

LAMPIRAN

Tabel. Data pengujian viskositas oli *Evalube Runner*

Percobaan 1							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Evalube Suhu Kamar	1	3	7,1	28,8	142	81,81
		1	6	14,8	28,8	148	
		1	12	30,5	28,8	152,5	
		1	30	77,3	28,8	154,6	
		1	60				
2	Oli Evalube Suhu ± 35°C	1	3	5,2	34,9	104	
		1	6	10,5	34,8	105	
		1	12	21,7	34,8	108,5	
		1	30	55,4	34,8	110,8	
		1	60				
3	Oli Evalube Suhu ± 45°C	1	3	3,4	44,4	68	
		1	6	7,7	44,2	77	
		1	12	14,6	44,1	73	
		1	30	37,8	43,9	75,6	
		1	60	77,3	43,8	77,3	
4	Oli Evalube Suhu ± 55°C	1	3	2,7	54,1	54	
		1	6	6,1	53,6	61	
		1	12	11,2	53,1	55,5	
		1	30	26	52,9	52	
		1	60	53,7	52,8	53,7	
5	Oli Evalube Suhu ± 65°C	1	3	2,6	61,1	52	
		1	6	4,5	60,6	45	
		1	12	7,1	60,2	35,5	
		1	30	18,7	60,1	37,4	
		1	60	39,2	60	39,2	

Percobaan 2							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Evalube Suhu Kamar	1	3	7,4	28,8	148	90,55
		1	6	15	28,8	150	
		1	12	30,7	28,8	153,5	
		1	30	77,6	28,8	155,2	
		1	60				
2	Oli Evalube Suhu ± 35°C	1	3	5,4	34,6	108	
		1	6	10,9	34,6	109	
		1	12	22,1	34,5	110,5	
		1	30	56,5	34,4	113	
		1	60				
3	Oli Evalube Suhu ± 45°C	1	3	3,7	43,6	73	
		1	6	8,1	43,3	81	
		1	12	15,4	43,1	77	
		1	30	39,7	42,9	79,4	
		1	60	80,9	42,8	80,9	
4	Oli Evalube Suhu ± 55°C	1	3	2,8	52,1	56	
		1	6	5,8	51,8	58	
		1	12	10,8	51,5	54	
		1	30	27,8	51,2	55,6	
		1	60	57,3	51,2	57,3	
5	Oli Evalube Suhu ± 65°C	1	3	5,3	60,1	106	
		1	6	8,4	60,1	84	
		1	12	12,5	60	62,5	
		1	30	27,9	60	55,8	
		1	60	55	59,9	55	

Percobaan 3							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Evalube Suhu Kamar	1	3	7,6	28,8	152	85,42
		1	6	15,1	28,8	151	
		1	12	30,8	28,8	154	
		1	30	77,7	28,8	155,4	
		1	60				
2	Oli Evalube Suhu ± 35°C	1	3	5,4	34,4	108	
		1	6	10,9	34,2	109	
		1	12	22,4	34,2	112	
		1	30	57,4	34,2	115	
		1	60				
3	Oli Evalube Suhu ± 45°C	1	3	3,7	42,7	74	
		1	6	8,3	42,4	83	
		1	12	16,1	42,2	80,5	
		1	30	41,5	42	83	
		1	60	84,5	41,9	84,5	
4	Oli Evalube Suhu ± 55°C	1	3	3,1	50,8	62	
		1	6	6,2	50,3	62	
		1	12	11,6	50,1	58	
		1	30	29,8	50	59,6	
		1	60	61,1	50	61,1	
5	Oli Evalube Suhu ± 65°C	1	3	2,5	64,2	50	
		1	6	4,3	63,6	43	
		1	12	6,9	63,1	34,5	
		1	30	17,8	62,8	35,6	
		1	60	37,5	62,3	37,5	

Tabel. Data pengujian viskositas oli *Yamalube Gold*

Percobaan 1							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Yamalube Suhu Kamar	1	3	8,3	29,1	166	79,74
		1	6	15,8	29,1	158	
		1	12	31,2	29,1	156	
		1	30	77,5	29,1	155	
		1	60				
2	Oli Yamalube Suhu ± 35°C	1	3	5,4	34,9	108	
		1	6	10,2	34,8	102	
		1	12	20,9	34,8	104,5	
		1	30	53,5	34,8	107	
		1	60				
3	Oli Yamalube Suhu ± 45°C	1	3	3,3	43,8	66	
		1	6	7,1	43,6	71	
		1	12	13,6	43,5	68	
		1	30	35,1	43,4	70,2	
		1	60	71,5	43,5	71,5	
4	Oli Yamalube Suhu ± 55°C	1	3	2,3	53,2	46	
		1	6	5,7	53,2	57	
		1	12	9,9	53,1	49,5	
		1	30	24,1	52,9	48,4	
		1	60	50,1	52,7	50,1	
5	Oli Yamalube Suhu ± 65°C	1	3	2	62,7	40	
		1	6	3,6	62,2	36	
		1	12	6,6	61,9	33	
		1	30	17,4	61,6	34,8	
		1	60	36,1	61	36,1	

Percobaan 2							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Yamalube Suhu Kamar	1	3	8,1	29	162	81,11
		1	6	15,6	29	156	
		1	12	30,8	29	154	
		1	30	77,1	29	154,2	
		1	60				
2	Oli Yamalube Suhu \pm 35°C	1	3	5,1	34,3	102	
		1	6	10,3	34,3	103	
		1	12	21,3	34,3	106,5	
		1	30	54,7	34,2	109,4	
		1	60				
3	Oli Yamalube Suhu \pm 45°C	1	3	3,5	42,9	70	
		1	6	7,4	42,6	74	
		1	12	14,3	42,4	71,5	
		1	30	36,9	42,3	74	
		1	60	74,8	42,3	75	
4	Oli Yamalube Suhu \pm 55°C	1	3	3,1	52,1	62	
		1	6	5,2	51,7	52	
		1	12	9,8	52,4	49	
		1	30	25,8	51,3	51,6	
		1	60	53,4	51	53,4	
5	Oli Yamalube Suhu \pm 65°C	1	3	1,9	60,6	38	
		1	6	3,7	60,2	37	
		1	12	7	60,1	35	
		1	30	18,6	60	37,2	
		1	60	38,7	60	38,7	

Percobaan 3							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Yamalube Suhu Kamar	1	3	7,9	29	158	83,99
		1	6	15,4	29	154	
		1	12	30,7	29	153,5	
		1	30	76,8	29	153,6	
		1	60				
2	Oli Yamalube Suhu \pm 35°C	1	3	4,9	34,1	98	
		1	6	10,3	34	103	
		1	12	21,6	33,9	108,5	
		1	30	55,5	33,8	111	
		1	60				
3	Oli Yamalube Suhu \pm 45°C	1	3	3,5	41,9	70	
		1	6	7,8	41,6	78	
		1	12	14,9	41,5	74,5	
		1	30	38,7	41,4	77,4	
		1	60	78,4	41,4	78,4	
4	Oli Yamalube Suhu \pm 55°C	1	3	2,8	50,3	56	
		1	6	5,4	50,1	54	
		1	12	10,6	50,1	53	
		1	30	28	50	56,2	
		1	60	57,4	50	57,4	
5	Oli Yamalube Suhu \pm 65°C	1	3	2,7	60,8	54	
		1	6	5	60,4	50	
		1	12	8	60,2	40	
		1	30	22,9	60,1	45,8	
		1	60	47,4	60	47,4	

Tabel. Data pengujian viskositas oli *Federal Racing*

Percobaan 1							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Federal Suhu Kamar	1	3	6,8	29	136	82,07
		1	6	13,8	29	138	
		1	12	27,8	29	139	
		1	30	70,1	29	140,2	
		1	60				
2	Oli Federal Suhu ± 35°C	1	3	5,8	32,3	116	
		1	6	11,6	32,4	116	
		1	12	23,6	32,5	118	
		1	30	59,7	32,5	119,4	
		1	60				
3	Oli Federal Suhu ± 45°C	1	3	3,7	42,7	74	
		1	6	8	42,3	80	
		1	12	15,8	42,1	79	
		1	30	39,9	41,9	79,8	
		1	60	80	41,6	80	
4	Oli Federal Suhu ± 55°C	1	3	3,2	51	64	
		1	6	5,7	51,1	52	
		1	12	10,3	51	51,5	
		1	30	26,3	50,6	52,6	
		1	60	53,9	50	53,9	
5	Oli Federal Suhu ± 65°C	1	3	2,4	63,2	48	
		1	6	4	63,1	40	
		1	12	7,2	62,7	36	
		1	30	18,1	62,4	36,2	
		1	60	37,9	62,2	37,9	

