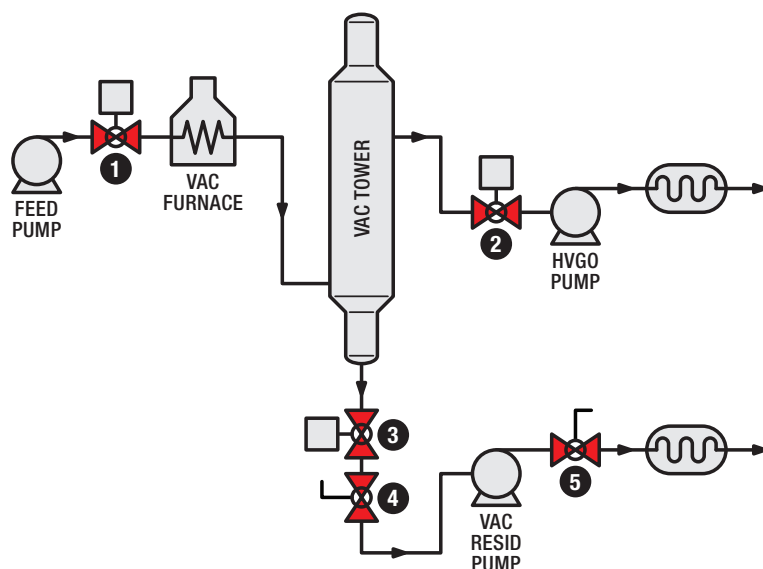


Vacuum Distillation														
Valve Number	Valve Description	Design Temperature Range		Design Pressure Range		Pipe Size		Recommended Valve ¹						
		deg F	deg C	psig	bar g	in	dn	C-Series	T-Series	G-Series	ISOLATOR 2.0	iRSVP	Watson Series	FlexStream®
1	Feed	400 – 720	204 – 382	100 – 200	7 – 14	6 – 10	150 – 250				•			
2	Heavy Vacuum Gas Oil Pump Emergency Block Valve	400 – 720	204 – 382	100	7	4 – 8	100 – 200				•			
3	Vacuum Tower Bottoms Emergency Block Valve	720	382	100	7	8 – 14	200 – 350	•						
4	Vacuum Bottoms Pump	720	382	100	7	6 – 10	150 – 250				•			
5	Vacuum Bottoms Exchanger	720	382	200	14	6 – 10	150 – 250				•			
	Heat Exchanger	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.



Typical operating conditions are:

- High temperature
400 – 720° F (204 – 382° C)
- Coking and heavy asphaltene service
- Temperature cycling
- Erosive conditions