

## LAMPIRAN

Tabel Nilai Torsi

TORSI						
No	RPM	Pertalite 100% (N.m)	Pertalite 95%vol.-PO 5%vol. (N.m)	Pertalite 90%vol.-PO 10%vol. (N.m)	Pertalite 80%vol.-PO 20%vol. (N.m)	Pertalite 70%vol.-PO 30%vol. (N.m)
1	2000	24,88	16,61	18,47	21,44	24,62
2	2250	22,02	17,05	18,03	19,8	23,09
3	2500	20,29	17,64	18,12	18,47	20,43
4	2750	19,35	17,53	17,86	17,69	19,05
5	3000	18,51	17,35	17,5	17,14	18,07
6	3250	17,28	16,66	16,81	16,24	16,89
7	3500	15,98	15,56	15,72	15,34	15,48
8	3750	14,78	14,62	14,64	14,36	14,08
9	4000	13,63	13,81	13,69	13,59	13,08
10	4250	12,88	13,2	12,85	12,91	12,98
11	4500	12,51	12,64	12,3	12,33	12,16
12	4750	11,53	11,56	11,64	11,35	11,21
13	5000	10,7	10,76	10,73	10,45	10,4
14	5250	10,04	10,07	10,06	9,73	9,73
15	5500	9,34	9,39	9,49	9,25	9,24
16	5750	8,73	8,74	8,85	8,51	8,49
17	6000	8,25	8,34	8,28	8,04	8,08
18	6250	7,82	7,94	7,97	7,84	7,77
19	6500	7,44	7,64	7,7	7,43	7,54
20	6750	6,88	7,36	7,29	7,13	7,13
21	7000	6,55	6,92	6,74	6,5	6,45
22	7250	6,31	6,7	6,54	6,31	6,31
23	7500	6	6,49	6,27	6,16	6,12
24	7750	5,69	6,17	6,13	5,89	5,94
25	8000	5,27	6,1	5,73	5,73	5,55
26	8250	4,77	5,48	5,35	5,19	5,23
27	8500	4,16	4,91	4,87	4,87	4,76

**Tabel Nilai Daya**

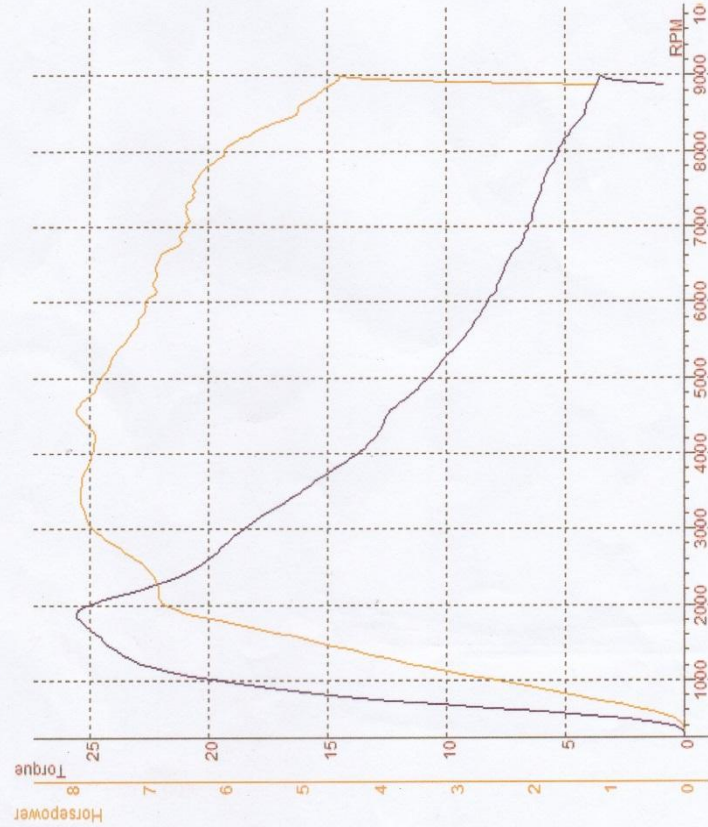
DAYA						
No	RPM	Pertalite 100% (Hp)	Pertalite 95%vol.-PO 5%vol. (Hp)	Pertalite 90%vol.-PO 10%vol. (Hp)	Pertalite 80%vol.-PO 20%vol. (Hp)	Pertalite 70%vol.-PO 30%vol. (Hp)
1	2000	6,8	4,6	5,1	6	6,8
2	2250	6,9	5,3	5,6	6,1	7,1
3	2500	7,1	6,1	6,3	6,3	7,1
4	2750	7,4	6,7	6,8	6,8	7,3
5	3000	7,7	7,2	7,4	7,1	7,6
6	3250	7,8	7,5	7,6	7,4	7,7
7	3500	7,9	7,7	7,7	7,5	7,6
8	3750	7,8	7,7	7,7	7,5	7,4
9	4000	7,7	7,7	7,7	7,6	7,4
10	4250	7,7	7,9	7,7	7,7	7,8
11	4500	7,9	8	7,8	7,8	7,7
12	4750	7,7	7,7	7,8	7,6	7,5
13	5000	7,6	7,6	7,6	7,4	7,3
14	5250	7,4	7,5	7,5	7,2	7,2
15	5500	7,2	7,3	7,4	7,2	7,2
16	5750	7,1	7,1	7,2	6,9	6,9
17	6000	7	7,1	7	6,8	6,9
18	6250	6,9	7	7	6,9	6,9
19	6500	6,9	7	7,1	6,8	6,9
20	6750	6,6	7	7	6,8	6,8
21	7000	6,5	6,9	6,7	6,4	6,4
22	7250	6,5	6,9	6,7	6,5	6,5
23	7500	6,4	6,9	6,7	6,5	6,5
24	7750	6,2	6,8	6,7	6,5	6,5
25	8000	6	6,9	6,5	6,5	6,3
26	8250	5,6	6,4	6,3	6,1	6,1
27	8500	5	5,9	5,9	5,9	5,7