Percobaan 2							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Federal Suhu Kamar	1	3	6,8	29,1	136	80,11
		1	6	13,7	29,1	137	
		1	12	27,7	29,1	138,5	
		1	30	70	29,1	140	
		1	60				
2	Oli Federal Suhu \pm 35°C	1	3	5,6	32,3	112	
		1	6	11,4	32,3	114	
		1	12	23,4	32,3	117	
		1	30	59,5	32,4	119	
		1	60				
3	Oli Federal Suhu \pm 45°C	1	3	3,6	41,2	72	
		1	6	8,1	41,1	81	
		1	12	16,1	40,9	50,5	
		1	30	40,9	40,8	81,8	
		1	60	82,4	40,6	82,5	
4	Oli Federal Suhu \pm 55°C	1	3	2,9	53,2	58	
		1	6	5,4	53	54	
		1	12	9,9	52,8	49,5	
		1	30	25,5	52,5	51	
		1	60	51,9	52,1	51,9	
5	Oli Federal Suhu \pm 65°C	1	3	2	61,4	40	
		1	6	3,9	60,9	39	
		1	12	7,5	60,6	37,5	
		1	30	19,7	60,3	39,4	
		1	60	40,9	60,1	40,9	

Percobaan 3							
No	Fluida	Rotor	Speed (RPM)	Percent (%)	Temperatur (°C)	Viskositas (Mpa.s)	Rata-rata Viskositas
1	Oli Federal Suhu Kamar	1	3	6,7	29,1	134	81,23
		1	6	13,6	29,1	136	
		1	12	27,7	29,1	138,5	
		1	30	69,9	29,1	139,8	
		1	60				
2	Oli federal Suhu ± 35°C	1	3	5,7	32,3	114	
		1	6	11,4	32,2	114	
		1	12	23,5	32,2	117,5	
		1	30	60	32,2	120	
		1	60				
3	Oli Federal Suhu ± 45°C	1	3	3,9	41,7	78	
		1	6	8,1	41,6	81	
		1	12	15,7	41,3	78,5	
		1	30	40,5	41,2	81	
		1	60	81,4	40,9	81,4	
4	Oli Federal Suhu ± 55°C	1	3	2,7	51,7	54	
		1	6	5,3	51,3	53	
		1	12	10,3	51,1	51,5	
		1	30	26,8	50,7	53,6	
		1	60	24,8	50,4	54,8	
5	Oli Federal Suhu ± 65°C	1	3	2,1	64,3	42	
		1	6	3,8	63,8	38	
		1	12	6,9	63,2	34,5	
		1	30	18	62,9	36	
		1	60	37,2	62,6	37,2	

Tabel. Data hasil pengujian konsumsi bahan bakar

Sampel Oli	Jarak tempuh (km)	Waktu (Menit)	Kecepatan (km/jam)	Temperatur (°C)	Volume BBM (Liter)
Oli Yamalube Gold 10W-40	4,00	8:35	40-45	45,2	0,083
	4,00	8:32	40-45	47,9	0,085
	4,00	8:34	40-45	56,3	0,087
	4,00	8:30	40-45	65,2	0,086
	4,00	8:38	40-45	70,1	0,087
Oli Evalube Runner 20W-40	4,00	8:32	40-45	51,2	0,093
	4,00	8:36	40-45	56,3	0,095
	4,00	8:34	40-45	63,6	0,093
	4,00	8:38	40-45	72,2	0,097
	4,00	8:40	40-45	75,3	0,103
Oli Federal Racing 10W-40	4,00	8:34	40-45	40,1	0,075
	4,00	8:32	40-45	43,7	0,077
	4,00	8:37	40-45	52,4	0,079
	4,00	8:30	40-45	57,8	0,076
	4,00	8:36	40-45	65,2	0,077

Tabel. Data haasil pengujian temperatur mesin

Sampel Oli	Jarak tempuh (km)	Konsumsi BBM (km/liter)	Rata-rata konsumsi BBM	Temperatur (°C)	Rata-rata temperatur
Oli Yamalube Gold 10W-40	4,00	48,192	46,7	45,2	56,9
	4,00	47,058		47,9	
	4,00	45,977		56,3	
	4,00	46,511		65,2	
	4,00	45,977		70,1	
Oli Enalube Runner 20W-40	4,00	43,010	41,6	51,2	63,7
	4,00	42,105		56,3	
	4,00	43,010		63,6	
	4,00	41,237		72,2	
	4,00	38,834		75,3	
Oli Federal Racing 10W-40	4,00	53,333	52	40,1	51,8
	4,00	51,948		43,7	
	4,00	50,632		52,4	
	4,00	52,631		57,8	
	4,00	51,948		65,2	

Tabel. Data perbandingan keseluruhan pengujian

Sampel Oli	Rata-rata konduktivitas (W/m.K)	Rata-rata viskositas (Mpa.s)	Torsi maksimum (N.m)	Daya maksimum (HP)	Konsumsi BBM (km/liter)	Temperatur mesin (°C)
Evalube	0,119	88,06	13,16	14,8	41,6	63,7
Yamalube	0,122	82,2	13,31	14,9	46,7	56,9
Federal	0,135	81,5	13,12	15	52	51,8

