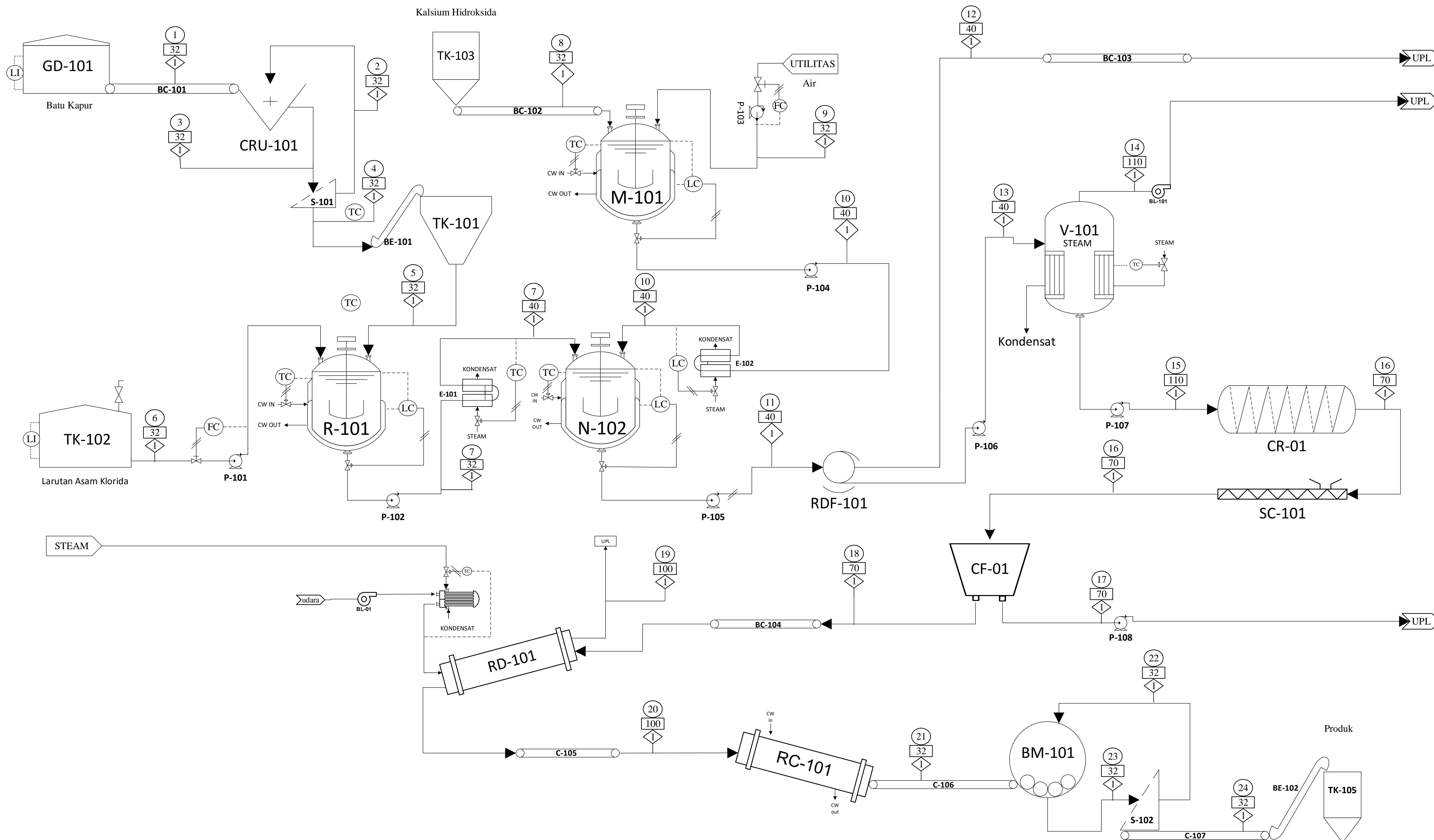


PROCESS ENGINEERING FLOW DIAGRAM

PRARANCANGAN PABRIK KIMIA KALSIMUM KLORIDA DARI ASAM KLORIDA DAN BATUAN KAPUR

DENGAN KAPASITAS 10.000 TON / TAHUN




| KETERANGAN ALAT | |
|-----------------|--------------------|
| R | REAKTOR |
| N | NEUTRALIZER |
| M | MIXER |
| V | EVAPORATOR |
| CR | CRYSTALIZER |
| CRU | CRUSHER |
| BM | BALL MILL |
| E | HEATER |
| RC | ROTARY COOLER |
| RD | ROTARY DRYER |
| RDF | ROTARI DRUM FILTER |
| CF | CENTRIFUGE |
| TK | TANGKI PENYIMPANAN |
| BC | BELT CONVEYOR |
| BE | BUCKET ELEVATOR |
| SC | SCREW CONVEYOR |
| S | SCREEN |
| BL | BLOWER |
| P | POMPA |
| GD | GUDANG |

| KETERANGAN SIMBOL | |
|-------------------|------------------|
| ○ | NOMOR ARUS |
| □ | TEMPERATURE (°C) |
| ◇ | TEKANAN (atm) |
| --- | SINYAL LISTRIK |
| — | ARUS PROSES |
| — | ARUS UTILITAS |
| ⊗ | CONTROL VALVE |
| ⊘ | UDARA TEKAN |

| KETERANGAN INSTRUMENT | |
|-----------------------|------------------------|
| FC | FLOW CONTROLLER |
| TC | TEMPERATURE CONTROLLER |
| LC | LEVEL CONTROLLER |
| LI | LEVER INDIKATOR |

| Komponen | Arus (kg/jam) | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---------------|-------|--------|--------|--------|----------|----------|--------|--------|--------|----------|-------|----------|---------|----------|----------|-------|----------|-------|----------|----------|-------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| CaCO ₃ | 715,88 | 35,79 | 751,68 | 715,88 | 715,88 | | 7,16 | | | | | | | | | | | | | | | | | |
