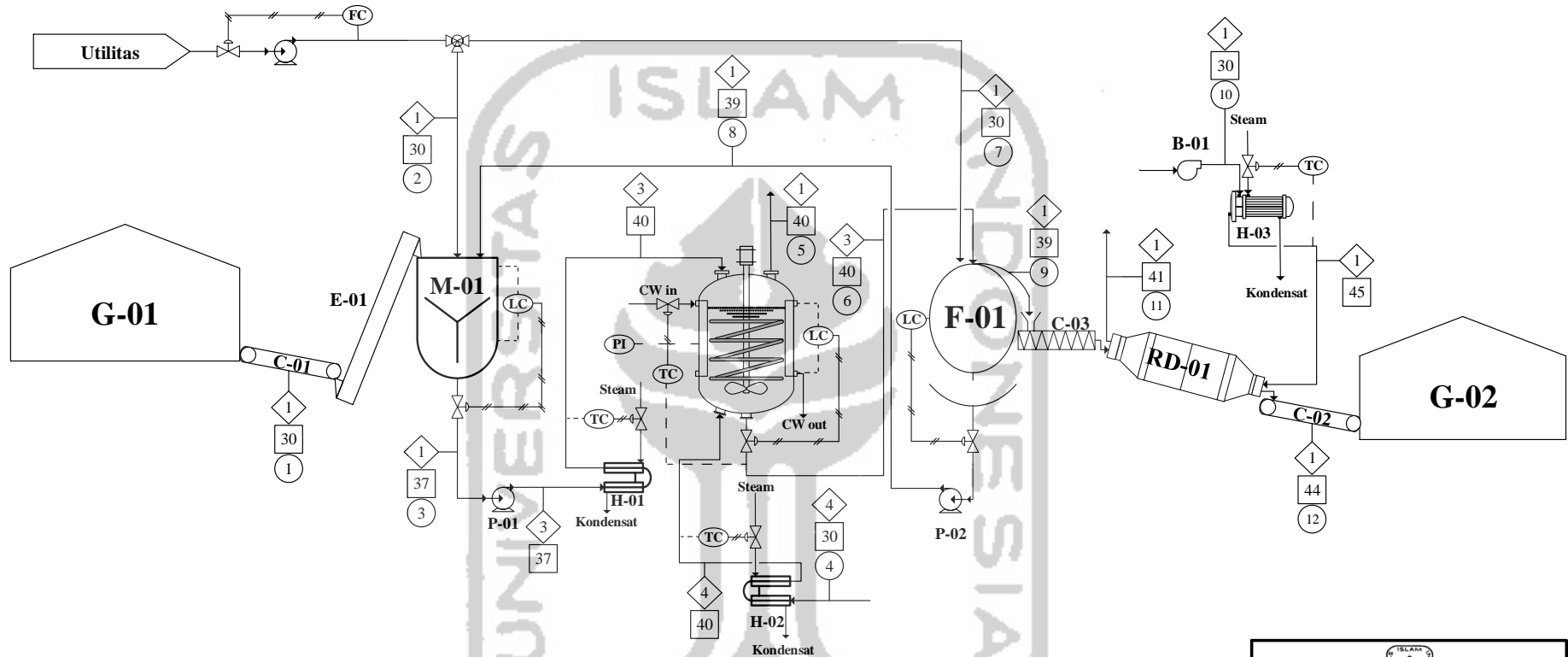


**LAMPIRAN B**

**PROCESS ENGINEERING FLOW DIAGRAM**



**PROCESS ENGINEERING FLOW DIAGRAM  
PRA RANCANGAN PABRIK SODIUM BICARBONATE DARI SODIUM CARBONATE  
DENGAN KAPASITAS PRODUKSI 100.000 TON/TAHUN**



| Komponen                        | Arus (kg/jam) |         |          |          |          |          |        |          |         |          |          |          |
|---------------------------------|---------------|---------|----------|----------|----------|----------|--------|----------|---------|----------|----------|----------|
|                                 | 1             | 2       | 3        | 4        | 5        | 6        | 7      | 8        | 9       | 10       | 11       | 12       |
| Na <sub>2</sub> CO <sub>3</sub> | 7965.774      |         | 8128.341 |          |          | 162.5668 |        | 162.5668 |         |          |          |          |
| H <sub>2</sub> O                | 10.9087       | 1341.77 | 13840.15 |          |          | 12487.47 | 1262.5 | 12487.47 | 1262.5  |          | 1261.238 | 1.2625   |
| NaHCO <sub>3(l)</sub>           |               |         | 1773.221 |          |          | 1773.221 |        | 1773.221 |         |          |          |          |
| NaHCO <sub>3(s)</sub>           |               |         |          |          |          | 12625    |        |          | 12625   |          |          | 12625    |
| CO <sub>2</sub>                 |               |         |          | 3947.613 | 641.0654 |          |        | 14423.26 |         |          |          |          |
| Udara                           |               |         |          |          |          |          |        |          |         | 781163.9 | 781163.9 |          |
| Total                           | 7976.683      | 1341.77 | 23741.71 | 3947.613 | 641.0654 | 27048.26 | 1262.5 | 28846.51 | 13887.5 | 781163.9 | 782425.2 | 12626.26 |

| Keterangan Instrumen |                     |
|----------------------|---------------------|
| FC                   | Flow Control        |
| TC                   | Temperature Control |
| LC                   | Level Control       |

| Keterangan Alat dan Bahan |                 |
|---------------------------|-----------------|
| G                         | Gudang          |
| M                         | Mixer           |
| R                         | Bubble Reaktor  |
| F                         | RDVF            |
| RD                        | Rotary Dryer    |
| HE                        | Heater          |
| C                         | Belt Conveyor   |
| SC                        | Screw Conveyor  |
| E                         | Bucket Elevator |
| P                         | Pompa           |
| B                         | Blower          |

| Keterangan Simbol |                  |
|-------------------|------------------|
| ◇                 | Tekanan, atm     |
| □                 | Suhu, °C         |
| ○                 | Nomer Arus       |
| ⊗                 | Control Valve    |
| —                 | Aliran Fluida    |
| ---               | Sinyal Elektrik  |
| —/—               | Sinyal Pneumatik |



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2019

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PRA RANCANGAN PABRIK SODIUM BICARBONATE DARI SODIUM CARBONATE  
DENGAN KAPASITAS PRODUKSI 100.000 TON/TAHUN

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DISUSUN OLEH :

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1. Cakra Warta Kasu (15 521 213)  
2. Iqbal Boswafi Fatmuharruman (15 521 185)

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DOSEN PEMBIMBING :

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