

LAMPIRAN

a. Hasil Pengujian Horse Power dan Torsi



SPORTDYNO V3.3
DYNAMOMETER: SD325
ROLLER INERTIA: 4.6

Displacement Correction
Correction Factor: SAE J1349
NOTE: Load Cell Included.

DATA FOR TEST: SATHIA FU 150 STD002

RPM	HP (HP)	TQ (N*M)	EXHAUST 1	RPM	HP (HP)	TQ (N*M)	EXHAUST 1
310	0.5	1.22	102.2	860	13.6	11.32	102.2
320	0.8	1.77	102.2	870	13.7	11.22	102.2
330	1.2	2.68	102.2	880	13.8	11.12	102.2
340	2.0	4.16	102.2	890	13.8	11.04	102.2
350	3.3	6.72	102.2	894.1	13.8	11.04	102.2
360	4.2	8.40	102.2	900	13.8	10.93	102.2
370	4.7	9.08	102.2	910	13.8	10.78	102.2
380	4.9	9.27	102.2	920	13.8	10.66	102.2
390	5.0	9.26	102.2	930	13.6	10.44	102.2
400	5.1	9.10	102.2	940	13.6	10.25	102.2
410	5.1	8.90	102.2	950	13.4	10.03	102.2
420	5.2	8.81	102.2	960	13.4	9.92	102.2
430	5.3	8.82	102.2	970	13.3	9.72	102.2
440	5.4	8.79	102.2	980	13.0	9.44	102.2
450	5.6	8.80	102.2	990	12.9	9.28	102.2
460	5.7	8.84	102.2	1000	13.0	9.21	102.2
470	5.8	8.78	102.2	1010	12.8	9.03	102.2
480	5.9	8.81	102.2	1020	12.5	8.74	102.2
490	6.1	8.97	102.2	1030	12.4	8.54	102.2
500	6.3	9.08	102.2	1040	12.2	8.34	102.2
510	6.6	9.18	102.2	1050	11.9	8.05	102.2
520	6.8	9.31	102.2	1060	11.8	7.87	102.2
530	7.0	9.40	102.2	1070	11.7	7.74	102.2
540	7.1	9.42	102.2	1080	11.5	7.54	102.2
550	7.3	9.49	102.2	1090	11.2	7.27	102.2
560	7.5	9.58	102.2	1100	10.6	6.84	102.2
570	7.8	9.73	102.2				
580	8.1	9.91	102.2				
590	8.2	9.97	102.2				
600	8.5	10.05	102.2				
610	8.6	10.14	102.2				
620	9.0	10.29	102.2				
630	9.2	10.43	102.2				
640	9.6	10.63	102.2				
650	9.8	10.72	102.2				
660	9.9	10.77	102.2				
670	10.2	10.81	102.2				
680	10.3	10.85	102.2				
690	10.5	10.88	102.2				
700	10.8	11.00	102.2				
710	11.0	11.09	102.2				
720	11.4	11.22	102.2				
730	11.5	11.26	102.2				
740	11.8	11.38	102.2				
750	12.0	11.43	102.2				
760	12.3	11.49	102.2				
770	12.5	11.52	102.2				
780	12.6	11.55	102.2				
790	12.8	11.54	102.2				
800	13.0	11.53	102.2				
810	13.1	11.54	102.2				
820	13.3	11.54	102.2				
830	13.4	11.55	102.2				
831.4	13.4	11.55	102.2				
840	13.6	11.51	102.2				
850	13.6	11.42	102.2				

