LAMPIRAN

Table 5-1 Sifat-sifat udara

Tabel C.5*b* Sifat-sifat udara (satuan SI)

T, K	c_p, J/(kg·K)	μ, kg/(m·s)	ν, m²/s (1 atm)	k, W/(m·K)	Pr
100	1,0266 × 10³	0,6924 × 10⁻⁵	1,923 × 10⁻⁶	0,009246	0,770
150	1,0099	1,0283	4,343	0,013735	0,753
200	1,0061	1,3289	7,490	0,01809	0,739
250	1,0053	1,488	9,49	0,02227	0,722
300	1,0057	1,983	15,68	0,02624	0,708
350	1,0090	2,075	20,76	0,03003	0,697
400	1,0140	2,286	25,90	0,03365	0,689
450	1,0207	2,484	28,86	0,03707	0,683
500	1,0295	2,671	37,90	0,04038	0,680
550	1,0392	2,848	44,34	0,04360	0,680
600	1,0551	3,018	51,34	0,04659	0,680
650	1,0635	3,177	58,51	0,04953	0,682
700	1,0752	3,332	66,25	0,05230	0,684
750	1,0856	3,481	73,91	0,05509	0,686
800	1,0978	3,625	82,29	0,05779	0,689
850	1,1095	3,765	90,75	0,06028	0,692
900	1,1212	3,899	99,3	0,06279	0,696
950	1,1321	4,023	108,2	0,06525	0,699
1000	1,1417	4,152	117,8	0,06752	0,702
1100	1,160	4,44	138,6	0,0732	0,704
1200	1,179	4,69	159,1	0,0782	0,707
1300	1,197	4,93	182,1	0,0837	0,705
1400	1,214	5,17	205,5	0,0891	0,705
1500	1,230	5,40	229,1	0,0946	0,705
1600	1,248	5,63	254,5	0,100	0,705

Table 5-2 Sifat-sifat air

Tabel C.3 Sifat-sifat cairan jenuh (satuan-satuan SI)

T, °C	ρ, kg/m³	c_p, J/(kg·K)	ν, m²/s	k, W/(m·K)	α, m²/s	Pr	β, K⁻¹
Air, H_2O							
0	1.002,28	4,2178 × 10³	1,788 × 10⁻⁶	0,552	1,308 × 10⁻⁷	13,6	
20	1.000,52	4,1818	1,006	0,597	1,430	7,02	0,18 × 10⁻³
40	994,59	4,1784	0,658	0,628	1,512	4,34	
60	985,46	4,1843	0,478	0,651	1,554	3,02	
80	974,08	4,1964	0,364	0,668	1,636	2,22	
100	960,63	4,2161	0,294	0,680	1,680	1,74	
120	945,25	4,250	0,247	0,685	1,708	1,446	
140	928,27	4,283	0,214	0,684	1,724	1,241	
160	909,69	4,342	0,190	0,680	1,729	1,099	
180	889,03	4,417	0,173	0,675	1,724	1,004	
200	866,76	4,505	0,160	0,665	1,706	0,937	
220	842,41	4,610	0,150	0,652	1,680	0,891	
240	815,66	4,756	0,143	0,635	1,639	0,871	
260	785,87	4,949	0,137	0,611	1,577	0,874	
280	752,55	5,208	0,135	0,580	1,481	0,910	
300	714,26	5,728	0,135	0,540	1,324	1,019	

Table 5-2 Nilai konduktivitas thermal beberapa bahan

Thermal conductivities of some materials at room conditions

Material	Thermal conductivity, W/m · K
Diamond	2300
Silver	429
Copper	401
Gold	317
Aluminium	237
Iron	80.2
Mercury (*ℓ*)	8.54
Glass	1.4
Brick	0.72
Water (*ℓ*)	0.613
Human skin	0.37
Wood (oak)	0.17
Helium (*g*)	0.152
Soft rubber	0.13
Glass fiber	0.043
Air (*g*)	0.026
Urethane, rigid foam	0.026