Proses Pengujian Viskositas



Pengujian viskositas dengan variasi temperatur suhu

Proses Pengujian Konduktivitas Termal



Proses memasukan sampel oli pada alat konduktivitas termal

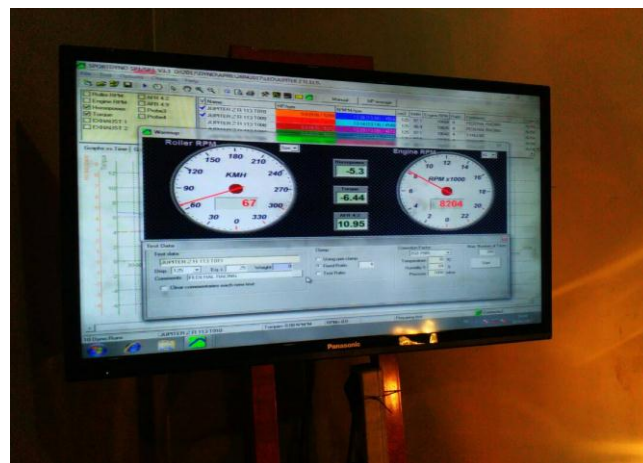
Proses Pengujian Dyno Test



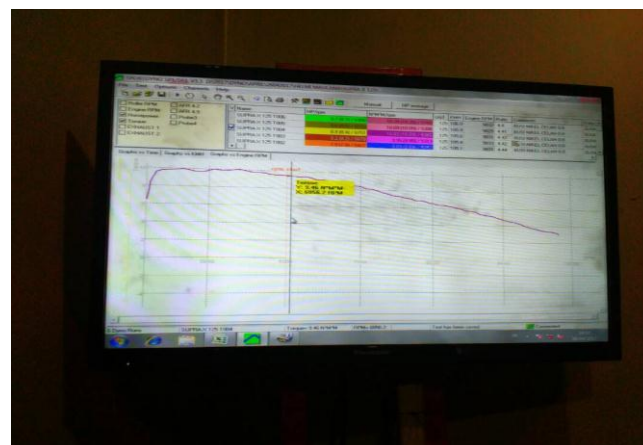
Pengisian sampel oli



Proses uji dyno test



Monitor uji torsi dan daya

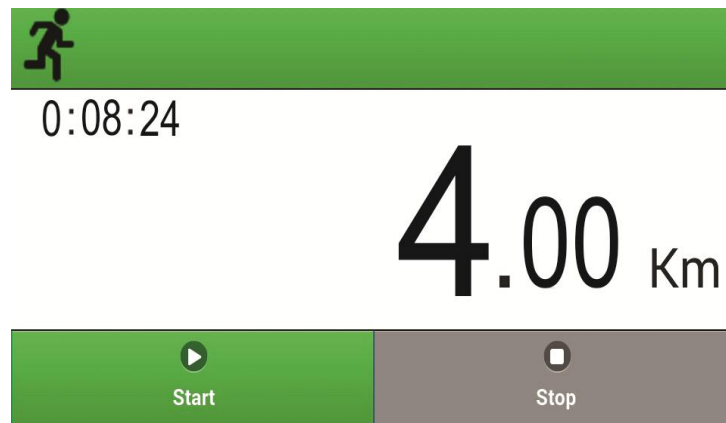


Hasil grafik uji torsi dan daya yang dihasilkan

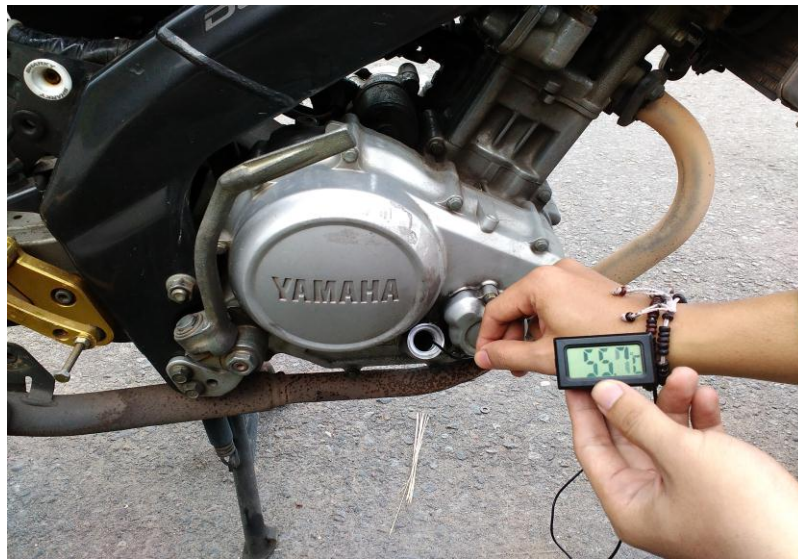
Proses Pengujian Konsumsi Bahan Bakar



Pengisian full to full



Jarak tempuh uji konsumsi bahan bakar



Pengukuran temperatur mesin



Proses uji jalan konsumsi bahan bakar



Dyno Centre & Motorcyclist Research Support
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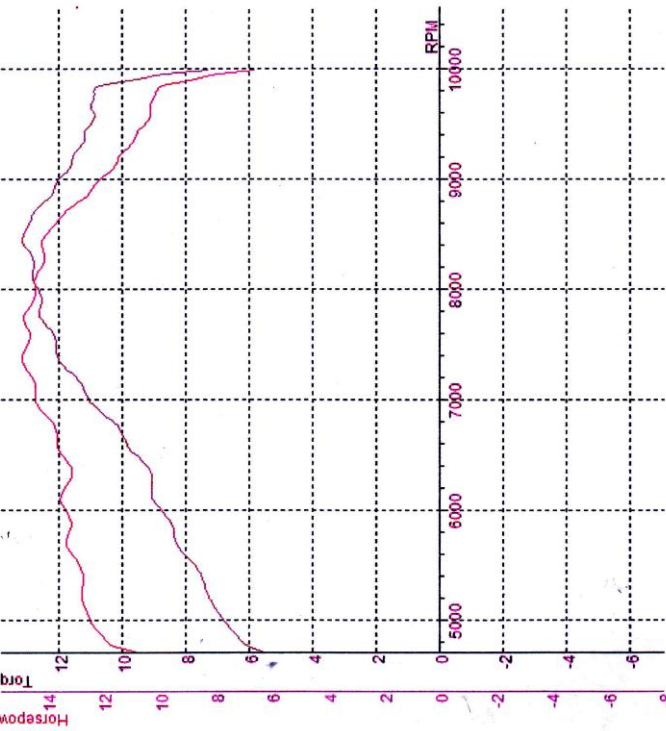
SPORDYNO V33
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.446

Displacement Correction
 Correction Factor: ISO 1385
 NOTE: Load Cell Included.

TEST NAME | MAX POWER | MAX TORQUE | Temp. °C | Humidity % | Pressure | KM/H
 VIXION 150 T013 | 14.9 (14.9) 8459 | 13.12 (13.12) 7362 | 33.5 °C | 50 % | 1000.0 mbar | 98.5

Date/Time
 26/04/2017 14:05:41

DATA FOR TEST: VIXION 150 T013



Comments
 FEDERAL

RPM	HP (HP)	HP (N*m)	T
4500	6.6	9.96	0.52
4750	6.8	10.22	0.54
5000	7.8	11.02	0.72
5250	8.3	11.25	0.90
5500	8.7	11.32	1.06
5750	9.5	11.69	1.24
6000	9.9	11.77	1.40
6250	10.2	11.64	1.58
6500	10.9	11.89	1.74
6750	11.5	12.09	1.90
7000	12.5	12.73	2.06
7250	13.3	12.99	2.22
7362	13.6	13.12	2.28
7500	13.7	12.90	2.38
7750	14.3	13.02	2.54
8000	14.3	12.71	2.68
8250	14.5	12.45	2.84
8459	14.9	12.47	2.98
8500	14.8	12.31	3.02
8750	14.2	11.50	3.20
9000	13.5	10.59	3.40
9250	12.9	9.90	3.60
9500	12.4	9.22	3.82
9750	12.3	8.93	4.04

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.9 HP

0.0 N*m
 13.12 N*m

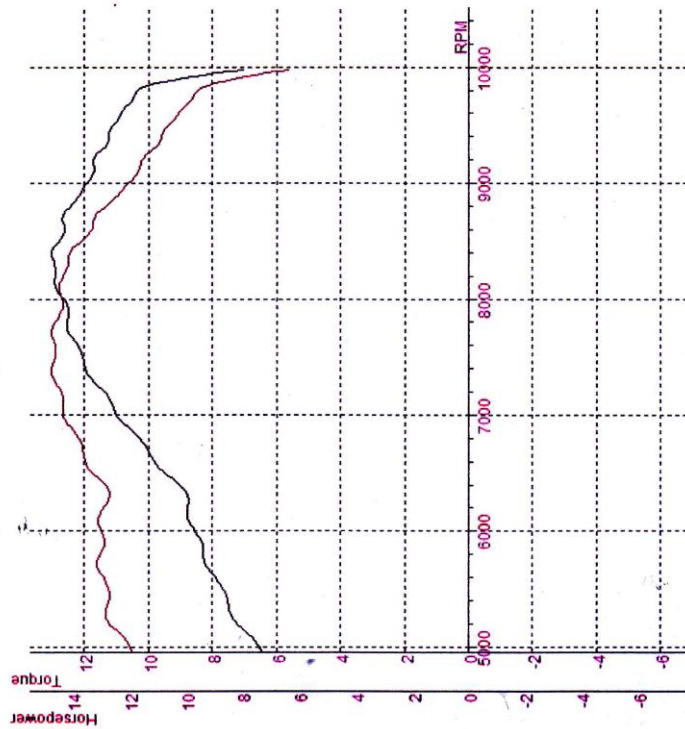
Mototech

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SPORTIVO 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
VIXION 150 T011 | 14.7 (14.7) / 8380 | 13.02 (13.02) / 7573 | 33.5 °C | 50 % | 1000.0 mbar | 98.4 | 26/04/2017 14:05:01



DATA FOR TEST: VIXION 150 T011

RPM	HP (HPQ (N*M*M))	T
4500	7.4	10.55
4750	7.5	10.60
5000	7.6	10.66
5250	8.4	11.33
5500	8.7	11.23
5750	9.4	11.56
6000	9.7	11.49
6250	9.9	11.22
6500	10.8	11.79
6750	11.5	12.11
7000	12.5	12.65
7250	13.1	12.81
7500	13.5	13.02
7750	13.6	12.90
8000	14.2	12.99
8250	14.3	12.70
8500	14.6	12.53
8750	14.7	12.47
9000	14.4	11.99
9250	14.2	11.49
9500	13.4	10.53
9750	13.1	9.98
	12.5	9.29
	11.8	8.53