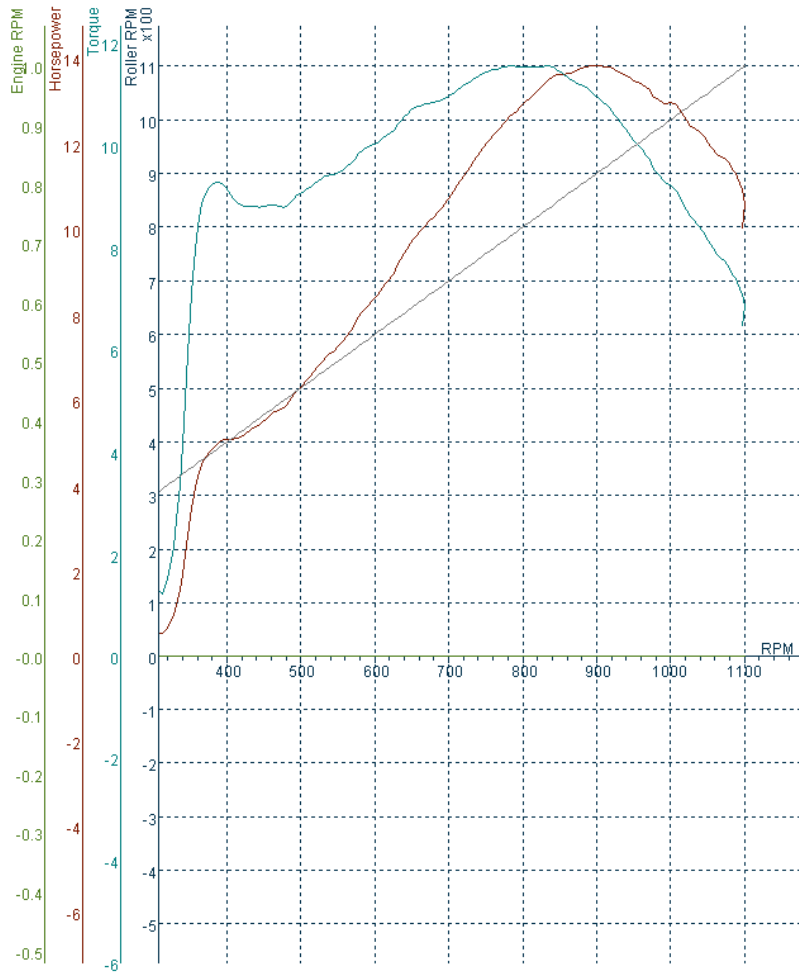
Tabel Horse Power dan Torsi Kondisi Standart



SPORTDYNO V3.3
DYNAMOMETER: SD325
ROLLER INERTIA: 4.6

Displacement Correction
 Correction Factor: SAE J1349
 NOTE: Load Cell Included.

TEST NAME	MAX POWER	MAX TORQUE	Temp. °C	Humidity %	Pressure	RPM	Date/Time
SATRIA FU 150 STD002	13.8 (13.8) / 894.1	11.55 (11.55) / 831.4	29.0 °C	56 %	1000.0 mbar	1100.108	1/1/2002 12:18:53 AM



Grafik Horse Power dan Torsi Standart



SPORTDYNO V3.3
 DYNAMOMETER: SD325
 ROLLER INERTIA: 4.6

Displacement Correction
 Correction Factor: SAE J1349
 NOTE: Load Cell Included.