**Tabel Konsumsi Bahan Bakar**

<b>Jenis Bahan Bakar</b>	<b>Jarak (km)</b>	<b>Kecepatan (km/h)</b>	<b>Waktu (h)</b>	<b>Volume Bahan Bakar Terpakai (l)</b>	<b>Konsumsi (km/l)</b>
<b>Pertalite 100%</b>	5	40	0,33	0,25	20
<b>Pertalite 95%vol.-PO 5%vol.</b>	5	40	0,33	0,16	31,25
<b>Pertalite 90%vol.-PO 10%vol.</b>	5	40	0,33	0,15	33,3
<b>Pertalite 80%vol.-PO 20%vol.</b>	5	40	0,33	0,14	35,71
<b>Pertalite 70%vol.-PO 30%vol.</b>	5	40	0,33	0,12	41,66

Displacement Correction  
 Correction Factor: ISO 1585  
 NOTE: Load Cell Included.

TEST NAME | MAX TORQUE | MAX POWER | Temp. °C | Humidity % | Pressure | KMH | Date/Time  
 BEAT 110 T005 | 25.56 (25.56) / 1879 | 7.9 (7.9) / 4549 | 29.3 °C | 54 % | 1000.0 mbar | 95.1 | 24/08/2017 9:50:06

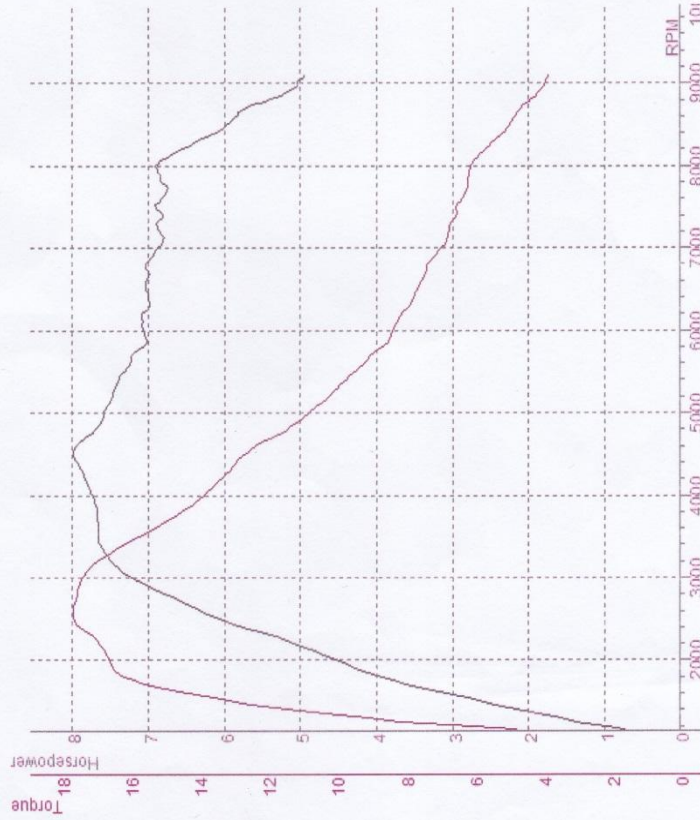


Comments  
 PERTAALITE 500ML

RPM	HP (HP/Q) (N*M*M)	T
250	0.0	0.54
500	0.3	0.00
750	1.4	4.05
1000	2.5	14.25
1250	3.9	19.84
1500	4.8	23.25
1750	6.1	24.36
1879	6.5	25.56
2000	6.8	25.86
2250	6.9	24.88
2500	7.1	22.02
2750	7.4	20.29
3000	7.7	19.35
3250	7.8	18.51
3500	7.9	17.28
3750	7.8	15.98
4000	7.7	14.78
4250	7.7	13.63
4500	7.9	12.88
4549	7.9	12.51
4750	7.7	12.40
5000	7.6	11.53
5250	7.4	10.70
5500	7.2	10.04