Comments
FEDERAL

LOSSES: 0.0HP
TOTAL ENGINE: 14.7HP

0.0N*M*M
13.02N*M*M

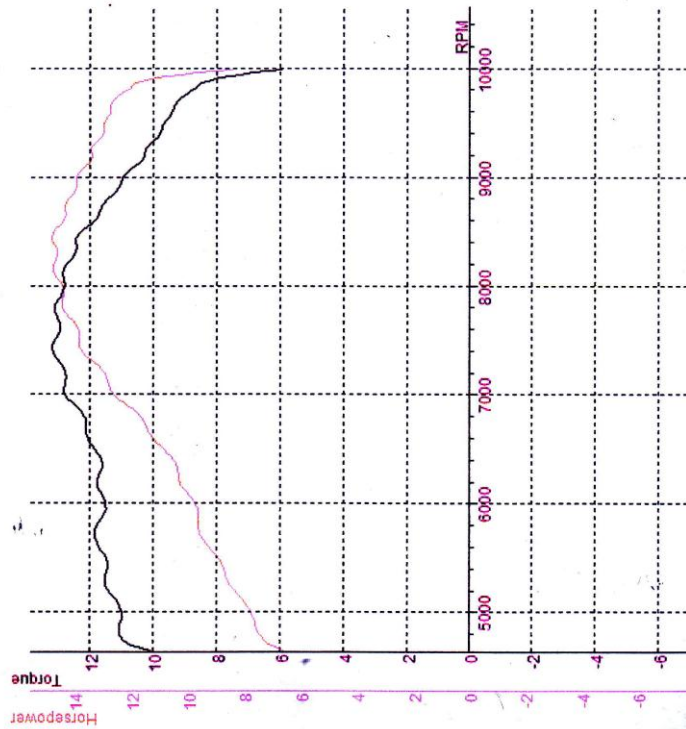
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SPORTIVO V3
 DYNAMOMETER: MOTOTECH
 ROLLER INERTIA: 1.46

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

TEST NAME: VIXION 150 T012 | MAX POWER: 13.20 (13.20) / 7419 | Temp. °C: 33.3 °C | Humidity %: 30% | Pressure: 1000.0 mbar | KM/H: 98.5 | Date/Time: 26/04/2017 14:05:21



DATA FOR TEST: VIXION 150 T012

Comments
 FEDERAL

RPM	HP (HP) (N*M*M)	T
4500	6.8	10.42
4750	7.4	11.02
5000	7.8	11.03
5250	8.5	11.52
5500	9.0	11.54
5750	9.6	11.84
6000	9.8	11.53
6250	10.3	11.67
6500	11.0	11.94
6750	11.6	12.16
7000	12.7	12.82
7250	13.1	12.86
7419	13.8	13.20
7500	13.8	13.08
7750	14.4	13.11
8000	14.4	12.81
8250	14.6	12.51
8452	14.8	12.41
8500	14.7	12.23
8750	14.3	11.57
9000	13.9	10.97
9250	13.4	10.23
9500	12.9	9.63
9750	12.3	8.91

LOSSES: 0.0 HP | 0.0 N*M*M
 TOTAL ENGINE: 14.8 HP | 13.20 N*M*M

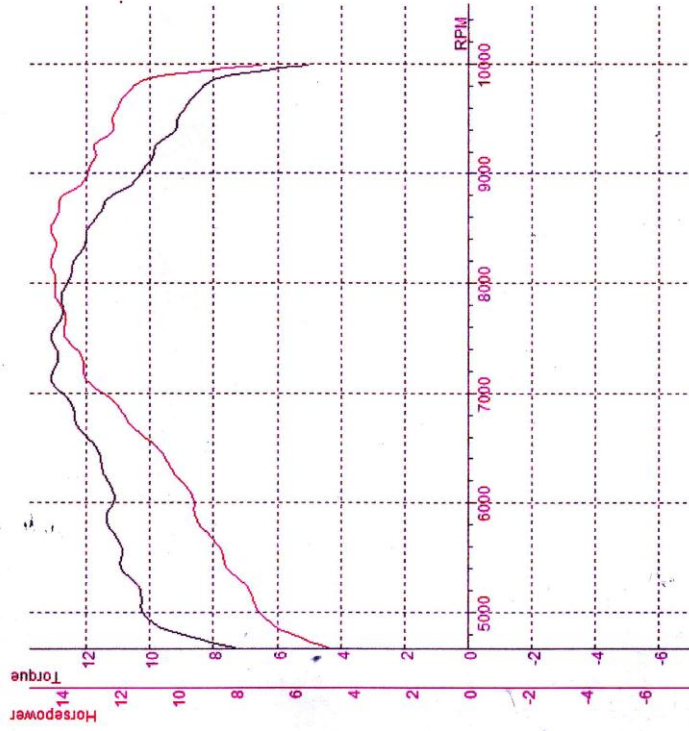


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 Telp. +62 274 882892

SPORTDYNO V3.3
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.446

Displacement Correction
 Correction Factor: ISO 1385
 NOTE: Load Cell Included.

TEST NAME | MAX POWER | MAX TORQUE | Temp. °C | Humidity % | Pressure | KM/H | Date/Time
 VIXION 150 T010 | 14.3 (14.3) / 8502 | 13.10 (13.10) / 7506 | 33.5 °C | 50 % | 1000.0 mbar | 98.4 | 26/04/2017 14:04:43



DATA FOR TEST: VIXION 150 T010

Comments
 FEDERAL

RPM	HP (HEQ)(N*M*M)	T
4500	5.1	7.73
4750	5.7	8.47
5000	7.2	10.24
5250	7.7	10.41
5500	8.4	10.86
5750	9.1	11.21
6000	9.4	11.15
6250	10.1	11.45
6500	10.7	11.71
6750	11.7	12.35
7000	12.7	12.85
7250	13.2	12.90
7500	13.8	13.10
7506	13.8	13.10
7750	13.9	12.73
8000	14.2	12.57
8250	14.2	12.20
8500	14.3	11.95
8502	14.3	11.95
8750	14.1	11.38
9000	13.1	10.30
9250	12.8	9.82
9500	12.2	9.12
9750	11.7	8.45

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.3 HP
 0.0 N*M*M
 13.10 N*M*M

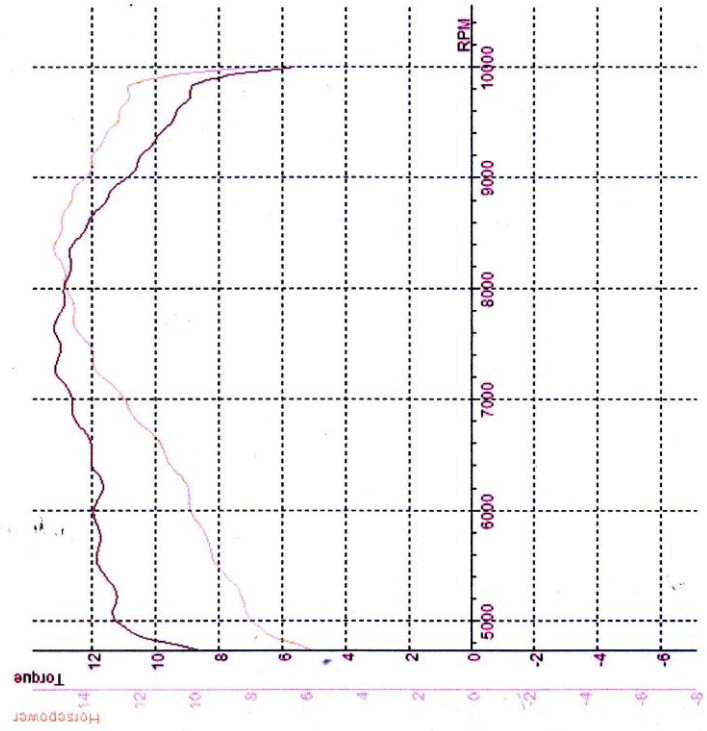
SPORTDYNO V3.3
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.446

