**Tabel 1.** Daftar Kebutuhan *(List of Requirement)* Kompor *Burner*

|  |  |  |
| --- | --- | --- |
| **No** | **Uraian Kebutuhan** | **Keterangan** |
| 1 | Spesifikasi dan Geometri | * Dimensi kompor *burner* sesuai standart * Bentuk kompor *burner* sesuai standart |
| 2 | Aman dan Nyaman | * Frame kompor kuat menahan beban sebesar 5 kg * Nyaman dalam pengoperasiannya. |
| 3 | Material dan Komponen | * Besi siku dengan ukuran 3 x 3 * Komponen alat banyak tersedia di pasaran |
| 4 | Fungsi | * Berfungsi sebagai kompor alternatif pengganti kompor LPG |
| 5 | Pemeliharaan | * Semua komponen mudah untuk di *assembly* * Setiap *part* mudah untuk dibersihkan |
| 6 | Manufaktur | * Semua *part* bisa di manufaktur dengan proses permesinan konvensional dan non konvensional |

**Tabel 2.** Tabel Pemilihan Komponen

|  |  |  |
| --- | --- | --- |
| **Sub-Bagian** | **Konsep A** | **Konsep B** |
| Material | Siku | Holow |
| Tangki Oli  atau Minyak | Plat Galvanis | Pipa Besi |
| Kran | Kran Angin | Kran Air |
| Saluran Oli atau Minyak | Pipa Besi Kecil | Selang |
| Pendorong Api | Fan DC 12V | Blower Keong 220V |

**Tabel 3.** Perbandingan Konsep A dan Konsep B

|  |  |  |
| --- | --- | --- |
| Desain | Kelebihan | Kekurangan |
| Konsep A | * Bisa menompang beban maksimal 5 Kg * Komponendari kompor *burner* menyatu menjadi satu dengan rangka kompor * Mudah untuk dipindah-pindahkan, cukup dengan mengangkat *heandle* yang sudah ada * Lebih efisien dalam perakitan | * Apabila komponen kompor ada kerusakan, maka perlu merusak sambungan las |
| Konsep B | * Bisa menompang beban maksimal 5 Kg * Komponen kompor *burner* dapat dibongkar pasang | * Jika kompor ingin di pindahkan ke tempat yang di inginkan, maka *part-part* perlu dirakit terlebih dahulu * Komponen lebih banyak |

**Tabel 4.** Perhitungan *Desain For Assembly* Kompor *Burner* Konsep A

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Part ID No | Name Of Assembly | Number Of Time The Operation Is Carried Out Consecutivity | Manual Handling Code | Manual Handling Time Per Part | Manual Insertion Code | Manual Insertion Time Per Part | Operation Time,Second = [(5) + (7)] | Operation Cost (Rp) x (8) | Figures For Estimation 0f Theoritical Minimum Part |
| 1 | Rangka Kompor | 1 | 3.0 | 1.95 | 9.6 | 12 | 13.95 |  | 0 |
| 2 | Tungku | 1 | 1.0 | 1.5 | 9.6 | 12 | 13.5 |  | 0 |
| 3 | Burner | 1 | 0.3 | 1.69 | 0.0 | 1.5 | 3.19 |  | 1 |
| 4 | Tutup Tangki | 1 | 0.3 | 1.69 | 0.0 | 1.5 | 3.19 |  | 1 |
| 5 | Tangki Oli atau Minyak | 1 | 3.3 | 2.51 | 9.6 | 12 | 14.51 |  | 0 |
| 6 | Karet Besi Siku | 4 | 1.0 | 1.5 | 0.0 | 1.5 | 12 |  | 1 |
| 7 | Dimmer | 1 | 1.1 | 1.8 | 9.6 | 12 | 13.8 |  | 0 |
| 8 | Fan DC 12V | 1 | 1.0 | 1.5 | 0.0 | 1.5 | 3 |  | 1 |
| 9 | Kran | 1 | 1.0 | 1.5 | 9.2 | 5 | 6.5 |  | 1 |
| 10 | Pipa Oli atau Minyak | 1 | 1.3 | 2.06 | 9.6 | 12 | 13.3 |  | 0 |
| 11 | Pipa Angin | 1 | 1.3 | 2.06 | 9.6 | 12 | 13.3 |  | 0 |
| 12 | Heandle Kompor | 2 | 1.0 | 1.5 | 9.1 | 7 | 17 |  | 0 |
| 13 | Paku Rivet | 4 | 0.1 | 1.43 | 9.1 | 7 | 33,72 |  | 0 |
| Total |  | 20 |  |  |  |  | 160.96 |  | 5 |
|  | | | | | | | TM | CM | NM |

**Tabel 5.** Perhitungan *Desain For Assembly* Kompor *Burner* Konsep B

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Part ID No | Name Of Assembly | Number Of Time The Operation Is Carried Out Consecutivity | Manual Handling Code | Manual Handling Time Per Part | Manual Insertion Code | Manual Insertion Time Per Part | Operation Time,Second = [(5) + (7)] | Operation Cost (Rp) x (8) | Figures For Estimation 0f Theoritical Minimum Part |
| 1 | Rangka Kompor | 1 | 3.0 | 1.95 | 9.6 | 12 | 13.95 |  | 0 |
| 2 | Tungku | 1 | 1.0 | 1.5 | 9.6 | 12 | 13.5 |  | 1 |
| 3 | Burner | 1 | 0.3 | 1.69 | 0.0 | 1.5 | 3.19 |  | 1 |
| 4 | Tutup Tangki | 1 | 0.3 | 1.69 | 0.0 | 1.5 | 3.19 |  | 1 |
| 5 | Tangki Oli atau Minyak | 1 | 3.3 | 2.51 | 9.6 | 12 | 14.51 |  | 1 |
| 6 | Kran | 1 | 1.0 | 1.5 | 9.2 | 5 | 6.5 |  | 1 |
| 7 | Blower Keong | 1 | 1.0 | 1.5 | 0.0 | 1.5 | 3 |  | 1 |
| 8 | Sambungan Burner | 1 | 1.0 | 1.5 | 0.0 | 1.5 | 3 |  | 0 |
| 9 | Pipa Angin | 1 | 1.3 | 2.06 | 9.6 | 12 | 14.06 |  | 1 |
| 10 | Selang Oli atau Minyak | 1 | 1.3 | 2.06 | 9.6 | 12 | 14.06 |  | 1 |
| 11 | Dudukan Blower Keong | 1 | 3.0 | 1.95 | 9.6 | 12 | 13.95 |  | 1 |
| 12 | Karet Besi Holow | 8 | 1.0 | 1.5 | 0.0 | 1.5 | 24 |  | 1 |
| 13 | Mur | 8 | 1.2 | 1.88 | 9.2 | 5 | 55.04 |  | 1 |
| 14 | Baut | 8 | 1.0 | 1.5 | 9.2 | 5 | 52 |  | 1 |
| Total |  | 35 |  |  |  |  | 233,95 |  | 12 |
|  | | | | | | | TM | CM | NM |