5750	7.1	9.34
6000	7.0	8.73
6250	6.9	8.25
6500	6.9	7.82
6750	6.6	7.44
7000	6.5	6.88
7250	6.5	6.35
7500	6.4	6.00
7750	6.2	5.69
8000	6.0	5.27
8250	5.6	4.77
8500	5.0	4.16

LOSSES: 0.0N\*TM  
 TOTAL ENGINE: 7.9HP  
 25.56N\*TM

TEST NAME: BEAT 110 T011 | MAX POWER: 8.0 (8.0) / 4510 | MAX TORQUE: 17.65 (17.65) / 2563 | Temp. °C: 30.6 °C | Humidity %: 48 % | Pressure: 1000.0 mbar | KMH: 93.5 | Date/Time: 09/09/2017 10:56:50



Comments  
 PENTALITE 475ML PYROLYTIC OIL 25ML

DATA FOR TEST: BEAT 110 T011

RPM	HP (HP)	(N*m)	T
1250	1.6	9.07	0.58
1500	2.7	13.31	0.70
1750	3.8	15.88	0.82
2000	4.6	16.61	0.96
2250	5.3	17.05	1.08
2500	6.1	17.64	1.20
2563	6.2	17.65	1.22
2750	6.7	17.53	1.32
3000	7.2	17.35	1.44
3250	7.5	16.66	1.58
3500	7.7	15.56	1.74
3750	7.7	14.62	1.88
4000	7.7	13.81	2.04
4250	7.9	13.20	2.20
4500	8.0	12.64	2.38
4510	8.0	12.64	2.38
4750	7.7	11.56	2.58
5000	7.6	10.76	2.78
5250	7.5	10.07	3.00
5500	7.3	9.39	3.24
5750	7.1	8.74	3.50
6000	7.1	8.34	3.74
6250	7.0	7.94	4.00
6500	7.0	7.64	4.30
6750	7.0	7.36	4.60
7000	6.9	6.92	4.90
7250	6.9	6.70	5.24
7500	6.9	6.49	5.58
7750	6.8	6.17	5.90
8000	6.9	6.10	6.28
8250	6.4	5.48	6.70
8500	5.9	4.91	7.16
8750	5.5	4.44	7.64
9000	5.0	3.94	8.18