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

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TEST NAME: VISION 150 T014 | MAX POWER: 13.20 (13.20) / 7657 | Temp. °C: 33.5 °C | Humidity %: 50 % | Pressure: 1000.0 mbar | KMH: 98.6 | Date/Time: 26/04/2017 14:05:59



DATA FOR TEST: VISION 150 T014

Comments
 FEDERAL

RPM	HP (HP)	HP (N*M/M)	T
4500	6.5	9.18	0.52
4750	8.0	11.30	0.70
5000	8.5	11.85	0.86
5250	9.2	12.71	1.04
5500	9.5	13.20	1.22
5750	10.1	13.94	1.38
6000	10.3	14.20	1.54
6250	11.0	15.00	1.72
6500	11.7	15.96	1.86
6750	12.4	16.93	2.02
7000	13.5	18.42	2.18
7250	14.2	19.50	2.32
7500	14.2	19.50	2.42
7657	13.20	18.20	2.50
7750	14.5	19.88	2.64
8000	14.8	20.40	2.80
8250	15.0	20.71	2.86
8352	15.0	20.71	2.96
8500	14.7	20.28	3.14
8750	14.4	19.80	3.34
9000	13.8	18.82	3.54
9250	13.4	18.22	3.76
9500	12.7	17.21	3.98
9750	12.3	16.80	4.22
10000	7.9	10.60	4.52

LOSSES: 0.0 HP | 0.0 N*M/M
 TOTAL ENGINE: 15.0 HP | 13.20 N*M/M

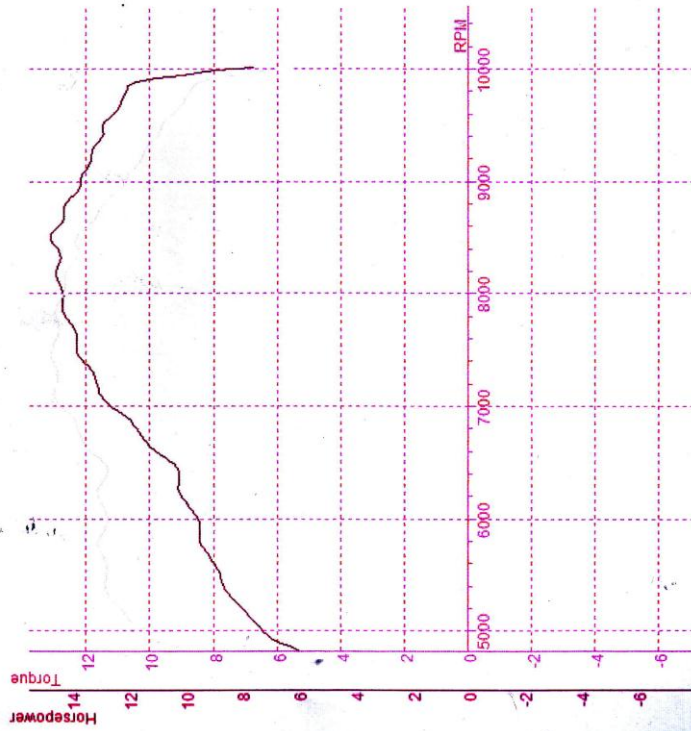


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SPORTIVO V33
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.46

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

TEST NAME | MAX POWER | MAX TORQUE | Temp. °C | Humidity % | Pressure | KM/H | Date/Time
 VIXION 150 T017 | 14.7 (14.7) / 8495 | | 33.8 °C | 30 % | 1000.0 mbar | 98.7 | 26/04/2017 14:25:52



DATA FOR TEST: VIXION 150 T017

Comments
 YAMALUBE GOLD

RPM	HP (HP) (N*m*MM)	T
4750	6.3	9.26
5000	7.3	10.39
5250	8.2	11.09
5500	8.8	11.33
5750	9.4	11.62
6000	9.6	11.32
6250	10.2	11.59
6500	10.6	11.52
6750	11.6	12.19
7000	12.8	12.90
7250	13.2	12.89
7484	13.8	13.10
7500	13.8	13.08
7750	14.1	12.91
8000	14.3	12.66
8250	14.5	12.41
8495	14.7	12.30
8500	14.7	12.24
8750	14.3	11.55
9000	13.7	10.75
9250	13.3	10.16
9500	12.9	9.59
9750	12.1	8.77
10000	7.6	5.33

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.7HP
 0.0N*m*MM
 13.10N*m*MM

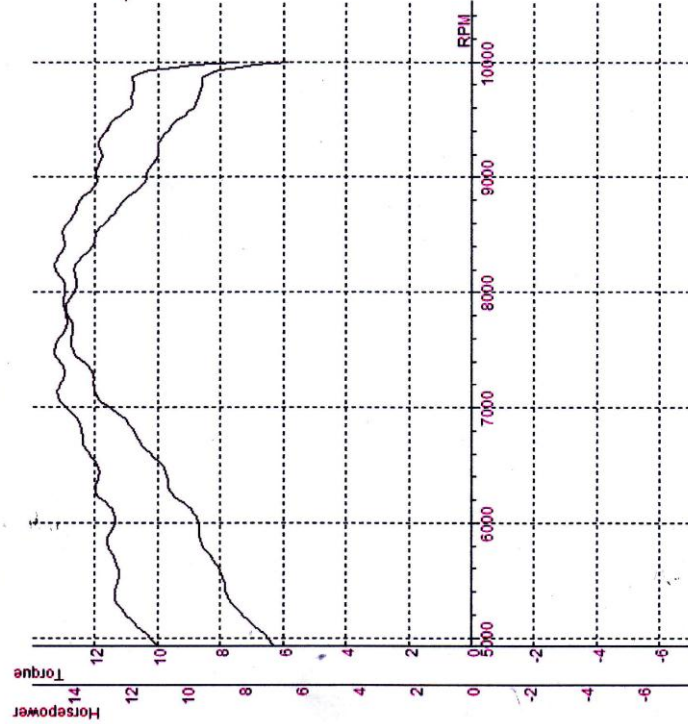
Mototech

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SPORTDYN0 V3.3
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.446

Displacement Correction
 Correction Factor: ISO 1385
 NOTE: Load Cell included.

TEST NAME | MAX POWER | MAX TORQUE | Temp. °C | Humidity % | Pressure | KM/H | Date/Time
 VIXION 150 T016 | 14.6 (14.6) / 8229 | 13.28 (13.28) / 7501 | 33.8 °C | 50 % | 1000.0 mbar | 98.5 | 26/04/2017 14:25:33



DATA FOR TEST: VIXION 150 T016

Comments
 YAMALUBE GOLD

RPM	HP (HP)	Q (N*M*M)	T
4750	7.1	10.15	0.52
5000	7.3	10.30	0.56
5250	8.2	11.16	0.72
5500	8.7	11.22	0.92
5750	9.3	11.51	1.08
6000	9.6	11.33	1.26
6250	10.5	11.94	1.42
6500	11.0	12.00	1.60
6750	11.8	12.38	1.74
7000	12.8	12.99	1.90
7250	13.3	12.97	2.06
7500	14.0	13.28	2.20
7501	14.0	13.28	2.20
7750	14.1	12.88	2.36
8000	14.3	12.63	2.52
8229	14.6	12.63	2.66
8500	14.6	12.57	2.68
8750	14.4	11.95	2.86
9000	13.8	11.19	3.04
9250	13.2	10.35	3.24
9500	13.1	9.99	3.44
9750	12.6	9.35	3.66
9750	11.9	8.62	3.90

