

BAB V

NERACA MASSA

5.1. Neraca Massa *Crusher* (C-01)

Tabel 5. 1 Neraca Massa Crusher (C-01)

Komponen	Input (Kg/jam)	Output (Kg/jam)
	A1	A2
CaCO ₃	9.269,89	9.269,89
H ₂ O	28,40909091	28,41
CaSO ₄	7,575757576	7,58
SiO ₂	34,09090909	34,09
MgCO ₃	89,96212121	89,96
Al ₂ O ₃	16,09848485	16,10
Fe ₂ O ₃	23,67424242	23,67
Sub Total	9.469,70	9.469,70
Total	9.469,70	9.469,70

5.2. Neraca Massa *Mixer* (M-01)

Tabel 5. 2 Neraca Massa Mixer (M-01)

Komponen	Input (Kg/jam)		Output (Kg/jam)
	A4	A5	A6
H ₂ SO ₄	18560,60606		18560,60606
H ₂ O	3411,931818	9469,69697	12881,62879
Sub Total	21972,53788	9469,69697	31442,23485
Total	31442,23485		31442,23485

5.3. Neraca Massa Reaktor (R-01)

Tabel 5. 3 Neraca Massa Reaktor (R-01)

Komponen	Input (Kg/jam)		Output (Kg/jam)	
	A2	A6	A7	A8
CaCO ₃	9.269,89		9.269,89	
H ₂ O	28,41	12881,62879	12.910,04	
CaSO ₄	7,58		7,58	
SiO ₂	34,09		34,09	
MgCO ₃	89,96		89,96	
Al ₂ O ₃	16,10		16,10	
Fe ₂ O ₃	23,67		23,67	
H ₂ SO ₄		18560,60606	18.560,61	
CaSO ₄ .2H ₂ O			10.364,65	
CO ₂				2.649,41
Sub Total	9.469,70	31.442,23	51.276,58	2.649,41
Total	53.925,99		53.925,99	

5.4. Neraca Massa *Rotary Drum Vacuum Filter* (F-01)

Tabel 5. 4 Neraca Massa Rotary Drum Vacuum Filter (F-01)

Komponen	Input (Kg/jam)		Output (Kg/jam)	
	A7	A9	A10	A11
CaCO ₃	9.269,89		9.269,89	
H ₂ O	12.910,04	10785,19708	10.785,20	12.910,04
CaSO ₄	7,58		7,58	
SiO ₂	34,09		34,09	
MgCO ₃	89,96		89,96	
Al ₂ O ₃	16,10		16,10	
Fe ₂ O ₃	23,67		23,67	
H ₂ SO ₄	18.560,61		17.075,76	1484,848485
CaSO ₄ .2H ₂ O	10.364,65		10.364,65	
Sub Total	51.276,58	10.785,20	47.666,89	14.394,89
Total	62.061,78		62.061,78	

5.5. Neraca Massa *Rotary Dryer* (RD-01)

Tabel 5. 5 Neraca Massa Rotary Dryer (RD-01)

Komponen	Input (Kg/jam)	Output (Kg/jam)	
	A10	A13	A14
CaCO ₃	9.269,89	9.269,89	
H ₂ O	10.785,20	107,85	10.677,35
CaSO ₄	7,58	7,58	
SiO ₂	34,09	34,09	
MgCO ₃	89,96	89,96	
Al ₂ O ₃	16,10	16,10	
Fe ₂ O ₃	23,67	23,67	
H ₂ SO ₄	17.075,76	341,52	16.734,24
CaSO ₄ .2H ₂ O	10.364,65	9.457,74	906,91
Sub Total	47.666,89	19.348,40	28.318,49
Total	47.666,89	47.666,89	