DATA FOR TEST: SATRIA FU 150 VARIABEL 1

RPM	HP (HP)	TQ (N*M)	EXHAUST 1	RPM	HP (HP)	TQ (N*M)	EXHAUST 1
310	0.6	1.27	102.2	860	13.3	11.16	102.2
320	0.6	1.36	102.2	870	13.4	11.11	102.2
330	1.0	2.16	102.2	880	13.4	11.02	102.2
340	1.6	3.44	102.2	882.8	13.4	11.02	102.2
350	2.9	5.95	102.2	890	13.4	10.91	102.2
360	3.6	7.38	102.2	900	13.3	10.71	102.2
370	4.4	8.65	102.2	910	13.2	10.48	102.2
380	4.8	9.13	102.2	920	13.1	10.31	102.2
390	4.9	9.14	102.2	930	12.9	9.99	102.2
400	5.0	9.10	102.2	940	12.7	9.73	102.2
410	5.1	9.04	102.2	950	12.7	9.66	102.2
420	5.2	8.94	102.2	960	12.7	9.56	102.2
430	5.3	8.90	102.2	970	12.6	9.36	102.2
440	5.4	8.87	102.2	980	12.5	9.17	102.2
450	5.5	8.83	102.2	990	12.3	8.98	102.2
460	5.6	8.86	102.2	1000	12.2	8.78	102.2
470	5.7	8.84	102.2	1010	12.2	8.69	102.2
480	5.9	8.90	102.2	1020	12.2	8.63	102.2
490	6.2	9.16	102.2	1030	12.0	8.38	102.2
500	6.4	9.33	102.2	1040	11.7	8.12	102.2
510	6.6	9.36	102.2	1050	11.7	8.02	102.2
520	6.8	9.45	102.2	1060	11.6	7.89	102.2
530	6.9	9.50	102.2	1070	11.4	7.66	102.2
540	7.1	9.48	102.2	1080	11.2	7.45	102.2
550	7.3	9.56	102.2	1090	11.0	7.30	102.2
560	7.5	9.71	102.2	1100	11.0	7.17	102.2
570	7.7	9.86	102.2	1110	10.8	7.00	102.2
580	8.0	9.98	102.2	1120	10.6	6.81	102.2
590	8.2	10.05	102.2	1130	10.5	6.72	102.2
600	8.4	10.11	102.2	1140	10.3	6.50	102.2
610	8.7	10.28	102.2				
620	8.9	10.42	102.2				
630	9.3	10.64	102.2				
640	9.5	10.78	102.2				
650	9.8	10.88	102.2				
660	9.9	10.87	102.2				
670	10.1	10.87	102.2				
680	10.3	10.96	102.2				
690	10.5	11.05	102.2				
700	10.7	11.14	102.2				
710	11.0	11.23	102.2				
720	11.2	11.26	102.2				
730	11.4	11.28	102.2				
740	11.6	11.35	102.2				
750	11.8	11.40	102.2				
760	12.0	11.44	102.2				
770	12.3	11.52	102.2				
780	12.5	11.56	102.2				
790	12.6	11.58	102.2				
791.1	12.6	11.58	102.2				
800	12.8	11.51	102.2				
810	12.9	11.49	102.2				
820	13.0	11.49	102.2				
830	13.2	11.43	102.2				
840	13.2	11.36	102.2				
850	13.2	11.27	102.2				

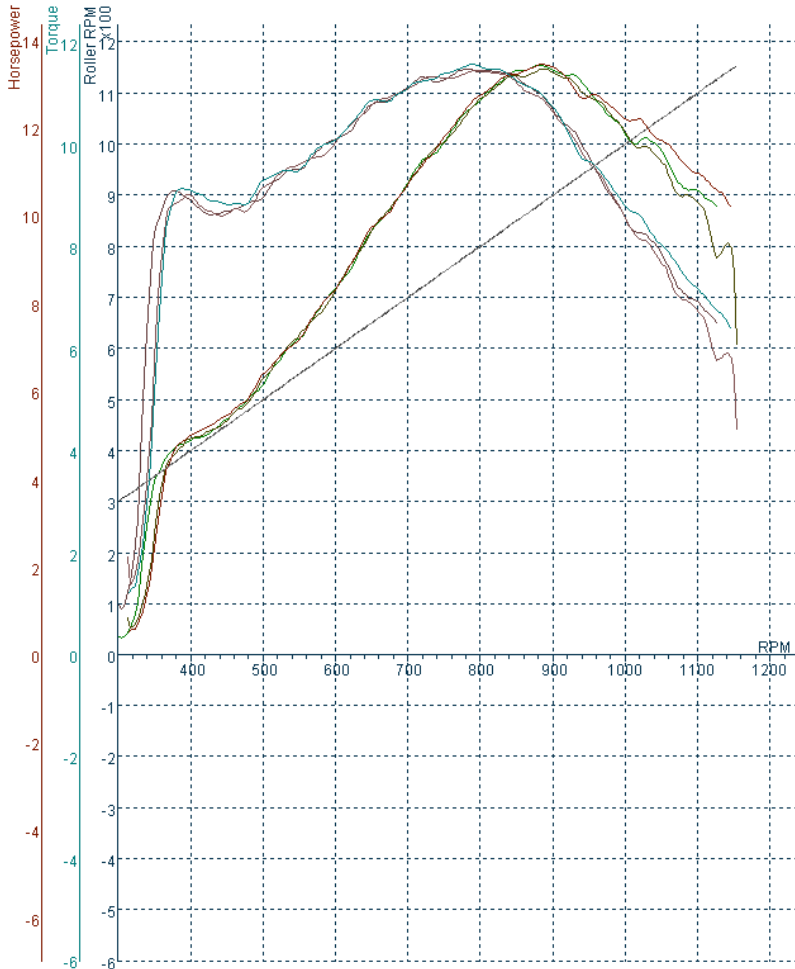
Tabel Horse Power dan Torsi dengan Hydrogen dengan Presentase KOH 3%



SPORTDYNO V3.3
 DYNAMOMETER: SD325
 ROLLER INERTIA: 4.6

Displacement Correction
 Correction Factor: SAE J1349
 NOTE: Load Cell Included.

