

LAMPIRAN
TABEL PENGUJIAN

Tabel L.1 Data hasil pengujian torsi pada campuran premium – pertamax.

premium 100% Putaran (rpm)	Torsi (N.m)	premium 90%		premium 80%		premium 70%		premium 60%		premium 50%		premium 40%		premium 30%		premium 20%		premium 10%		pertamax 100%	
		Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)
4000	7.7	4000	7.54	4000	7.48	4000	7.32	4000	6.99	4000	8.29	4000	8.26	4000	8.55	4000	8.59	4000	8.36	4000	7.66
4250	8	4250	8.22	4250	8.18	4250	7.83	4250	8.4	4250	8.53	4250	8.48	4250	8.71	4250	8.72	4250	8.56	4250	8.12
4500	8.95	4500	9	4500	9	4500	9.12	4500	9.16	4500	9.18	4500	9	4500	9	4500	8.93	4500	9	4500	8.88
4750	9.14	4750	9.25	4750	9.22	4750	9.32	4750	9.32	4750	9.39	4750	9.21	4750	9.27	4750	9.21	4750	9.28	4750	9
5000	9.25	5000	9.35	4965	9.33	5000	9.41	5000	9.41	5000	9.49	5000	9.34	5000	9.39	5000	9.33	5000	9.36	5000	9.14
5250	9.35	5230	9.41	5166	9.35	5184	9.47	5250	9.49	5223	9.54	5237	9.4	5250	9.47	5250	9.38	5250	9.44	5249	9.21
5383	9.36	5285	9.41	5343	9.36	5325	9.49	5357	9.5	5351	9.55	5361	9.41	5418	9.48	5282	9.39	5400	9.46	5416	9.2
5500	9.34	5500	9.35	5500	9.37	5500	9.46	5500	9.47	5501	9.53	5522	9.37	5500	9.46	5500	9.35	5579	9.43	5623	9.15
5750	9.3	5750	9.36	5750	9.34	5750	9.41	5750	9.43	5750	9.48	5750	9.34	5750	9.4	5750	9.34	5750	9.38	5784	9.12
6000	9.23	6000	9.29	6000	9.28	6000	9.37	6000	9.37	6000	9.39	6000	9.28	6000	9.37	6000	9.29	6000	9.34	6000	9
6250	9	6250	9.15	6250	9.17	6250	9.2	6250	9.2	6250	9.26	6250	9.15	6250	9.2	6250	9.19	6250	9.22	6250	8.94
6500	8.83	6500	8.91	6500	8.91	6500	8.96	6500	8.95	6500	9	6500	8.88	6500	8.98	6500	8.97	6500	9	6500	8.71
6750	8.55	6750	8.63	6750	8.64	6750	8.67	6750	8.65	6750	8.72	6750	8.66	6750	8.72	6750	8.73	6750	8.75	6750	8.46
7000	8.35	7000	8.39	7000	8.42	7000	8.43	7000	8.43	7000	8.46	7000	8.43	7000	8.5	7000	8.47	7000	8.48	7000	8.24
7250	8.18	7250	8.21	7250	8.28	7250	8.58	7250	8.19	7250	8.28	7250	8.25	7250	8.3	7250	8.26	7250	8.27	7250	8.1
7454	8	7484	8	7469	8	7473	8	7488	8	7499	8.12	7500	8.11	7498	8.14	7500	8	7500	8	7500	7.91
7500	7.92	7560	7.99	7615	8	7541	7.99	7566	7.92	7562	8	7652	8	7601	8	7650	7.95	7641	8	7654	7.83
7750	7.67	7750	7.72	7695	7.76	7750	7.7	7750	7.79	7750	7.8	7750	7.86	7751	8.17	7750	7.85	7750	7.81	7750	7.63
8000	7.26	8000	7.32	8000	7.37	8000	7.3	8000	7.36	8000	7.41	8000	7.4	8000	7.44	8000	7.47	8000	7.42	8000	7.24
8250	6.89	8250	6.95	8250	7	8250	6.92	8250	6.91	8250	7	8250	7	8250	7	8250	7	8250	7	8250	6.85
8500	6.55	8500	6.58	8500	6.64	8500	6.3	8500	6.55	8500	6.57	8500	6.63	8500	6.71	8500	6.68	8500	6.62	8500	6.57

