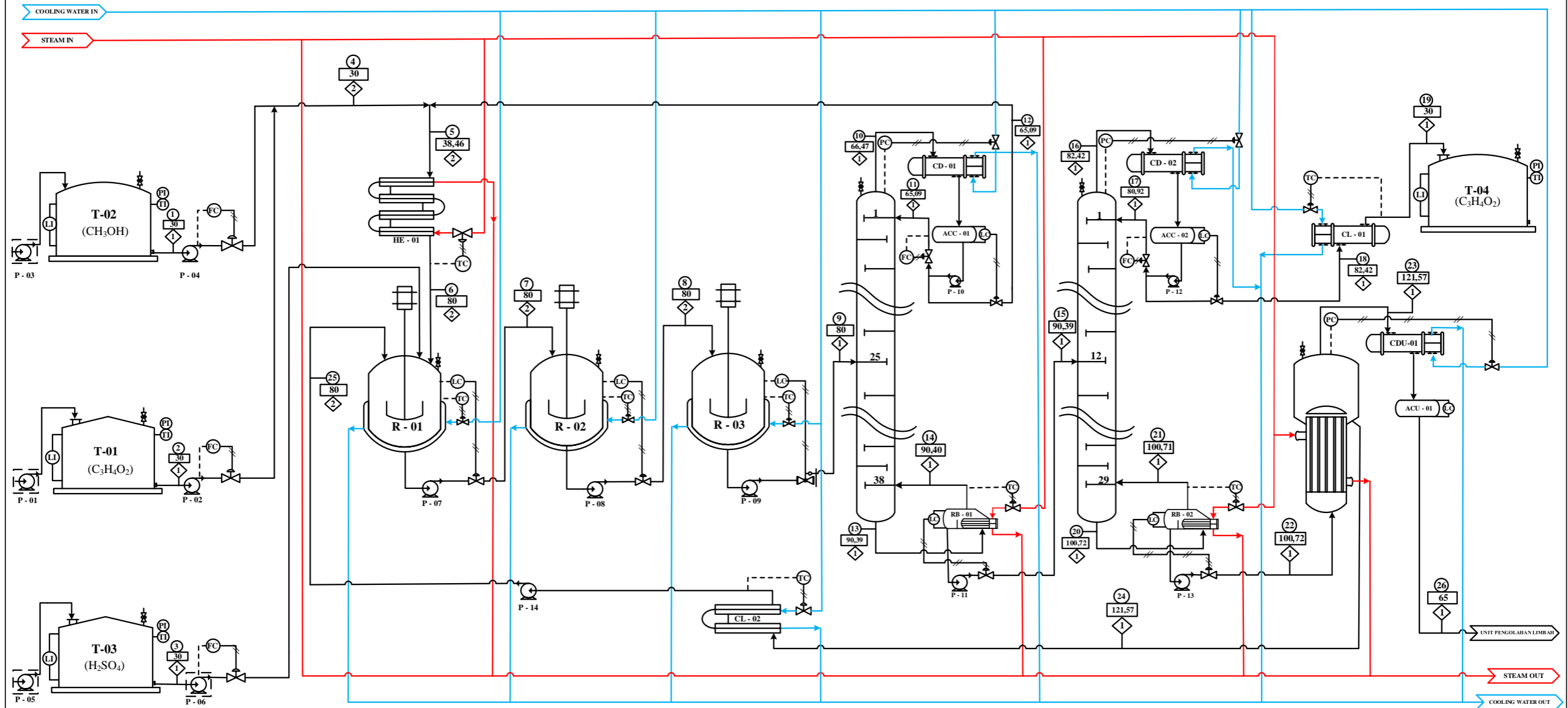




LAMPIRAN B
PROCESS ENGINEERING FLOW DIAGRAM

PROCESS ENGINEERING FLOW DIAGRAM
PRA RANCANGAN PABRIK KIMIA METIL AKRILAT DARI ASAM AKRILAT DAN METANOL
KAPASITAS PRODUKSI 45.000 TON/TAHUN