LOSSES: 0.0 HP  
 TOTAL ENGINE: 8.0 HP  
 0.0N\*mPM  
 17.65N\*mPM

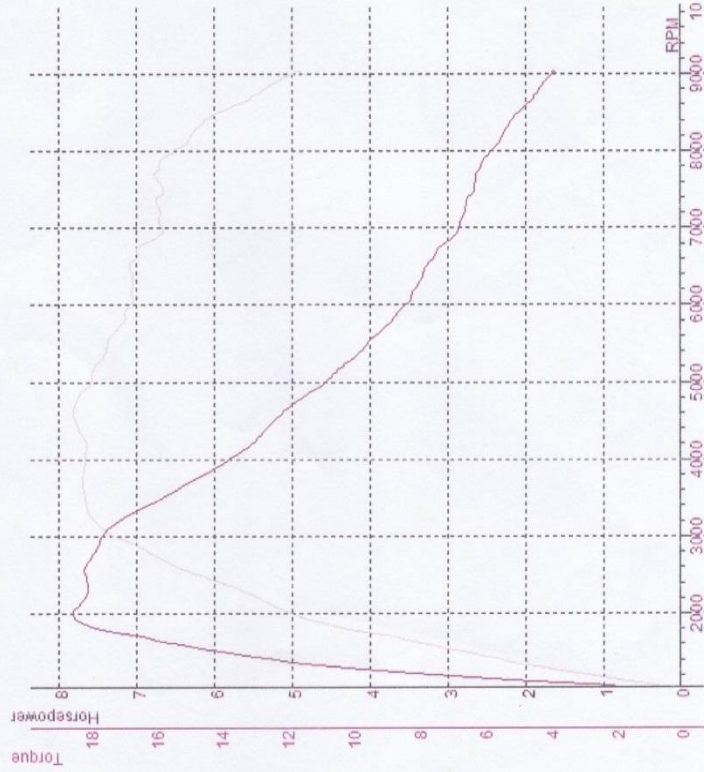


Dyno Centre & Motorcycle Research Support  
 Jl. Binafrost Selem, Kemuning, Singapore, Bongsungkanan,  
 Bekasi, Yogyakarta, Indonesia  
 Telp : +62 274 654303

SPORTDYNO V3.3  
 DYNAMOMETER: MOTOTECH  
 ROLLER INERTIA: 1.446

Displacement Correction  
 Correction Factor: ISO 1585  
 NOTE: Load Cell Included.

TEST NAME: BEAT 110 T014  
 MAX POWER: 18.48 (18.48) / 1973  
 Temp. °C: 30.9 °C  
 Humidity %: 46 %  
 Pressure: 1000.0 mbar  
 KMH: 92.9  
 Date/Time: 09/09/2017 11:03:32



Comments  
 PERTALITE 450ML PYROLYTIC OIL 50ML

RPM	HP (HP)	(N·M)	T
1250	1.7	10.13	0.64
1500	2.8	13.93	0.74
1750	4.1	17.39	0.86
1973	5.0	18.48	0.96
2000	5.1	18.47	0.98
2250	5.6	18.03	1.10
2500	6.3	18.12	1.22
2750	6.8	17.86	1.34
3000	7.4	17.50	1.48
3250	7.6	16.81	1.60
3500	7.7	15.72	1.74
3750	7.7	14.64	1.90
4000	7.7	13.69	2.06
4250	7.7	12.85	2.24
4500	7.8	12.30	2.42
4631	7.8	12.04	2.50
4750	7.8	11.64	2.60
5000	7.6	10.73	2.82
5250	7.5	10.06	3.04
5500	7.4	9.49	3.26
5750	7.2	8.85	3.50
6000	7.0	8.28	3.78
6250	7.0	7.97	4.04
6500	7.1	7.70	4.32
6750	7.0	7.29	4.62
7000	6.7	6.74	4.94
7250	6.7	6.54	5.28
7500	6.7	6.27	5.62
7750	6.7	6.13	5.96
8000	6.5	5.73	6.34
8250	6.3	5.35	6.76
8500	5.9	4.87	7.24
8750	5.4	4.36	7.72
9000	5.0	3.88	8.28