Tabel L.2 Data hasil pengujian daya pada campuran premium – Pertamina.

premium 100%	premium 90%	premium 80%	premium 70%	premium 60%	premium 50%	premium 40%	premium 30%	premium 20%	premium 10%	pertamax
Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)	Putaran (rpm)
Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)	Daya (kw)
4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
3.43	3.33	3.82	3.2	3	3.75	3.8	3.9	3.95	3.85	3.5
4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250
3.6	3.7	3.65	3.47	3.92	3.87	3.92	4	4	3.97	3.72
4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
4.22	4.25	4.27	4.3	4.39	4.34	4.27	4.22	4.22	4.25	4.25
4750	4750	4750	4750	4750	4750	4750	4750	4750	4750	4750
4.54	4.62	4.59	4.64	4.67	4.64	4.59	4.59	4.57	4.62	4.59
5000	5000	4965	5000	5000	5000	5000	5000	5000	5000	5000
4.84	4.89	4.87	4.94	4.92	4.97	4.89	4.92	4.87	4.89	4.84
5250	5230	5166	5184	5250	526	5237	5250	5250	5250	5249
5.14	5.14	5.14	5.19	5.21	5.26	5.14	5.19	5.14	5.14	5
5383	5285	5343	5325	5357	5351	5361	5282	5282	5282	5416
5.26	5.19	5.31	5.34	5.29	5.34	5.29	5.31	5.24	5.29	5.17
5500	5500	5500	5500	5500	5501	5522	5500	5579	544	5623
5.46	5.39	5.51	5.46	5.46	5.49	5.49	5.44	5.39	5.44	5.39
5750	5750	5750	5750	5750	5750	5750	5750	5750	5750	5784
5.59	5.66	5.64	5.69	5.71	5.71	5.64	5.69	5.66	5.66	5.59
6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
5.81	5.86	5.74	5.91	5.89	5.91	5.84	5.91	5.84	5.91	5.79
6250	6250	6250	6250	6250	6250	6250	6250	6250	6250	6250
5.96	5.99	6	6	6	6	6	6	6	6	5.94
6500	6500	6500	6500	6500	6500	6500	6500	6500	6500	6500
6	6	6	6.11	6.11	6.16	6	6.13	6.11	6.16	6
6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
6	6.13	6.11	6.13	6.13	6.16	6.13	6.18	6.21	6.18	6
7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000
6.13	6.18	6.18	6.21	6.23	6.21	6.21	6.26	6.21	6.26	6.16
7250	7250	7250	7250	7250	7250	7250	7250	7250	7250	7250
6.26	6.26	6.31	6.28	6.23	6.31	6.28	6.31	6.28	6.31	6.23
7454	7484	7469	7473	7488	7499	7498	7500	7498	7500	7500
6.28	6.36	6.38	6.36	6.33	6.43	6.38	6.43	6.43	6.38	6.31
7500	7560	7615	7541	7566	7562	7652	7650	7601	7641	7500
6.31	6.36	6.38	6.36	6.38	6.43	6.46	6.43	6.41	6.41	6.36
7750	7750	7695	7750	7750	7750	7751	7750	7750	7750	7750
6.28	6.28	6.33	6.31	6.36	6.36	6.41	6.41	6.41	6.38	6.31
8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
6.11	6.18	6.21	6.16	6.18	6.23	6.23	6.28	6.31	6.26	6.16
8250	8250	8250	8250	8250	8250	8250	8250	8250	8250	8250
5.99	6	6	6	5.99	6	6	6.16	6.18	6.11	6
8500	8500	8500	8500	8500	8500	8500	8500	8500	8500	8500
5.89	5.91	5.94	5.84	5.89	5.89	5.96	6	6	5.91	5.89

Tabel L.3 Data hasil pengujian daya pada campuran premium – etanol.