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.6HP

0.0N*M*M
 13.28N*M*M

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SPORTIVO V33
 DYNAMOMETER: MOTOTECH
 ROLLER INERTIA: 1.446

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

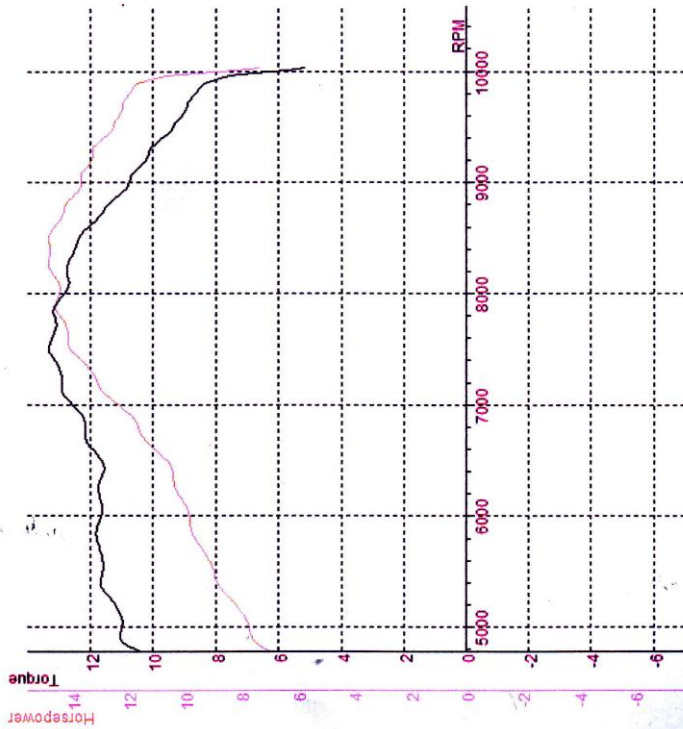
TEST NAME: VIXION 150 T020
 MAX POWER: 14.8 HP (10.8 kW)
 MAX TORQUE: 13.31 (13.31) / 7516
 Temp °C: 33.8 °C
 Humidity %: 30 %
 Pressure: 1000.0 mbar
 KM/H: 98.9
 Date/Time: 26/04/2017 14:26:46

DATA FOR TEST: VIXION 150 T020

Comments: YAMALUBE GOLD

RPM	HP (HEQ) (N*M*M)	T
4500	7.2	10.67
4750	7.4	10.83
5000	7.7	10.96
5250	8.4	11.38
5500	9.0	11.59
5750	9.5	11.76
6000	9.8	11.62
6250	10.4	11.73
6500	10.7	11.69
6750	11.6	12.17
7000	12.5	12.67
7250	13.2	12.91
7500	14.1	13.31
7516	14.1	13.31
7750	14.3	13.09
8000	14.4	12.74
8250	14.8	12.69
8489	14.8	12.38
8500	14.8	12.34
8750	14.3	11.52
9000	13.6	10.74
9250	13.2	10.13
9500	12.5	9.30
9750	12.1	8.78
10000	8.1	5.73

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.8 HP
 0.0 N*M*M
 13.31 N*M*M



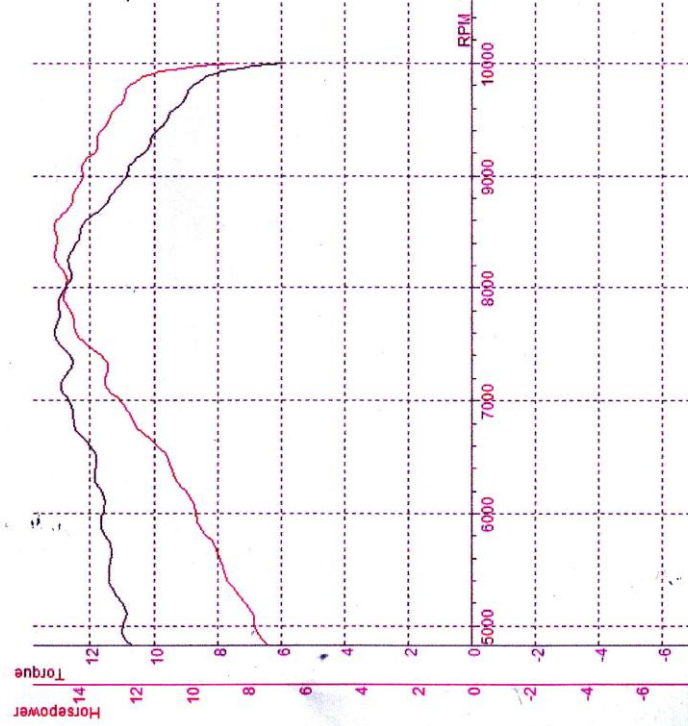


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SPORTIVO V43
 DYNAMOMETER: MOTOTECH
 ROLLER INERTIA: 1.446

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

TEST NAME: VIXION 150 T018
 MAX POWER: 14.8 (14.8) / 8312
 MAX TORQUE: 13.12 (13.12) / 7588
 Temp. °C: 33.8 °C
 Humidity %: 50 %
 Pressure: 1000.0 mbar
 KM/H: 98.7
 Date/Time: 26/04/2017 14:26:09



DATA FOR TEST: VIXION 150 T018

Comments
 YAMALUBE GOLD

RPM	HP (HP)*	HP (HP)* (N*M*M)	T
4500	7.4	10.83	0.52
4750	7.5	10.90	0.54
5000	7.7	10.95	0.64
5250	8.2	11.11	0.80
5500	8.9	11.39	1.00
5750	9.3	11.44	1.16
6000	9.8	11.59	1.34
6250	10.4	11.80	1.50
6500	10.8	11.81	1.66
6750	11.9	12.47	1.82
7000	12.5	12.70	1.98
7250	12.9	12.65	2.14
7500	13.8	13.03	2.30
7588	14.0	13.12	2.34
7750	14.2	12.97	2.44
8000	14.4	12.70	2.62
8250	14.8	12.70	2.76
8500	14.8	12.63	2.80
8750	14.2	12.30	2.94
9000	13.8	10.84	3.30
9250	13.3	10.15	3.50
9500	12.8	9.56	3.72
9750	12.3	8.88	3.96
10000	7.6	5.37	4.56

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.8 HP

0.0N*M*M
 13.12N*M*M

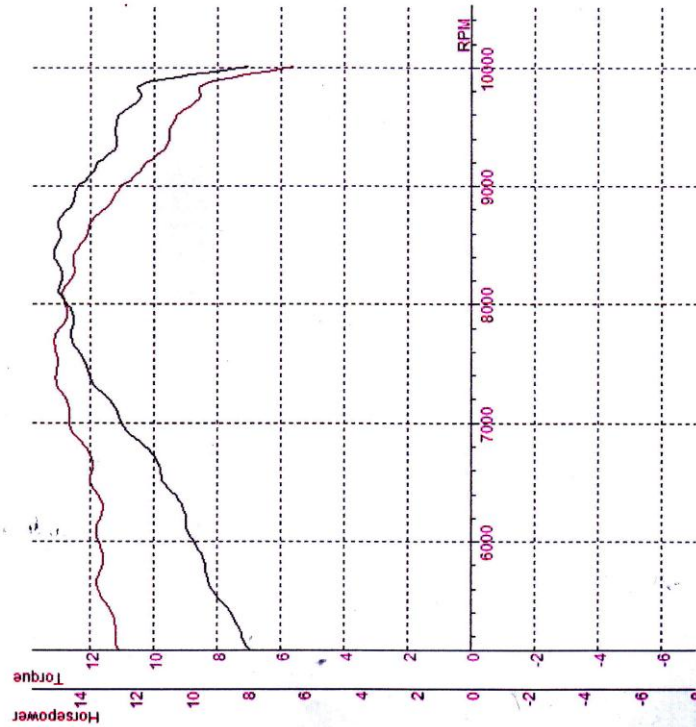


Dyna Centre & Mototechnology Research Support
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 Jl. Murnawan, Surabaya
 Telp 1-82-274-838303

SPORTIVO V3.3
 DYNAMOMETER: MOTOTECH
 ROLLER INERTIA: 1.46

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

TEST NAME | MAX POWER | MAX TORQUE | Temp. °C | Humidity % | Pressure | KM/H | Date/Time
 VIXION 150 T019 | 14.9 (14.9) / 8412 | 13.15 (13.15) / 7684 | 33.8 °C | 50 % | 1000.0 mbar | 98.7 | 26/04/2017 14:26:28