TEST NAME	MAX POWER	MAX TORQUE	Temp. °C	Humidity %	Pressure	RPM	Date/Time
SATRIA FU 150 VARIABEL 1006	13.4 (13.4) / 882.2	11.48 (11.48) / 782.0	31.5 °C	39 %	1000.0 mbar	1130.536	1/1/2002 1:03:5
SATRIA FU 150 VARIABEL 1004	13.3 (13.3) / 888.4	11.47 (11.47) / 793.9	31.5 °C	39 %	1000.0 mbar	1155.675	1/1/2002 1:01:5
SATRIA FU 150 VARIABEL 1	13.4 (13.4) / 882.8	11.58 (11.58) / 791.1	31.5 °C	39 %	1000.0 mbar	1150.632	1/1/2002 12:58



Grafik Horse Power dan Torsi dengan Hydrogen dengan Presentase KOH 3%



SPORTDYN0 V3.3
 DYNAMOMETER: SD325
 ROLLER INERTIA: 4.6

Displacement Correction
 Correction Factor: SAE J1349
 NOTE: Load Cell Included.

DATA FOR TEST: SATRIA FU 150 VARIABEL 2005

RPM	HP (HP)	TQ (N*M)	EXHAUST 1	RPM	HP (HP)	TQ (N*M)	EXHAUST 1
320	1.2	2.64	102.2	870	13.5	11.21	102.2
330	1.5	3.27	102.2	880	13.5	11.07	102.2
340	1.9	4.03	102.2	890	13.5	11.00	102.2
350	2.7	5.70	102.2	898.6	13.6	10.92	102.2
360	3.8	7.69	102.2	900	13.5	10.87	102.2
370	4.4	8.62	102.2	910	13.5	10.67	102.2
380	4.7	9.03	102.2	920	13.4	10.53	102.2
390	4.9	9.19	102.2	930	13.3	10.35	102.2
400	5.0	9.14	102.2	940	13.3	10.20	102.2
410	5.1	9.01	102.2	950	13.2	10.02	102.2
420	5.1	8.86	102.2	960	12.9	9.70	102.2
430	5.2	8.76	102.2	970	12.9	9.59	102.2
440	5.3	8.72	102.2	980	12.8	9.42	102.2
450	5.4	8.70	102.2	990	12.6	9.19	102.2
460	5.5	8.72	102.2	1000	12.5	9.00	102.2
470	5.7	8.79	102.2	1010	12.2	8.73	102.2
480	5.8	8.74	102.2	1020	12.0	8.47	102.2
490	6.0	8.82	102.2	1030	11.9	8.32	102.2
500	6.2	9.02	102.2	1040	11.9	8.22	102.2
510	6.4	9.12	102.2	1050	11.8	8.07	102.2
520	6.7	9.28	102.2	1060	11.6	7.86	102.2
530	6.9	9.41	102.2	1070	11.4	7.66	102.2
540	7.1	9.56	102.2	1080	10.9	7.25	102.2
550	7.2	9.57	102.2	1090	10.7	7.03	102.2
560	7.4	9.63	102.2	1100	10.6	6.93	102.2
570	7.7	9.73	102.2	1110	10.6	6.90	102.2
580	7.9	9.80	102.2	1120	10.3	6.61	102.2
590	8.1	9.92	102.2	1130	10.1	6.42	102.2
600	8.3	10.01	102.2	1140	9.9	6.26	102.2
610	8.6	10.14	102.2	1150	9.3	5.83	102.2
620	8.7	10.19	102.2	1160	2.5	1.53	102.2
630	8.9	10.26	102.2				
640	9.1	10.30	102.2				
650	9.4	10.42	102.2				
660	9.6	10.56	102.2				
670	9.9	10.69	102.2				
680	10.2	10.84	102.2				
690	10.4	10.94	102.2				
700	10.6	11.00	102.2				
710	10.8	11.04	102.2				
720	11.0	11.09	102.2				
730	11.3	11.20	102.2				
740	11.6	11.29	102.2				
750	11.7	11.33	102.2				
760	11.9	11.33	102.2				
770	12.1	11.33	102.2				
780	12.3	11.37	102.2				
790	12.5	11.43	102.2				
800	12.7	11.49	102.2				
806.8	12.8	11.49	102.2				
810	12.9	11.49	102.2				
820	13.0	11.48	102.2				
830	13.2	11.49	102.2				
840	13.3	11.47	102.2				
850	13.4	11.39	102.2				
860	13.5	11.31	102.2				