Premium 100%		E 5%		E 10%		E 15%		E 20%	
Putaran (rpm)	Daya (kw)	Putaran (rpm)	Daya (kw)	Putaran (rpm)	Daya (kw)	Putaran (rpm)	Daya (kw)	Putaran (rpm)	Daya (kw)
4000	3.43	4000	3.7	4000	3.62	4000	3.45	4000	3.45
4250	3.6	4250	3.8	4250	3.72	4250	3.62	4250	3.6
4500	4.22	4500	4.2	4500	4	4500	4	4500	4
4750	4.54	4750	4.47	4750	4.44	4750	4.44	4750	4.44
5000	4.84	5000	4.79	5000	4.79	5000	4.77	5000	4.74
5250	5.14	5250	5	5227	5	5250	5	5250	4.99
5383	5.26	5349	5.17	5259	5.12	5437	5.21	5498	5.26
5500	5.46	5500	5.31	5500	5.31	5500	5.31	5569	5.41
5750	5.59	5750	5.56	5750	5.51	5750	5.51	5750	5.54
6000	5.81	6000	5.79	6000	5.74	6000	5.76	6000	5.71
6250	5.96	6250	5.96	6250	5.94	6250	5.89	6250	5.86
6500	6	6500	6	6500	6	6500	6	6500	5.99
6750	6	6750	6.11	6750	6	6750	6	6750	6
7000	6.13	7000	6.16	7000	6.13	7000	6.11	7000	6.11
7250	6.26	7250	6.23	7250	6.26	7250	6.26	7250	6.23
7454	6.28	7500	6.36	7500	6.33	7500	6.33	7500	6.38
7500	6.31	7724	6.38	7687	6.36	7708	6.38	7750	6.41
7750	6.28	7751	6.41	7793	6.38	7758	6.38	7829	6.41
8000	6.11	8000	6.33	8000	6.28	8000	6.26	8000	6.33
8250	5.99	8250	6.18	8250	6.13	8250	6.21	8250	6.23
8500	5.89	8500	6	8500	6	8500	6	8500	6

Tabel L.4 Data hasil pengujian torsi pada campuran premium – etanol.

Premium 100 %		E 5%		E 10%		E 15%		E 20%	
Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)	Putaran (rpm)	Torsi (N.m)
4000	7.7	4000	8	4000	7.94	4000	7.73	4000	7.65
4250	8	4250	8.24	4250	8.14	4250	7.96	4250	7.91
4500	8.95	4500	8.8	4500	8.62	4500	8.65	4500	8.64
4750	9.14	4750	9	4750	8.95	4750	8.91	4750	8.93
5000	9.25	5000	9.15	5000	9.13	5000	9	5000	9.06
5250	9.35	5250	9.23	5227	9.2	5250	9.15	5250	9.1
5383	9.36	5349	9.25	5259	9.21	5437	9.2	5498	9.13
5500	9.34	5500	9.21	5500	9.19	5500	9.18	5569	9.14
5750	9.3	5750	9.19	5750	9.13	5750	9.13	5750	9.1
6000	9.23	6000	9.18	6000	9	6000	9.12	6000	9
6250	9	6250	9	6250	9	6250	8.97	6250	8.94
6500	8.83	6500	8.84	6500	8.81	6500	8.77	6500	8.75
6750	8.55	6750	8.6	6750	8.6	6750	8.51	6750	8.3
7000	8.35	7000	8.38	7000	8.34	7000	8.32	7000	8.27
7250	8.18	7250	8.2	7250	8.21	7250	8.18	7250	8.19
7454	8	7500	8	7500	8	7500	8.05	7500	8
7500	7.92	7724	7.96	7687	7.83	7708	7.98	7750	7.89
7750	7.67	7751	7.85	7793	7.79	7758	7.82	7829	7.84
8000	7.26	8000	7.49	8000	7.46	8000	7.46	8000	7.51
8250	6.89	8250	7	8250	7	8250	7.16	8250	7.2
8500	6.55	8500	6.57	8500	6.72	8500	6.74	8500	6.77

