BAB V

NERACA PANAS

Kapasitas Produksi : 200.000 Ton/Tahun

Operasi Pabrik : 330 Hari/Tahun

Basis : 1 jam operasi

Satuan : Kilo Joule (kJ)

Temperatur Referensi : 25°C

5.1. *Waste Heat Boiler* (WHB-01)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Q2	177.102,8686	
Q3		7.807.022,7
Q11	219.837.106,6	
Q12		212.207.186,8
Total	**220.014.209,5**	**220.014.209,5**

5.2. *Waste Heat Boiler* (WHB-02)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Q12	220.625.466,9	
Q14		219.984.884,9
Q13		-9.205
Q8	-649.787	
Total	**219.975.679,7**	**219.975.679,7**

5.3. *Waste Heat Boiler* (WHB-03)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Q14	181.735.643,9	
Q15		25.070.493,16
Qcw	1.091,9187	
Qst		156.666.242,6
Total	**181.736.735,8**	**181.736.735,8**

5.4. Reaktor (R-01)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Q10	220.625.466,9	
Q11		219.984.884,9
Qreaksi		-9.205
Qisolator	- 649.787	
Total	**219.975.679,7**	**219.975.679,7**

5.5. Reaktor (R-02)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Q18	29.832.162,1	
Q19		9.529.174,21
Qreaksi		-2.567
Qisolator	-20.305.555	
Total	**9.526.607,18**	**9.526.607,18**

5.6. *Cooler* (C-01)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Q13	39.942.196,77	
Q14		13.669.260,28
Qcw in	-7.087.805,978	
Qs out		-35.439.029,9
Qc		54624160,4
Total	**32.854.390,79**	**32.854.390,79**

5.7. Absorber (ABS-01)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Qin	1.774.095,898	
Qout		-39.165.801.876
Qreaksi		-195.352.514,2
Qisolator	-39.362.928.486	
Total	**-39.361.154.390**	**-39.361.154.390**

5.8. *Heater* (H-01)

Aliran	Input (kJ/jam)	Output (kJ/jam)
Q16	5.291.843	
Q32		42.399.868
Qs in	72.629.288	
Qs out		35.521.263
Total	**77.921.131**	**77.921.131**

5.9. *Furnace* (F-01)

Aliran	Input	Output
Q9	46.324.376,69	
Q10		220.625.466,9
Q	174.301.090,2	
Total	**220.625.466,9**	**220.625.466,9**