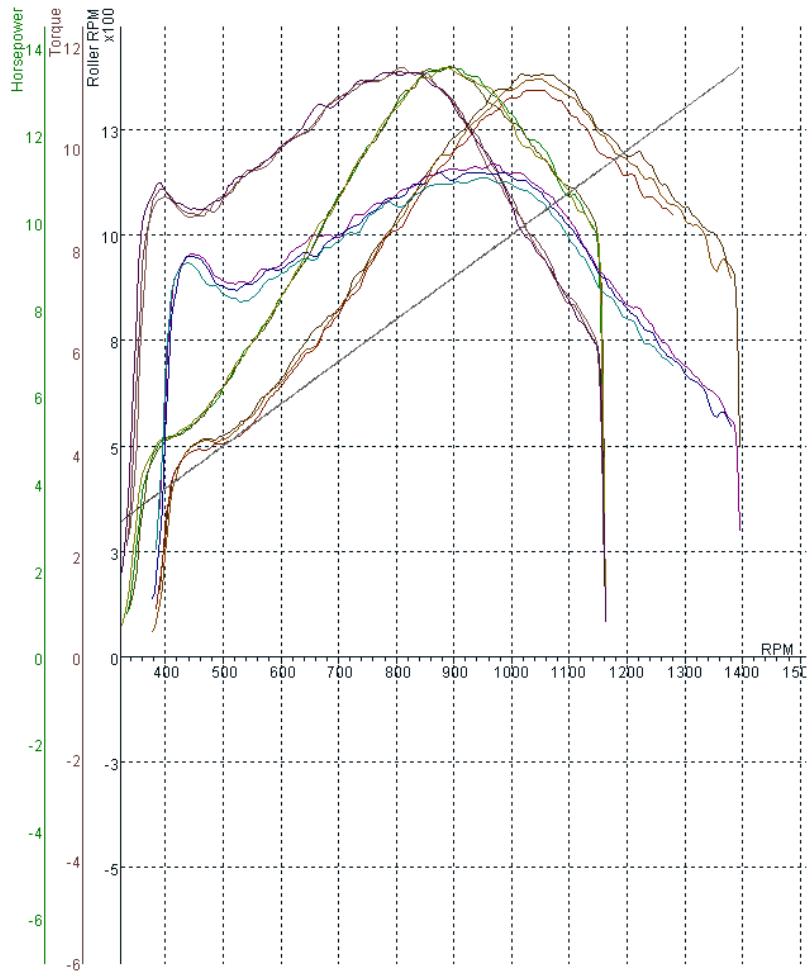
Tabel Horse Power dan Torsi dengan Hydrogen dengan Presentase KOH 4%



SPORTDYNO V3.3
DYNAMOMETER: SD325
ROLLER INERTIA: 4.6

Displacement Correction
 Correction Factor: SAE J1349
 NOTE: Load Cell Included.

