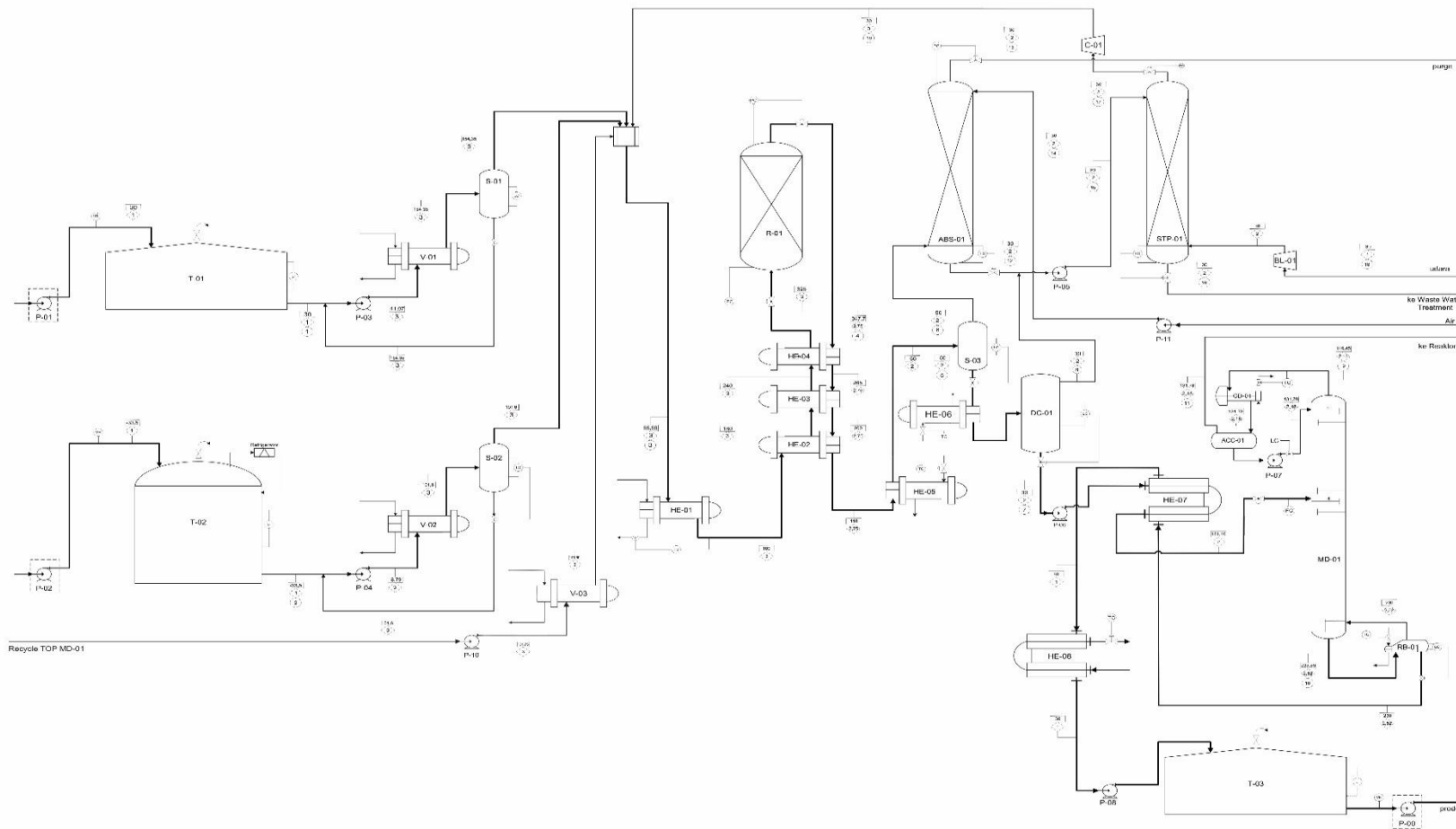


PROCESS ENGINEERING FLOW DIAGRAM PABRIK BENZONITRILE DARI AMMONIA DAN TOLUENE KAPASITAS 50.000 TON/TAHUN



Keterangan	
R	Reaktor
S	Separator
DC	Decanter
MD	Menara Distilasi
ABS	Absorber
STP	Striper
T	Tangki
HE	Heat Exchanger
CD	Condenser
RB	Reboiler
P	Pompa
C	Compressor
LI	Level Indicator
TC	Temperature Controller
PC	Pressure Controller
LC	Level Controller
FC	Flow Controller
VR	Volume Recorder
○	Nomor Arus, kg/jam
◇	Temperatur, C
◇	Tekanan, atm

Komponen	No Arus (kg/jam)																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Nitrogen	6411.30		30942.60	30942.60		30942.60							30942.60				30942.60	30942.60	30942.60
Oksigen			9395.63	4061.40		4061.40							4061.40				9395.63	9395.63	9395.63
C.Dioksida			0.00	2562.85		2562.85							2562.85						
Amoniak		1051.72	1875.26	832.64	44.17	788.47	0.32	43.85	0.32		0.32	787.68	0.79		831.53	8.32	823.22		823.22
N-Heptana	97.63		104.96	104.96	104.93	0.03	7.35	97.59	7.33	0.02	7.33	0.03		97.59	97.59				
Air		5.29		3940.64	3773.74	166.90	27.32	3746.42	27.31	0.01	27.31	27022.50	166.90	27022.50	30768.92	30768.92			
Toluene			6763.67	356.38	356.11	0.26	355.55	0.57	352.37	3.18	352.37		0.26		0.57	0.57			
Benzonitril			30.82	6343.95	6340.95	3.00	6340.01	0.94	30.82	6309.19	30.82		3.00		0.94	0.94			
Total	6508.94	1057.01	49145.54	49145.43	10619.91	38525.52	6730.54	3889.37	418.15	6312.39	418.15	27810.18	37737.84	27022.50	31699.55	30876.34	41161.45	40338.23	41161.45

PROGRAM STUDI TEKNIK KIMIA
FAKULTAS TEKNOLOGI INDUSTRI
UNIVERSITAS ISLAM INDONESIA

PROCESS ENGINEERING FLOW DIAGRAM
PABRIK BENZONITRILE DARI AMMONIA DAN TOLUENE
KAPASITAS 50.000 TON/TAHUN

Dikerjakan oleh:
Egip Indrayanto (14521120)
Fachri Fachrul Qashmal (14521279)

Dosen Pembimbing:
Ir. Bachrun Sulrisno, M.Sc.
Dr. Ifa Puspasari, ST., M.Eng.