NERACA MASSA (KG/JAM)																										
Komponen	Nomor Arus																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
C ₃ H ₄ O ₂	-	4.756,8745	-	4.756,8745	4.756,8745	4.756,8745	48,0492	41,9898	48,0492	-	-	-	64,6459	16,5967	48,0492	-	-	-	-	89,6405	41,5913	48,0492	0,0035	48,0457	48,0457	0,0035
CH ₃ OH	2.222,087	-	-	2.222,087	4.271,0402	4.271,0402	2.156,8753	2.154,1822	2.156,8753	9.791,8044	7.742,7729	2.049,0315	684,0354	576,1916	107,8438	325,7714	240,5442	85,2273	85,2273	299,7913	277,1748	22,6165	22,6165	-	-	22,6165
C ₄ H ₆ O ₂	-	-	-	-	47,4513	47,4513	5.729,2694	5.736,5071	5.792,2694	226,7576	179,3063	47,4513	21.677,6195	15.995,8013	5.681,8182	21.066,5528	15.555,1892	5.511,3636	5.511,3636	1.235,0449	1.064,5903	170,4545	170,4545	-	-	170,4545
H ₂ O	3.3330	47,5687	0,0155*	50,8987	75,6081	75,6081	1.396,4803	397,9951	1.396,4803	133,9931	105,9537	28,0394	3.381,1891	2.012,7481	1.368,4409	325,7714	240,5442	85,2273	85,2273	5.811,7475	4.528,5339	1.283,2136	1.154,8923	128,3214	128,3214	1.154,8923
H ₂ SO ₄	-	-	0,7728*	-	-	-	466,5337	466,5337	466,5337	-	-	-	466,5776	0,0439	466,5337	-	-	-	-	466,6954	0,1617	466,5337	0,0322	466,5015	466,5015	0,0322
TOTAL	2.225,3417	4.804,4433	0,7883*	7.029,7850	9.154,3071	9.154,3071	9.797,2079	9.797,2079	9.797,2079	10.152,5551	8.028,0329	2.124,5222	26.274,0674	18.601,3816	7.672,6858	21.718,0957	16.036,2775	5.681,8182	5.681,8182	7.902,9196	5.912,0502	1.990,8676	1.347,9990	642,8686	642,8686	1.347,9990

NOTASI		INSTRUMEN	
○	NOMOR ARUS	FC	FLOW CONTROLLER
□	TEMPERATURE CONTROLLER (°C)	LC	LEVEL CONTROLLER
◇	TEKANAN (ATM)	LI	LEVEL INDICATOR
—	ALIRAN PROSES	PI	PRESSURE INDICATOR
—	ALIRAN STEAM	TC	TEMPERATURE CONTROLLER
—	ALIRAN PENDINGIN	TI	TEMPERATURE INDICATOR
—	SINYAL UDARA TEKAN	PC	PRESSURE CONTROLLER
—	ELECTRIC CONNECTION	KETERANGAN ALAT	
—	PRESSURE RELIEF	T	TANGKI PENYIMPANAN
—	CONTROL VALVE	HE	HEAT EXCHANGER
—	REGULATING VALVE	R	REACTOR
		MD	MENARA DESTILASI
		RB	REBOILER
		CD	CONDENSOR
		ACC	ACCUMULATOR
		P	POMPA
		EV	EVAPORATOR
		CL	COOLER


PROSES ENGINEERING FLOW DIAGRAM
PRA RANCANGAN PABRIK KIMIA METIL AKRILAT
KAPASITAS PRODUKSI 45.000 TON/TAHUN

Dikerjakan oleh :
Mutiara (200606008)
Fitriatul Musarofah (200606017)

Dosen Pembimbing :
Fiska Yohana Purwaningtyas, S.T., M.Eng

JURUSAN TEKNIK KIMIA
FAKULTAS TEKNIK
UNIVERSITAS MUHAMMADIYAH GRESIK
2024