

Lampiran 7. Data dan Perhitungan Kalor Input

Beban	0kg	10kg	20kg	30kg
fc(km/kg)	32,870	30,951	29,257	27,055
Q input pertamax plus malam hari (km/MJ)	0,756	0,712	0,673	0,622

Beban	0kg	10kg	20kg	30kg
fc(km/kg)	34,211	32,820	30,604	28,100
Q input pertamax plus siang hari (km/MJ)	0,786	0,754	0,704	0,646

Beban	0kg	10kg	20kg	30kg
fc (km/kg)	65,657	52,227	44,192	37,672
Qb LPG malam hari (km/MJ)	1,437	1,143	0,967	0,824

Beban	0kg	10kg	20kg	30kg
fc (km/kg)	70,708	59,688	47,381	40,673
Qb LPG siang hari (km/MJ)	1,547	1,306	1,037	0,890

Contoh perhitungan Qb pertamax plus malam :

Property	LPG	Gasoline
Composition (vol.%)	30C <sub>3</sub> H <sub>8</sub> -70C <sub>4</sub> H <sub>10</sub>	C <sub>7</sub> H <sub>15</sub>
Lower heating value at 1 atm and 15 °C (MJ/kg)	45.7	43.5
Density at 1 atm and 15 °C (kg/m <sup>3</sup> )	560 (liquid)	735 (liquid)
Flame speed (m/s)	0.382	0.375
Flammability limits (in air) (vol.%)	2.15-9.6	1.4-7.6
Research octane number	105	95
Auto ignition temperature (°C)	485-545	257
Stoichiometric A/F ratio	15.5	14.9

Sumber: Erkus, Baris dkk : 2013

Contoh perhitungan kalor inputan pertamax plus malam hari

$$\text{Kalor inputan} = \text{fc/LHV}_{\text{gasoline}}$$

$$\text{Kalor Inputan} = \frac{32,870 \text{ km/kg}}{43,5 \text{ MJ/kg}}$$

$$\text{Kalor Inputan} = 0,756 \text{ km/MJ}$$