LOSSES: 0.0 HP  
 TOTAL ENGINE: 7.8 HP  
 0.0 N·M  
 18.48 N·M

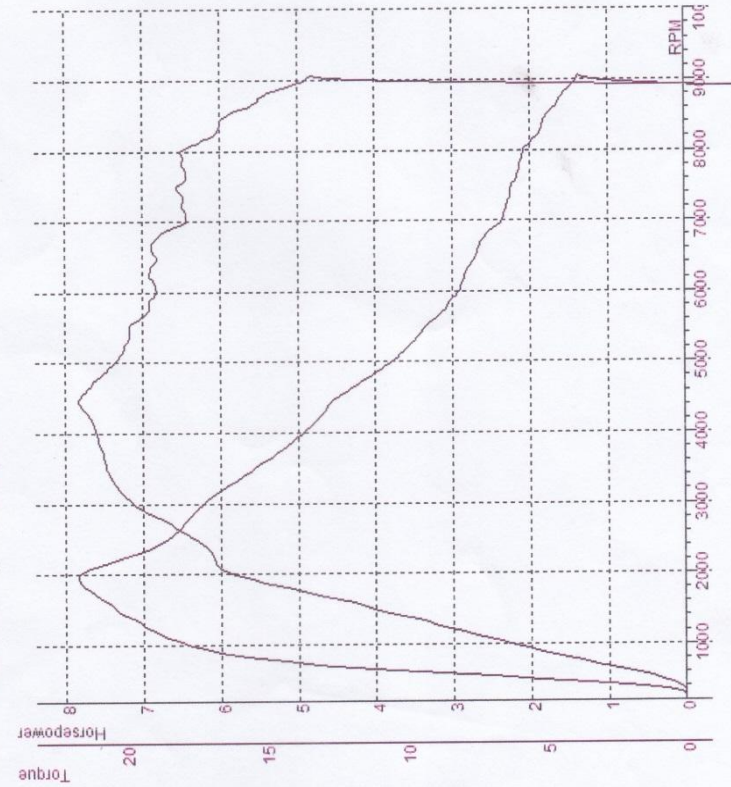


Diponegoro Center of Motor Vehicle Research and Support  
 Jl. Ringroad Selatan, Kemaran, Ingojaren, Bantul, Yogyakarta, Indonesia  
 Telp. : +62 274 636603

SPORTDYNO V3.3  
 DYNAMOMETER: MOTOTECH  
 ROLLER INERTIA: 1.446

Displacement Correction  
 Correction Factor: ISO 1585  
 NOTE: Load Cell Included.

TEST NAME | MAX POWER | MAX TORQUE | Temp. °C | Humidity % | Pressure | KMH | Date/Time  
 BEAT 110 T016 | 7.8 (8.7) / 4466 | 21.66 (22.30) / 1961 | 31.4 °C | 42 % | 1000.0 mbar | 93.2 | 09/09/2017 11:13:28



DATA FOR TEST: BEAT 110 T016

Comments  
 PERTALITE 400ML PYROLYTIC OIL 100ML

RPM	HP (HP)	T (N*M)
250	0.0	0.09
500	0.4	0.66
750	1.5	15.19
1000	2.4	17.97
1250	3.2	19.27
1500	4.1	20.35
1750	5.1	21.28
1961	5.7	21.66
2000	6.0	21.84
2250	6.1	19.80
2500	6.3	18.47
2750	6.8	17.69
3000	7.1	17.14
3250	7.4	16.24
3500	7.5	15.34
3750	7.5	14.36
4000	7.6	13.59
4250	7.7	12.91
4466	7.8	12.53
4500	7.8	12.33
4750	7.6	11.35
5000	7.4	10.45
5250	7.2	9.73
5500	7.2	9.25
5750	6.9	8.51
6000	6.8	8.04
6250	6.9	7.84
6500	6.8	7.43
6750	6.8	7.13
7000	6.4	6.50
7250	6.5	6.31
7500	6.5	6.16
7750	6.5	5.89
8000	6.5	5.73
8250	6.1	5.19
8500	5.9	4.87
...	(more)	

