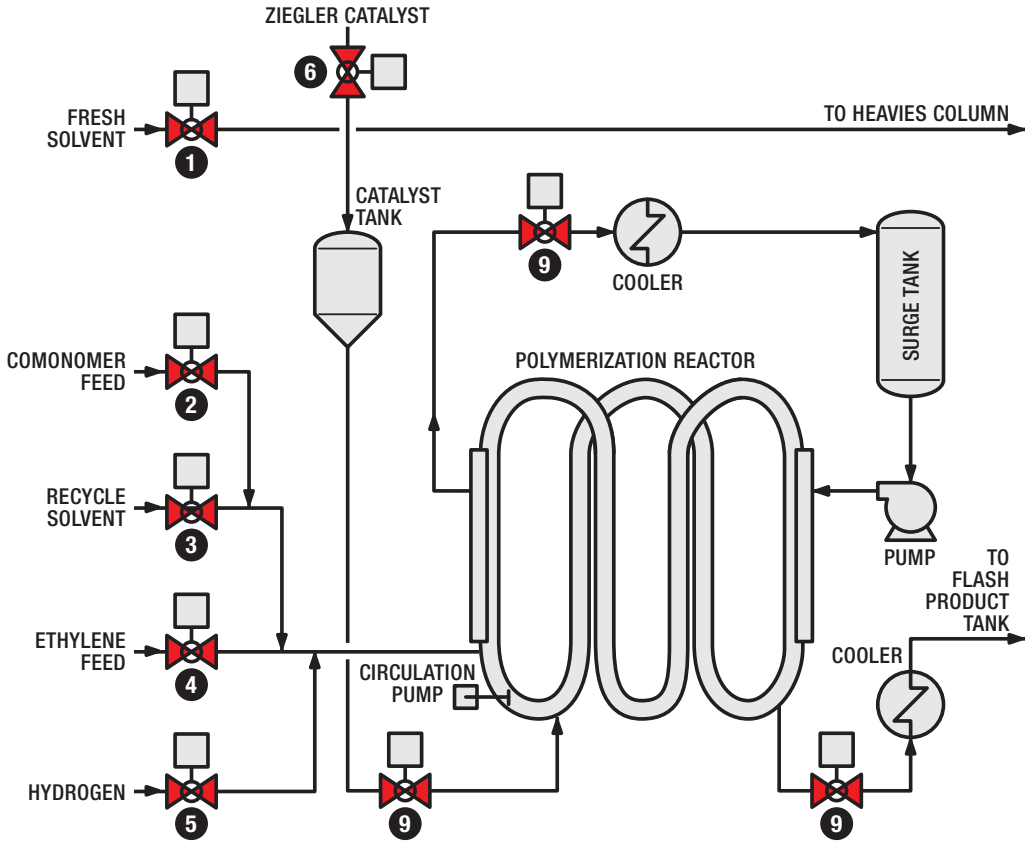

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