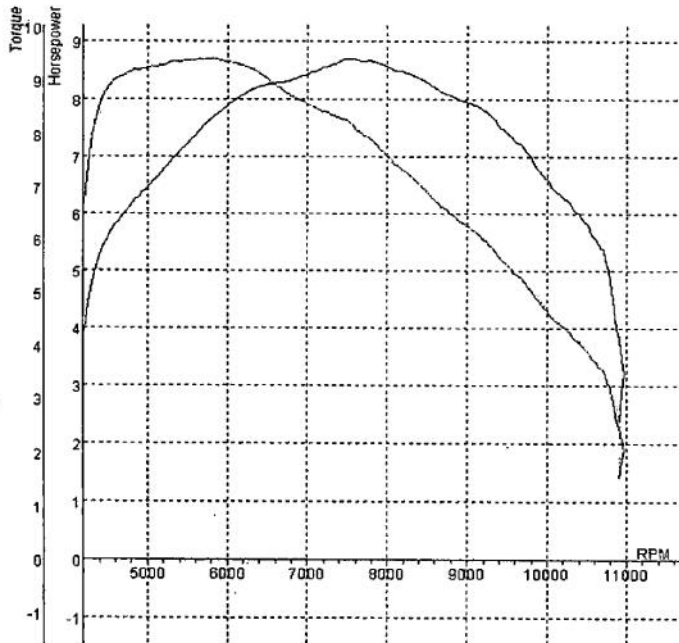
Tabel L.5 Data hasil pengujian konsumsi bahan bakar (*mf*) pada campuran premium – pertamax.

premium 100%		premium 90%		premium 80%		premium 70%		premium 60%		premium 50%		premium 40%		premium 30%		premium 20%		premium 10%		pertamax 100%	
rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf
4000	0.28	4000	0.28	4000	0.29	4000	0.27	4000	0.27	4000	0.27	4000	0.27	4000	0.26	4000	0.26	4000	0.26	4000	0.27
5000	0.32	5000	0.33	5000	0.33	5000	0.32	5000	0.34	5000	0.33	5000	0.32	5000	0.32	5000	0.32	5000	0.33	5000	0.31
6000	0.36	6000	0.39	6000	0.42	6000	0.34	6000	0.41	6000	0.4	6000	0.4	6000	0.38	6000	0.39	6000	0.38	6000	0.36
7000	0.49	7000	0.48	7000	0.48	7000	0.41	7000	0.46	7000	0.46	7000	0.48	7000	0.45	7000	0.46	7000	0.46	7000	0.45
8000	0.59	8000	0.56	8000	0.58	8000	0.49	8000	0.56	8000	0.54	8000	0.55	8000	0.51	8000	0.54	8000	0.54	8000	0.51

Tabel L.6 Data hasil pengujian konsumsi bahan bakar (*mf*) pada campuran premium – etanol.

premium 100%		E5%		E10%		E15%		E20%	
rpm	mf	rpm	mf	rpm	mf	rpm	mf	rpm	mf
4000	0.28	4000	0.27	4000	0.28	4000	0.3	4000	0.29
5000	0.32	5000	0.3	5000	0.31	5000	0.33	5000	0.33
6000	0.36	6000	0.37	6000	0.37	6000	0.4	6000	0.41
7000	0.49	7000	0.43	7000	0.48	7000	0.48	7000	0.5
8000	0.59	8000	0.48	8000	0.58	8000	0.53	8000	0.59

TEST NAME	MAX POWER	MAX TORQUE	Temp. °C	Humidity %	Pressure	KMH	Date/Time
JUPITER Z 110 T024	8.7 (8.7) / 7518	9.41 (9.41) / 5735	31.2 °C	64 %	1000.0 mbar	91.6	7/16/2013 2:12:12 PM



DATA FOR TEST: JUPITER Z 110 T024

Comments
 100% PREMIUM

RPM	HP (HPQ (N*M*M))	T
4000	4.3	7.20
4250	4.6	7.62
4500	5.7	8.93
4750	6.1	9.14
5000	6.5	9.25
5250	6.9	9.34
5500	7.2	9.37
5735	7.6	9.41
5750	7.6	9.41
6000	7.9	9.35
6250	8.1	9.23
6500	8.3	9.01
6750	8.3	8.73
7000	8.4	8.55
7250	8.6	8.39
7500	8.7	8.22
7518	8.7	8.22
7750	8.7	7.92
8000	8.5	7.56
8250	8.4	7.24
8500	8.3	6.91
8750	8.1	6.53
9000	7.9	6.24
9250	7.7	5.91
9500	7.4	5.50
9750	7.1	5.11
10000	6.6	4.65
10250	6.2	4.29
10500	5.8	3.89
10750	5.0	3.28

LOSSES: 0.0 HP 0.0N*M*M
 TOTAL ENGINE: 8.7HP 9.41N*M*M