TEST NAME	MAX POWER	MAX TORQUE	Temp. °C	Humidity %	Pressure	RPM	Date/Time
SATRIA FU 150 VARIABEL 2005	13.6 (13.6) / 898.6	11.49 (11.49) / 806.8	31.5 °C	39 %	1000.0 mbar	1161.454	1/1/2002 2:11:5
SATRIA FU 150 VARIABEL 2004	13.6 (13.6) / 892.4	11.59 (11.59) / 808.4	31.5 °C	39 %	1000.0 mbar	1160.874	1/1/2002 2:11:1
SATRIA FU 150 VARIABEL 2003	13.6 (13.6) / 884.2	11.49 (11.49) / 828.1	31.5 °C	39 %	1000.0 mbar	1161.975	1/1/2002 2:10:2
SATRIA FU 150 VARIABEL 2002	13.4 (13.4) / 1056.1	9.68 (9.68) / 969.0	31.5 °C	39 %	1000.0 mbar	1397.567	1/1/2002 2:09:5
SATRIA FU 150 VARIABEL 2001	13.3 (13.3) / 1053.0	9.52 (9.52) / 983.2	31.5 °C	39 %	1000.0 mbar	1384.375	1/1/2002 2:08:5
SATRIA FU 150 VARIABEL 2	13.0 (13.0) / 1028.4	9.41 (9.41) / 952.0	31.5 °C	39 %	1000.0 mbar	1286.271	1/1/2002 2:08:2



Grafik Horse Power dan Torsi dengan Hydrogen dengan Presentase KOH 4%



SPORTDYNO V3.3
 DYNAMOMETER: SD325
 ROLLER INERTIA: 4.6

Displacement Correction
 Correction Factor: SAE J1349
 NOTE: Load Cell Included.

DATA FOR TEST: SATRIA FU 150 VARIABEL 3006

RPM	HP (HP)	TQ (N*M)	EXHAUST 1	RPM	HP (HP)	TQ (N*M)	EXHAUST 1
310	0.5	1.19	102.2	860	13.5	11.37	102.2
320	0.7	1.68	102.2	870	13.6	11.34	102.2
330	1.3	2.85	102.2	880	13.7	11.24	102.2
340	2.7	5.71	102.2	882.1	13.7	11.24	102.2
350	3.8	7.99	102.2	890	13.6	11.00	102.2
360	4.4	8.94	102.2	900	13.5	10.83	102.2
370	4.7	9.20	102.2	910	13.5	10.68	102.2
380	4.9	9.40	102.2	920	13.5	10.59	102.2
390	5.0	9.37	102.2	930	13.4	10.42	102.2
400	5.1	9.17	102.2	940	13.3	10.22	102.2
410	5.1	9.10	102.2	950	13.0	9.85	102.2
420	5.2	9.02	102.2	960	12.9	9.66	102.2
430	5.3	8.95	102.2	970	12.8	9.55	102.2
440	5.4	8.86	102.2	980	12.7	9.33	102.2
450	5.5	8.85	102.2	990	12.5	9.10	102.2
460	5.6	8.88	102.2	1000	12.4	8.94	102.2
470	5.7	8.89	102.2	1010	12.1	8.65	102.2
480	5.9	8.87	102.2	1020	11.9	8.43	102.2
490	6.1	9.07	102.2	1030	11.9	8.29	102.2
500	6.4	9.29	102.2	1040	11.8	8.15	102.2
510	6.6	9.40	102.2	1050	11.6	7.99	102.2
520	6.9	9.57	102.2	1060	11.4	7.74	102.2
530	7.0	9.59	102.2	1070	11.0	7.38	102.2
540	7.2	9.63	102.2	1080	10.9	7.29	102.2
550	7.3	9.65	102.2	1090	10.8	7.17	102.2
560	7.5	9.74	102.2	1100	10.6	6.90	102.2
570	7.7	9.85	102.2	1110	10.3	6.71	102.2
580	8.0	10.01	102.2	1120	10.1	6.49	102.2
590	8.3	10.20	102.2	1130	10.0	6.33	102.2
600	8.5	10.30	102.2	1140	9.7	6.11	102.2
610	8.8	10.37	102.2	1150	9.3	5.84	102.2
620	8.9	10.42	102.2	1160	1.3	0.82	102.2
630	9.1	10.48	102.2				
640	9.4	10.63	102.2				
650	9.6	10.75	102.2				
660	9.9	10.89	102.2				
670	10.3	11.08	102.2				
680	10.4	11.14	102.2				
690	10.7	11.16	102.2				
700	10.8	11.15	102.2				
710	11.0	11.21	102.2				
720	11.2	11.30	102.2				
730	11.6	11.45	102.2				
740	11.7	11.50	102.2				
750	11.9	11.50	102.2				
760	12.1	11.49	102.2				
770	12.3	11.56	102.2				
780	12.5	11.64	102.2				
790	12.7	11.70	102.2				
793	12.8	11.71	102.2				
800	12.9	11.68	102.2				
810	13.0	11.66	102.2				
820	13.3	11.66	102.2				
830	13.4	11.63	102.2				
840	13.4	11.58	102.2				
850	13.5	11.44	102.2				

