LAMPIRAN C
PROCESS ENGINEERING FLOW DIAGRAM

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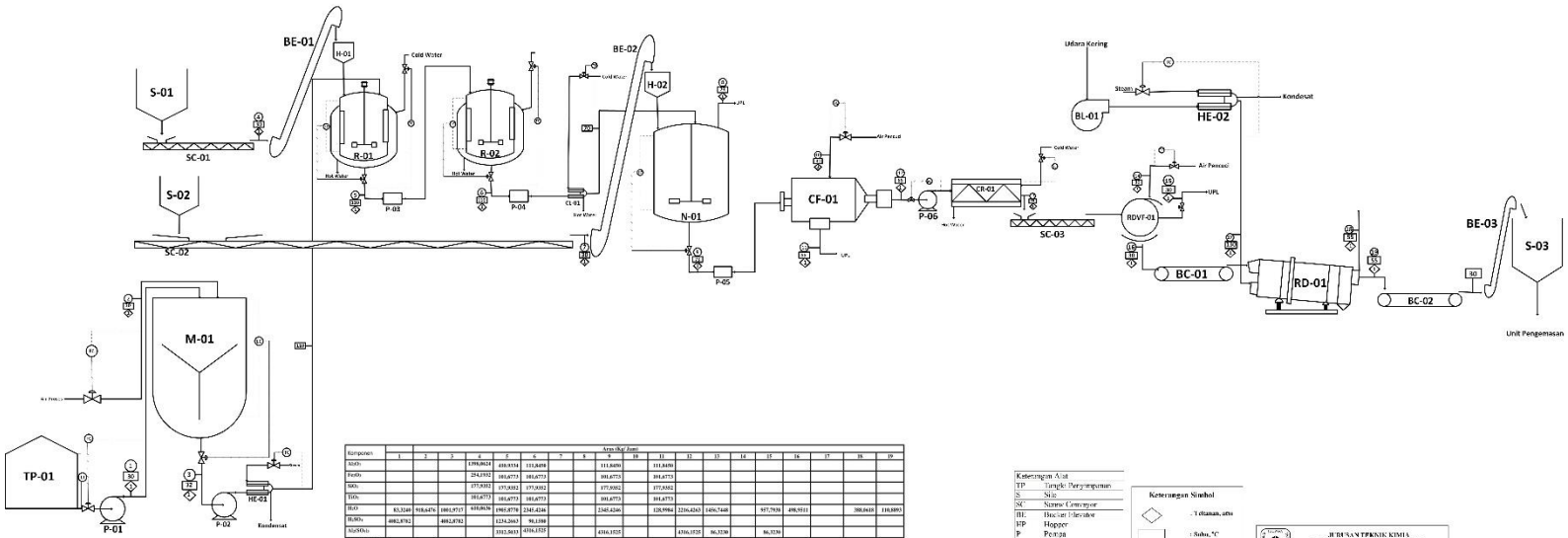
PRA RANCANGAN PABRIK ALUMINIUM SULFAT DARI BAUKSIT DAN ASAM SULFAT DENGAN PROSES DORR
KAPASITAS 40.000 TON/TAHUN



Komponen	Arus (Kg/Jam)																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Al_2O_3				1399,0024	410,9354	111,8490			111,8490		111,8490								
Fe_2O_3				254,1552	101,6773	101,6773			101,6773		101,6773								
SiO_2				177,5352	177,5352	177,5352			177,5352		177,5352								
TiO_2				101,6773	101,6773	101,6773			101,6773		101,6773								
H_2O	83,3240	918,6476	1001,9717	418,0636	1901,8778	2345,4246			2345,4246		128,9984	2216,4263	1456,7448		937,7938	498,9511		388,0445	110,8893
H_2SO_4		4882,8782		4882,8782	1234,2663	96,1380													
$Al_2(SO_4)_3$					3312,5613	4316,1525			4316,1525			4316,1525	86,3230		86,3230				
$Al_2(SO_4)_3.18H_2O$													4989,5188			4989,5188		49,8951	4939,6237
$Fe_2(SO_4)_3$					303,9118	303,9118			99,4227		99,4227								
$FeSO_4$									222,2252		222,2252								
Bauksit							279,6125												
$Bal(SO_4)_2$									260,2522		260,2522								
H_2S (gas)								31,5286											
S (gas)								23,4836											
Air Pencuci										119,0030	119,0030			498,9511	498,9511				
Udara																	483033,3427	483033,3427	
Total	4166,2012	918,6476	5804,8499	2541,9317	7628,7816	7628,7816	279,6125	54,7622	7851,6119	119,0030	1319,8332	6532,5797	6532,5797	498,9511	1543,0879	5488,4619	483033,3427	483471,1996	5050,5001

Keterangan Instrumen

FC	Flow Control
TC	Temperature Control
LC	Level Control

Keterangan Alat

TP	Tangki Penyimpanan
S	Silo
SC	Screw Conveyor
BE	Bucket Elevator
HP	Hopper
P	Pompa
HT	Heater
CL	Cooler
M	Mixer
R	Reaktor
N	Normalizer
CF	Centrifuge
CR	Kristalizer
RDVF	Rotary Drum Vacuum Filter
RD	Rotary Dryer
BC	Belt Conveyor

Keterangan Simbol

- : Tekanan, atm
- : Suhu, °C
- : Nomor arus
- : Control Valve
- : Sinyal Pneumatik
- : Sinyal Elektrik

JURUSAN TEKNIK KIMIA
FAKULTAS TEKNOLOGI INDUSTRI
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