| MgCO ₃ | 20,17 | 1,01 | 21,18 | 20,17 | 20,17 | | 0,20 | | | | | | | | | | | | | | | | | |
| HCl | | | | | | 641,66 | 106,94 | | | | | | | | | | | | | | | | | |
| H ₂ O | | | | | | 1.092,22 | 1.224,07 | | 144,22 | 144,22 | 1.419,70 | 14,20 | 1.405,50 | 1004,48 | 401,02 | 71,02 | 67,47 | 3,55 | 1,03 | 2,52 | 2,52 | 0,13 | 2,65 | 2,52 |
| Ca(OH) ₂ | | | | | | | | 122,86 | | 122,86 | 5,85 | 0,06 | 5,79 | | 5,79 | 5,79 | 5,50 | 0,29 | | 0,29 | 0,29 | 0,01 | 0,30 | 0,29 |
| CaCl ₂ | | | | | | | 786,68 | | | | 970,14 | 9,70 | 960,44 | | 960,44 | 19,21 | 18,25 | 0,96 | | 0,96 | 0,96 | 0,05 | 1,01 | 0,96 |
| MgCl ₂ | | | | | | | 22,58 | | | | 4,74 | 0,05 | 4,70 | | 4,70 | 4,70 | 4,46 | 0,23 | | 0,23 | 0,23 | 0,01 | 0,25 | 0,23 |
| CO ₂ | | | | | | | 322,30 | | | | | | | | | | | | | | | | | |
| Mg(OH) ₂ | | | | | | | | | | | 11,03 | 10,92 | 0,11 | | 0,11 | 0,11 | | 0,11 | 0,001 | 0,11 | 0,11 | 0,01 | 0,11 | 0,11 |
| CaCl ₂ .H ₂ O | | | | | | | | | | | | | | | | 1.271,22 | | 1.271,22 | 12,71 | 1.258,51 | 1.258,51 | 62,93 | 1.321,44 | 1.258,51 |
| Total | 736,05 | 36,80 | 772,85 | 736,05 | 736,05 | 1.733,88 | 2.469,93 | 122,86 | 144,22 | 267,08 | 2411,46 | 34,92 | 2.376,54 | 1004,48 | 1.372,05 | 100,83 | 95,69 | 1.276,37 | 13,74 | 1.262,63 | 1.262,63 | 63,13 | 1.325,76 | 1.262,63 |



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KAPASITAS 10.000 TON/TAHUN

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