LOSSES: -0.8 HP  
 TOTAL ENGINE: 8.7HP  
 -0.6N\*M/M  
 22.50N\*M/M

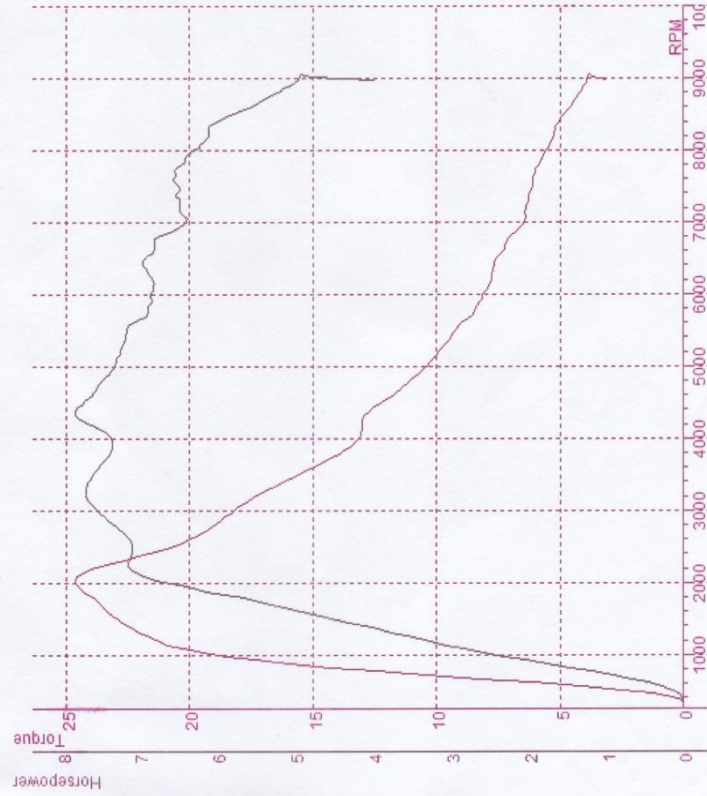


**Dyno Centre & Motocycle Research Support**  
 Jl. Ringroad Selatan, Kemoran, Jombang, Banguntapan,  
 Bantul, Yogyakarta, Indonesia  
 Telp. +62 274 839393

SPORTDYN0 V3.3  
 DYNAMOMETER: MOTOTECH  
 ROLLER INERTIA: 1.446

Displacement Correction  
 Correction Factor: ISO 1585  
 NOTE: Load Cell Included.

TEST NAME | MAX POWER | MAX TORQUE | Temp. °C | Humidity % | Pressure | KMH | Date/Time  
 BEAT 110 T019 | 7.8 (7.8) / 4357 | 24.62 (24.62) / 2044 | 31.8 °C | 40 % | 1000.0 mbar | 93.2 | 09/09/2017 11:20:29



DATA FOR TEST: BEAT 110 T019  
 Comments  
 PENTALITE 350ML PYROLYTIC OIL 150ML

RPM	HP (HP@)	(N*M*M)	T
250	0.0	0.00	0.56
500	0.2	2.48	0.64
750	1.2	12.44	0.74
1000	2.0	19.44	0.84
1250	3.6	21.73	0.92
1500	4.7	23.09	1.02
1750	5.6	23.85	1.10
2000	6.8	24.62	1.20
2044	6.8	24.62	1.20
2250	7.1	23.09	1.30
2500	7.1	20.43	1.42
2750	7.3	19.05	1.54
3000	7.6	18.07	1.66
3250	7.7	16.89	1.80
3500	7.6	15.48	1.94
3750	7.4	14.08	2.10
4000	7.4	13.08	2.28
4250	7.8	12.98	2.44
4357	7.8	12.83	2.50
4500	7.7	12.16	2.62
4750	7.5	11.21	2.82
5000	7.3	10.40	3.02
5250	7.2	9.73	3.26
5500	7.2	9.24	3.48
5750	6.9	8.49	3.74
6000	6.9	8.08	4.02
6250	6.9	7.77	4.30
6500	6.9	7.54	4.58
6750	6.8	7.13	4.88
7000	6.4	6.45	5.22
7250	6.3	6.31	5.56
7500	6.3	6.12	5.90
8000	6.3	5.94	6.26
8250	6.3	5.55	6.66
8500	6.1	5.23	7.08
8500	5.7	4.76	7.56
... (more)			

LOSSES: 0.0 HP  
 TOTAL ENGINE: 7.8HP  
 0.0N\*M\*M  
 24.62N\*M\*M