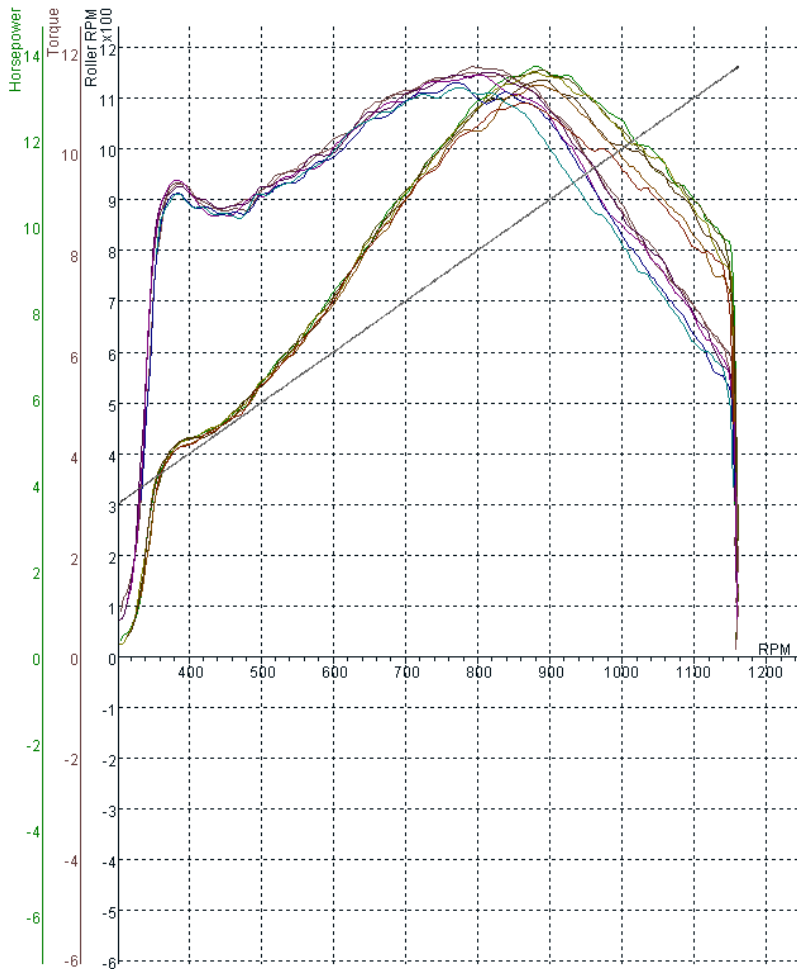
Tabel Horse Power dan Torsi dengan Hydrogen dengan Presentase KOH 5%



SPORTDYNO V3.3
DYNAMOMETER: SD325
ROLLER INERTIA: 4.6

Displacement Correction
 Correction Factor: SAE J1349
 NOTE: Load Cell Included.

TEST NAME	MAX POWER	MAX TORQUE	Temp. °C	Humidity %	Pressure	RPM	Date/Time
SATRIA FU 150 VARIABEL 3006	13.7 (13.7) / 882.1	11.71 (11.71) / 793.0	31.5 °C	39 %	1000.0 mbar	1160.14	1/1/2002 2:38:0
SATRIA FU 150 VARIABEL 3005	13.6 (13.9) / 885.3	11.59 (11.75) / 788.6	31.5 °C	39 %	1000.0 mbar	1160.53	1/1/2002 2:37:5
SATRIA FU 150 VARIABEL 3004	13.6 (13.6) / 875.1	11.59 (11.59) / 816.8	31.5 °C	39 %	1000.0 mbar	1160.798	1/1/2002 2:37:0
SATRIA FU 150 VARIABEL 3002	13.4 (13.4) / 889.4	11.53 (11.53) / 798.6	31.5 °C	39 %	1000.0 mbar	1159.007	1/1/2002 2:36:1
SATRIA FU 150 VARIABEL 3001	13.3 (13.3) / 882.4	11.38 (11.38) / 772.3	31.5 °C	39 %	1000.0 mbar	1156.026	1/1/2002 2:35:4
SATRIA FU 150 VARIABEL 3	12.9 (12.9) / 864.1	11.30 (11.30) / 774.1	31.5 °C	39 %	1000.0 mbar	1155.396	1/1/2002 2:35:1