DATA FOR TEST: VIXION 150 T019

Comments
 YAMALUBE GOLD

RPM	HP (HP)	HP (N*M*M)	T
4750	8.0	11.14	0.52
5000	8.1	11.17	0.54
5250	8.3	11.18	0.62
5500	9.0	11.63	0.80
5750	9.4	11.69	0.96
6000	9.9	11.75	1.14
6250	10.2	11.59	1.32
6500	11.0	12.02	1.48
6750	11.5	12.09	1.64
7000	12.5	12.66	1.80
7250	13.2	12.89	1.94
7500	13.8	13.01	2.10
7684	14.2	13.15	2.20
7750	14.3	13.04	2.26
8000	14.5	12.84	2.42
8250	14.6	12.51	2.58
8412	14.9	12.53	2.68
8500	14.7	12.28	2.74
8750	14.5	11.77	2.92
9000	14.0	11.01	3.10
9250	13.0	9.92	3.32
9500	12.7	9.42	3.54
9750	11.8	8.53	3.76
10000	7.9	5.60	4.28

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.9 HP
 0.0 N*M*M
 13.15 N*M*M

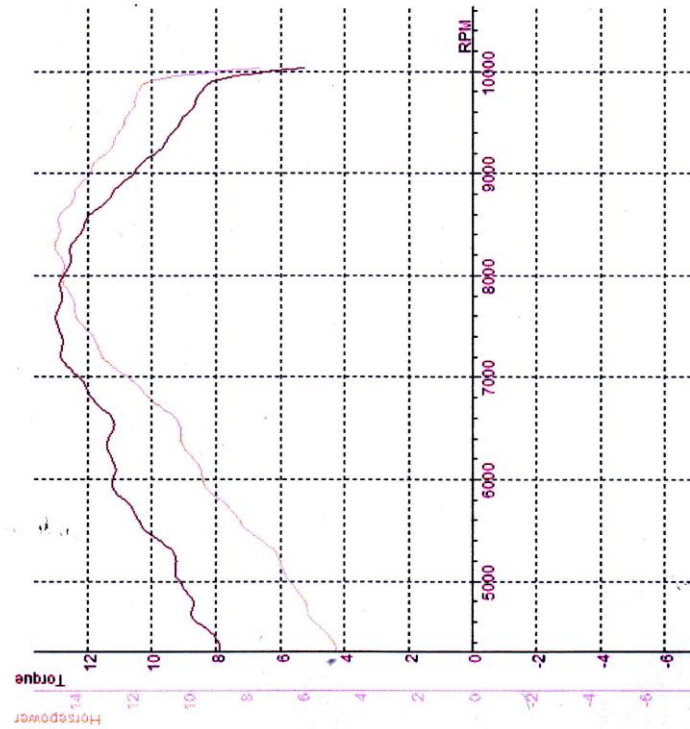
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SPORTIVO V33
 DYNAMOMETER: MOTOTECH
 ROLLER INERTIA: 1.446

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

TEST NAME: VIXION 150 T006
 MAX POWER: 13.00 (13.00) / 7558
 Temp. °C: 33.2 °C
 Humidity %: 57 %
 Pressure: 1000.0 mbar
 KMH: 98.3
 Date/Time: 26/04/2017 13:41:27



DATA FOR TEST: VIXION 150 T006

Comments	RPM	HP (HFO) (N*M*MM)	T
EVALUATE	4000	4.8	7.88
	4250	5.2	8.21
	4500	5.8	8.70
	4750	6.4	9.14
	5000	6.9	9.30
	5250	7.9	10.24
	5500	8.7	10.74
	5750	9.5	11.19
	6000	10.0	11.32
	6250	10.2	11.17
	6500	11.2	11.76
	6750	12.1	12.31
	7000	13.1	12.82
	7250	13.8	12.98
	7500	13.8	13.00
	7558	14.0	12.82
	7750	14.4	12.74
	8000	14.6	12.56
	8250	14.6	12.53
	8500	14.5	12.08
	8750	13.9	11.27
	9000	13.4	10.54
	9250	12.6	9.65
	9500	12.2	9.10
	9750	11.8	8.56
	10000	8.8	6.23

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.6HP
 0.0N*M*MM
 13.00N*M*MM

SPORTDYNO V3.3
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.446

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

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 Bantul, Yogyakarta, Indonesia
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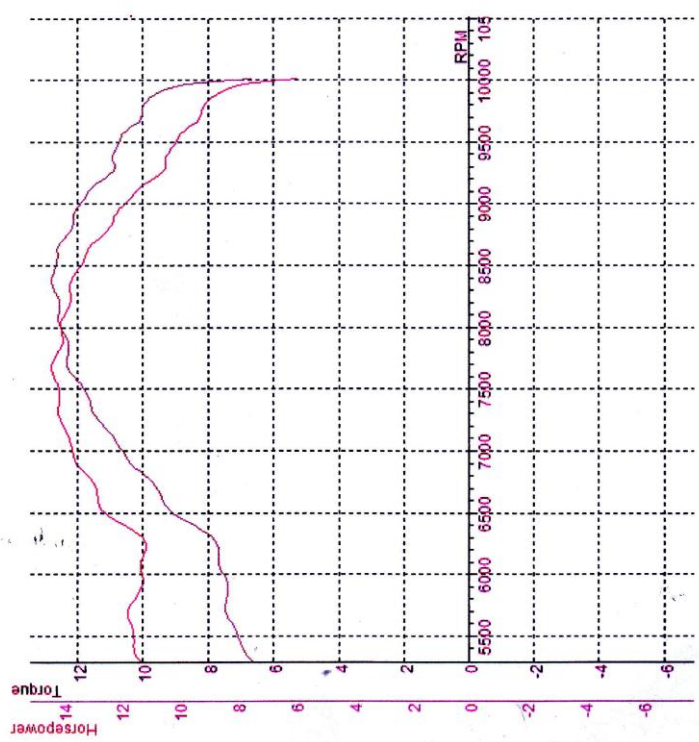
TEST NAME: VIXION 150 T005 | MAX POWER: 14.4 (10.41) / 8.95 | Temp. °C: 33.2 °C | Humidity %: 57 % | Pressure: 1000.0 mbar | KMH: 98.1
 Date/Time: 26/04/2017 13:41:09

DATA FOR TEST: VIXION 150 T005

Comments
 EVALUATE

RPM	HP (HP) (N*M*MM)	T
5000	7.6	10.14
5250	7.7	10.21
5500	7.9	10.27
5750	8.4	10.36
6000	8.5	10.01
6250	8.7	9.91
6500	10.2	11.16
6750	11.1	11.99
7000	12.0	12.16
7250	12.9	12.56
7500	13.3	12.56
7664	13.8	12.78
7750	13.8	12.68
8000	14.1	12.49
8250	14.2	12.19
8395	14.4	12.16
8500	14.2	11.84
8750	13.8	11.20
9000	13.3	10.49
9250	12.3	9.37
9500	12.0	8.94
9750	11.3	8.18
10000	8.2	5.74

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.4 HP
 0.0 N*M*MM
 12.78 N*M*MM



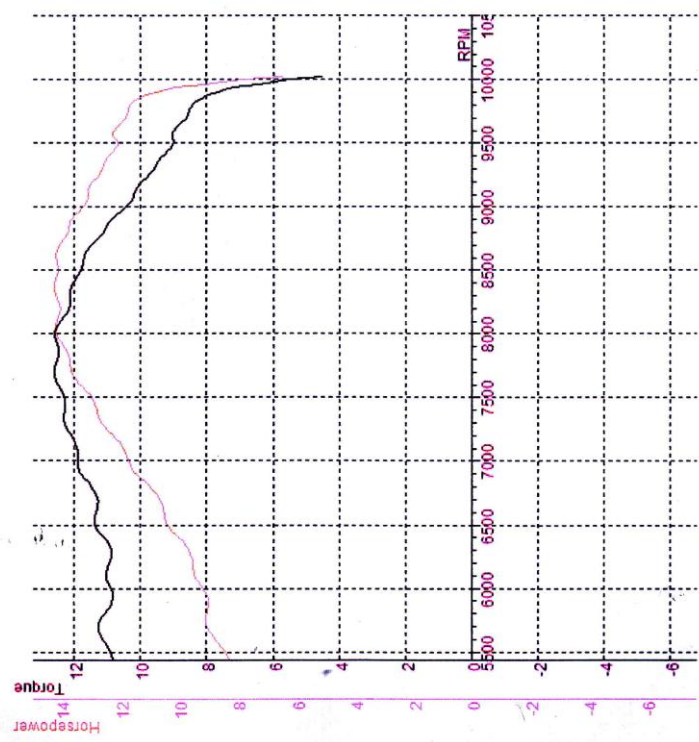
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SPORTINO V3.3
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.446

