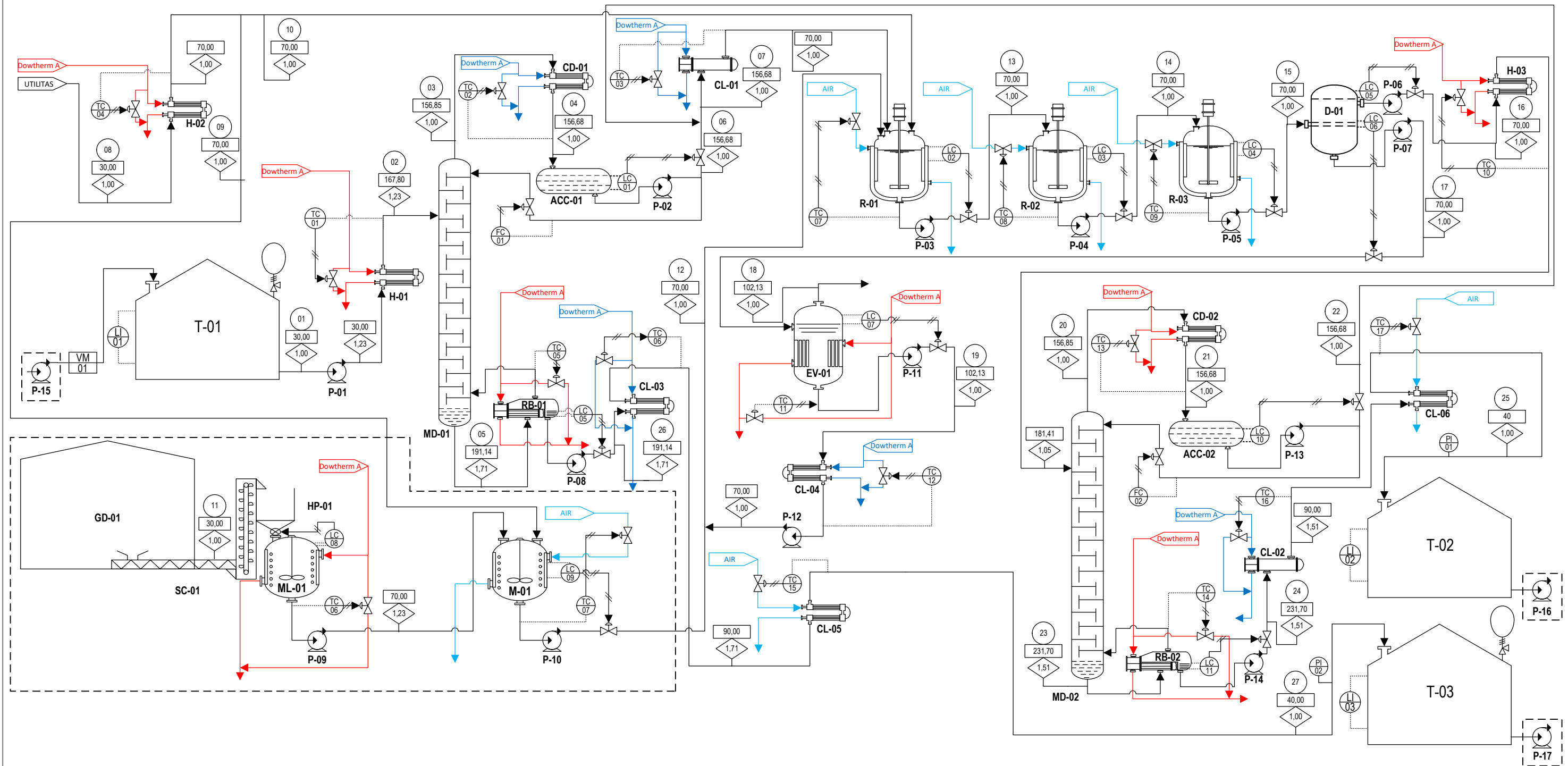




PROCESS ENGINEERING FLOW DIAGRAM
PRARANCANGAN PABRIK KIMIA ALPHA TERPINEOL DARI TERPENTIN DAN AIR
KAPASITAS 30.000 TON/TAHUN