Grafik Horse Power dan Torsi dengan Hydrogen dengan Presentase KOH 5%

DATA HASIL PENGUJIAN FUEL CONSUMPTION SATRIA FU 150 cc

Tabel Hasil Pengujian Fuel Consumption Satria FU

SATIA FU 150 cc STANDART 5000 RPM	No.	Percobaan 1,2,3	Volume Peralite		
			10 ml	25ml	50ml
	01.	Percobaan 1	49 detik	128 detik	239 detik
	02.	Percobaan 2	53 detik	128 detik	241 detik
03.	Percobaan 3	50 detik	133 detik	242 detik	
Rata - Rata			50,6 detik	129,6 detik	240,6 detik

SATIA FU 150 cc KOH 3% 5000 RPM	No.	Percobaan 1,2,3	Volume Peralite		
			10 ml	25ml	50ml
	01.	Percobaan 1	55 detik	142 detik	264 detik
	02.	Percobaan 2	59 detik	144 detik	261 detik
03.	Percobaan 3	57 detik	140 detik	266 detik	
Rata - Rata			57 detik	142 detik	263,6 detik

SATIA FU 150 cc KOH 4% 5000 RPM	No.	Percobaan 1,2,3	Volume Peralite		
			10 ml	25ml	50ml
	01.	Percobaan 1	56 detik	143 detik	266 detik
	02.	Percobaan 2	60 detik	144 detik	262 detik
03.	Percobaan 3	57 detik	145 detik	265 detik	
Rata - Rata			57,6 detik	144 detik	264,3 detik

SATIA FU 150 cc KOH 5% 5000 RPM	No.	Percobaan 1,2,3	Volume Peralite		
			10 ml	25ml	50ml
	01.	Percobaan 1	55 detik	145 detik	267 detik
	02.	Percobaan 2	59 detik	147 detik	263 detik
03.	Percobaan 3	57 detik	144 detik	264 detik	
Rata - Rata			57 detik	145,3 detik	264,6 detik

b. Peralatan Penunjang Pengujian



Generator Hydrogen



Generator Hydrogen Setelah Terpasang



Air Aquades

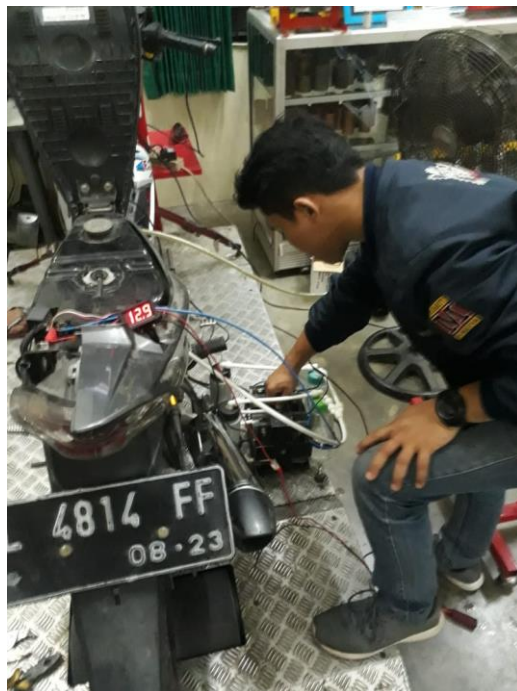
c. Pengujian Torsi, HorsePower dan Fuel Consumption



Dynotest



Gelas Takar Vuel Consumption 10ml, 25ml, 50ml



Persiapan Pengujian



Proses Pengujian