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

TEST NAME: VIXION 150 T004 | MAX POWER: 12.58 (12.58) / 7702 | Temp. °C: 33.2 °C | Humidity %: 57 % | Pressure: 1000.0 mbar | KMH: 98.2 | Date/Time: 26/04/2017 13:40:50



DATA FOR TEST: VIXION 150 T004

Comments EVALUATE

RPM	HP (HP)	HP (N*M/M)	T
5000	8.3	10.85	0.52
5250	8.4	10.90	0.54
5500	8.5	10.95	0.56
5750	9.1	11.15	0.74
6000	9.2	10.87	0.90
6250	9.6	10.85	1.10
6500	10.4	11.36	1.26
6750	10.9	11.40	1.44
7000	11.7	11.89	1.60
7250	12.5	12.22	1.76
7500	13.0	12.30	1.92
7702	13.6	12.58	2.04
7750	13.7	12.52	2.08
8000	14.2	12.56	2.24
8250	14.1	12.10	2.40
8370	14.2	12.06	2.48
8500	14.1	11.74	2.58
8750	13.8	11.20	2.76
9000	13.2	10.36	2.96
9250	12.7	9.72	3.16
9500	12.1	9.00	3.38
9750	11.7	8.51	3.62
10000	7.8	5.52	4.14

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.2HP
 12.58N*M/M

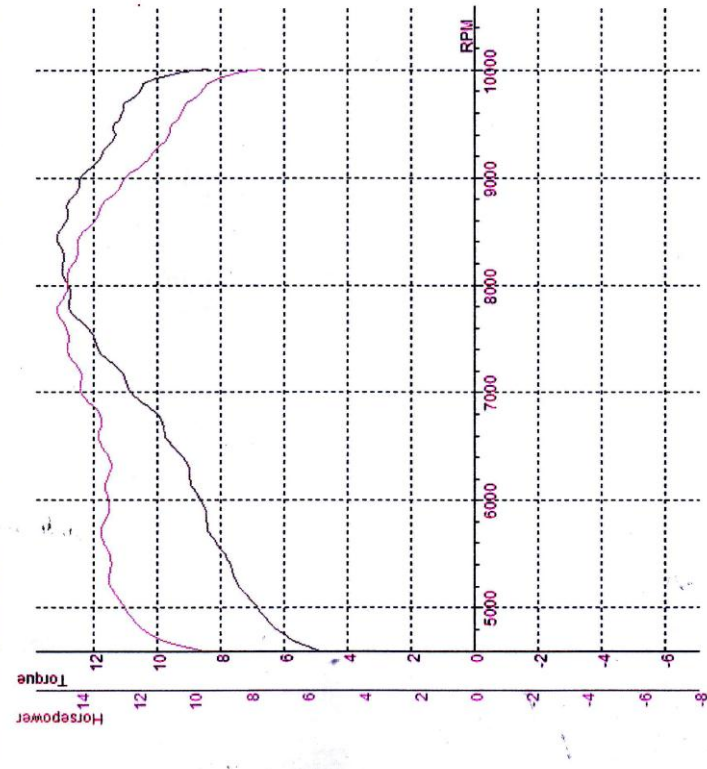
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SPORTIVO V3.3
DYNAMOMETER: MOTOTECH
ROLLER INERTIA: 1.446

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

TEST NAME: MAX POWER. | MAX TORQUE | Temp. °C: 33.2 °C | Humidity %: 57 % | Pressure: 1000.0 mbar | KMH: 98.2 | Date/Time: 26/04/2017 13:41:46



DATA FOR TEST: VIXION 150 T007

Comments EVALUATE	RPM	HP (HP)(N*M*MM)	T
	4500	5.8	9.01
	4750	6.8	10.25
	5000	7.8	11.07
	5250	8.5	11.54
	5500	8.9	11.53
	5750	9.5	11.72
	6000	9.8	11.55
	6250	10.1	11.48
	6500	10.8	11.78
	6750	11.2	11.76
	7000	12.2	12.40
	7250	12.8	12.56
	7500	13.6	12.80
	7750	14.4	13.16
	8000	14.5	12.82
	8250	14.6	12.54
	8439	14.8	12.46
	8500	14.8	12.22
	8750	14.5	11.71
	9000	14.0	10.96
	9250	13.2	10.06
	9500	12.8	9.53
	9750	12.1	8.76
	10000	9.5	6.68

LOSSES: 0.0 HP
 TOTAL ENGINE: 14.8 HP
 0.0N*M*MM
 13.16N*M*MM

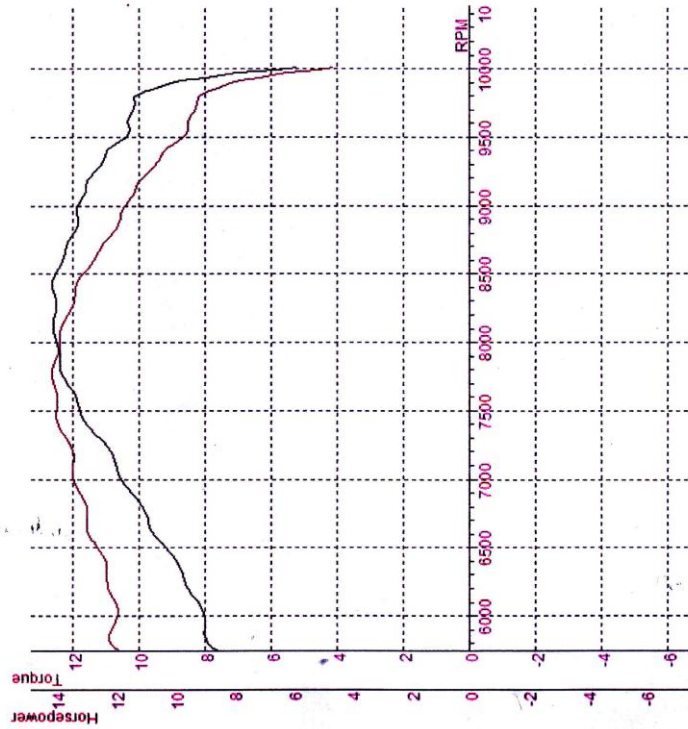
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SPORTDYNO V3.3
 DYNAMOMETER: MOTOTECH
 ROLLER INERTIA: 1.446

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

TESTNAME: VISION 150 T003 | MAX POWER: 14.2 (14.2) / 8426 | Temp °C: 33.2 °C | Humidity %: 57 % | Pressure: 1000.0 mbar | KMH: 98.1 | Date/Time: 26/04/2017 13:40:32



DATA FOR TEST: VISION 150 T003

Comments EVALUATE

RPM	HP (HP)	HP (N*M/M)	T
5500	8.8	10.77	0.52
5750	8.9	10.86	0.54
6000	9.0	10.85	0.70
6250	9.7	10.98	0.88
6500	10.3	11.27	1.04
6750	11.0	11.57	1.22
7000	11.9	12.01	1.38
7250	12.4	12.12	1.54
7500	13.2	12.49	1.70
7750	13.8	12.64	1.86
7770	13.8	12.64	1.86
8000	14.0	12.40	2.02
8250	14.0	12.04	2.18
8500	14.2	11.91	2.30
8750	14.0	11.67	2.36
9000	13.6	10.99	2.54
9250	13.3	10.42	2.74
9500	12.6	9.64	2.96
9750	11.7	8.68	3.18
9750	11.4	8.24	3.42
10000	5.9	4.14	4.10

LOSSES: 0.0 HP 0.0N*M/M
 TOTAL ENGINE: 14.2HP 12.64N*M/M