Sumber : Cengel, Y.A & Moran M.J, Thermodynamics an Engineering Aproach

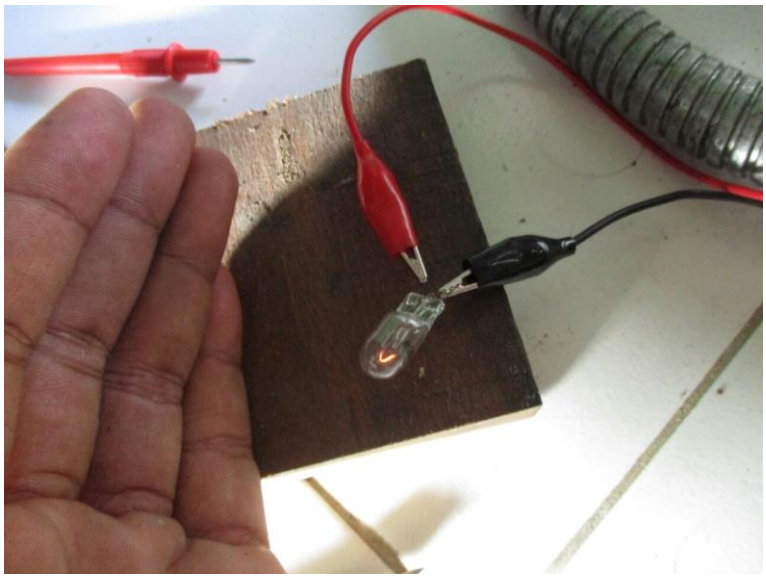
Gambar 1 skematis alat pengujian

Gambar 2 Mengukur berat panci stainless steel

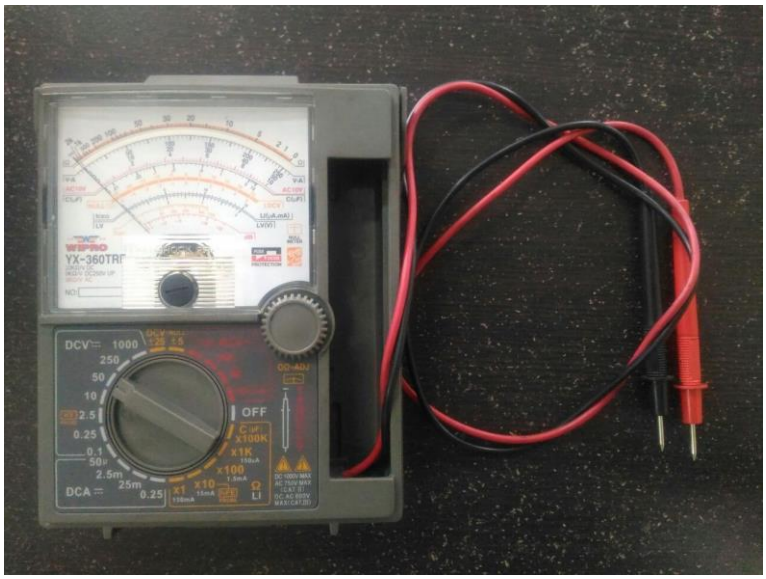
Gambar 3 Mengukur berat panci aluminium

Gambar 4 Kompor gas LPG

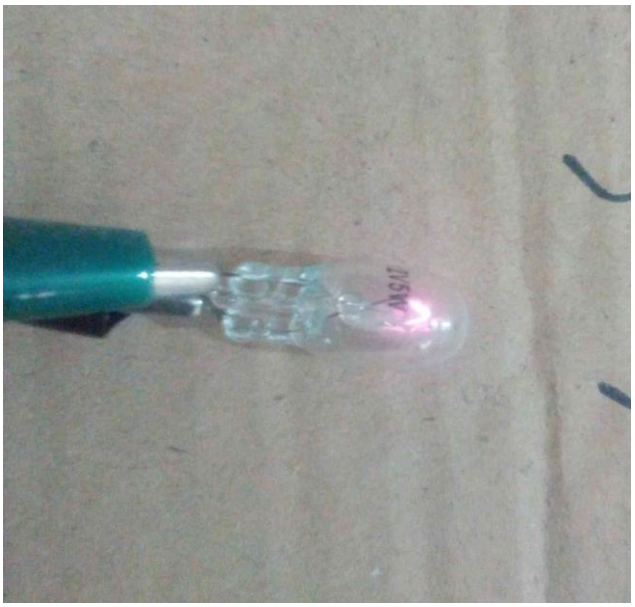
Gambar 5 Skematis termoelektrik generator



Gambar 6 Nyala lampu sangat redup



Gambar 7 Alat ukur avo meter


Gambar 8 Nyala lampu redup

Gambar 9 Nyala lampu sedang

Gambar 10 Alat ukur berat gas LPG

Gambar 11 Alat ukur termo meter