Nomor Arus	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Fasa	Cair	Cair	Uap	Cair	Cair	Cair	Cair	Cair	Cair	Cair	Padat	Cair	Cair	Cair	Cair	Cair	Cair	Uap	Cair	Uap	Cair	Cair	Cair	Cair	Cair	Cair	
Temperatur (°C)	30,00	167,80	156,85	156,68	191,34	156,68	156,68	30,00	70,00	70,00	30,00	30,00	70,00	70,00	70,00	70,00	70,00	102,13	102,13	156,85	156,68	156,68	229,95	229,95	40,00	191,34	40,00
Tekanan (atm)	1,00	1,23	1,00	1,00	1,71	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,51	1,51	1,00	1,71	1,00
C ₁₀ H ₁₈ (α-pinene) (kg/jam)	3.853,36	3.853,36	3.354,35	3.354,35	499,01	3.354,35	6.428,99	-	-	-	-	-	4.896,84	3.865,08	3.150,20	3.150,20	-	-	-	3.074,63	3.074,63	3.074,63	75,57	75,57	75,57	499,01	499,01
C ₁₀ H ₁₈ (β-pinene) (kg/jam)	127,49	127,49	0,21	0,21	127,28	0,21	0,21	-	-	-	-	-	0,21	0,21	0,21	0,21	-	-	-	0,21	0,01	0,01	0,21	0,21	0,21	127,28	127,28
C ₁₀ H ₁₆ (Champane) (kg/jam)	72,60	72,60	-	-	72,60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72,60	72,60
C ₁₀ H ₁₆ (Carene) (kg/jam)	363,42	363,42	-	-	363,42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	363,42	363,42
C ₁₀ H ₁₆ (Limonene) (kg/jam)	9,74	9,74	-	-	9,74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,74	9,74
H ₂ O (kg/jam)	-	-	-	-	-	-	-	4.022,43	1.983,28	2.039,15	30,82	2.014,10	1.836,66	1.700,31	1.605,83	-	1.605,83	1.605,83	2.014,10	-	-	-	-	-	-	-	-
C ₂ H ₃ ClO ₂ (kg/jam)	-	-	-	-	-	-	-	-	-	-	3.082,31	3.082,31	5.096,41	5.096,41	5.096,41	-	5.096,41	-	3.082,31	-	-	-	-	-	-	-	-
C ₁₀ H ₁₈ O (kg/jam)	-	-	-	-	-	-	-	-	-	-	-	-	1.734,64	2.902,75	3.712,10	3.712,10	-	-	-	-	-	-	3.712,10	3.712,10	3.712,10	-	-
Total (kg/jam)	4.426,60	4.426,60	3.354,56	3.354,56	1.072,05	3.354,56	6.429,20	4.022,43	1.983,28	2.039,15	3.113,13	5.096,41	13.564,75	13.564,75	13.564,75	6.862,52	6.702,24	1.605,83	5.096,41	3.074,85	3.074,64	3.074,64	3.787,88	3.787,88	3.787,88	1.072,05	1.072,05

Keterangan Alat										Keterangan Simbol									
T	Tangki	RB	Reboiler	MD	Menara Destilasi	GD	Gudang	PI	Pressure Indicator	FC	Flow Control	◇	Tekanan	—	Signal				
R	Reaktor	ACC	Accumulator	CD	Condensor	P	Pompa	VM	Volume Meter	TC	Temperature Control	—	Arus Proses		Transmitter				
ML	Melter	H	Heater	HP	Hoper	PR	Pressure Reducer	LI	Level Indicator	○	Nomor Arus	—	Arus Air	—	Arus Dowtherm Pendingin				
M	Mixer	CL	Cooler	EV	Evaporator					LC	Level Control	□	Suhu	—	Arus Dowtherm Pemanas				



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DARI TERPENTIN DAN AIR
KAPASITAS 30.000 TON/TAHUN

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