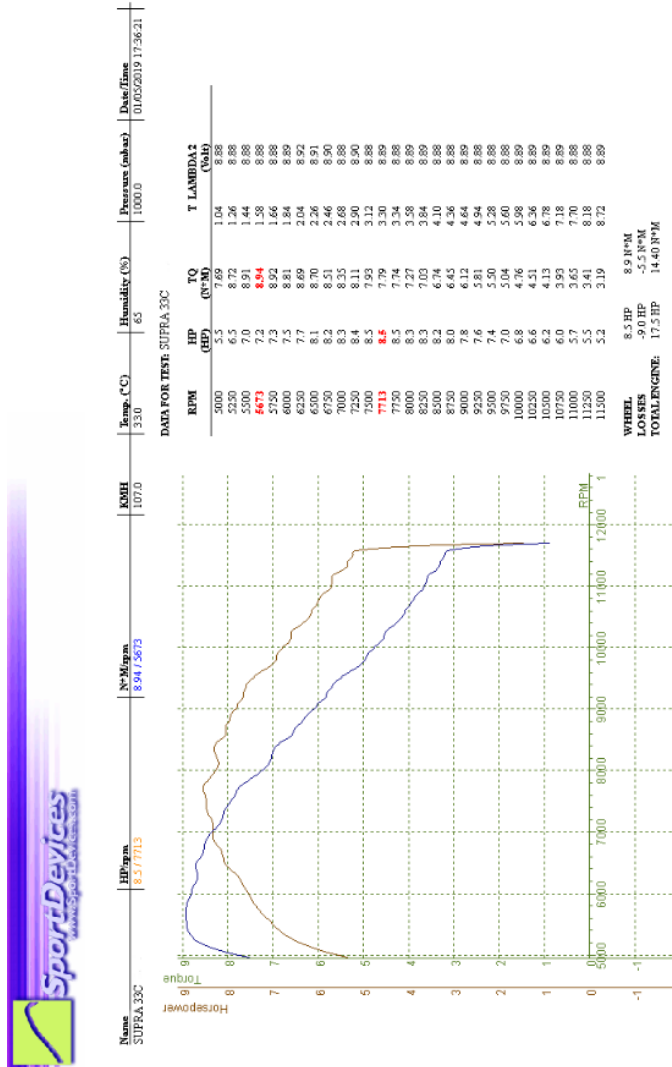


## Lampiran 1 Sifat-Sifat Udara (Arshae, 1997)

$T$ (K)	$\rho$ (kg/m <sup>3</sup> )	$c_p$ (kJ/kg · K)	$\mu \cdot 10^7$ (N · s/m <sup>2</sup> )	$\nu \cdot 10^6$ (m <sup>2</sup> /s)	$k \cdot 10^3$ (W/m · K)	$\alpha \cdot 10^6$ (m <sup>2</sup> /s)	$Pr$
100	3.5562	1.032	71.1	2.00	9.34	2.54	0.786
150	2.3364	1.012	103.4	4.426	13.8	5.84	0.758
200	1.7458	1.007	132.5	7.590	18.1	10.3	0.737
250	1.3947	1.006	159.6	11.44	22.3	15.9	0.720
300	1.1614	1.007	184.6	15.89	26.3	22.5	0.707
350	0.9950	1.009	208.2	20.92	30.0	29.9	0.700
400	0.8711	1.014	230.1	26.41	33.8	38.3	0.690
450	0.7740	1.021	250.7	32.39	37.3	47.2	0.686
500	0.6964	1.030	270.1	38.79	40.7	56.7	0.684
550	0.6329	1.040	288.4	45.57	43.9	66.7	0.683
600	0.5804	1.051	305.8	52.69	46.9	76.9	0.685
650	0.5356	1.063	322.5	60.21	49.7	87.3	0.690
700	0.4975	1.075	338.8	68.10	52.4	98.0	0.695
750	0.4643	1.087	354.6	76.37	54.9	109	0.702
800	0.4354	1.099	369.8	84.93	57.3	120	0.709
850	0.4097	1.110	384.3	93.80	59.6	131	0.716
900	0.3868	1.121	398.1	102.9	62.0	143	0.720
950	0.3666	1.131	411.3	112.2	64.3	155	0.723
1000	0.3482	1.141	424.4	121.9	66.7	168	0.726
1100	0.3166	1.159	449.0	141.8	71.5	195	0.728
1200	0.2902	1.175	473.0	162.9	76.3	224	0.728
1300	0.2679	1.189	496.0	185.1	82	238	0.719
1400	0.2488	1.207	530	213	91	303	0.703
1500	0.2322	1.230	557	240	100	350	0.685
1600	0.2177	1.248	584	268	106	390	0.688
1700	0.2049	1.267	611	298	113	435	0.685
1800	0.1935	1.286	637	329	120	482	0.683
1900	0.1833	1.307	663	362	128	534	0.677

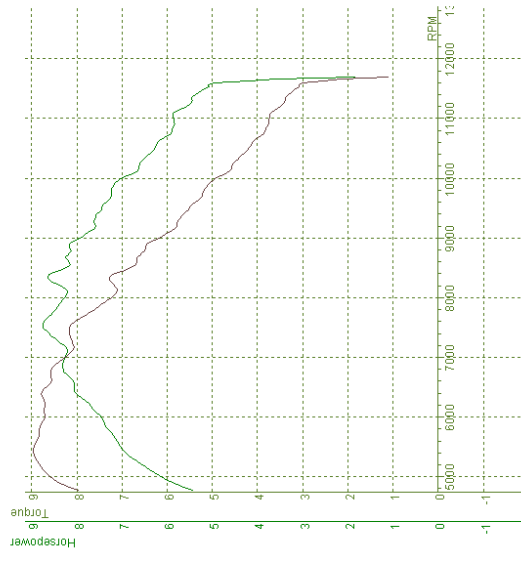
# Lampiran 2 Data Hasil Tes Dynotest pada suhu 33<sup>o</sup>C



# Lampiran 3 Data Hasil Tes Dynotest pada suhu 32°C



Name SUPRA\_32C | RPMmax 6377.5453 | RPM 1071 | Temp. (C) 32.0 | Humidity (%) 65 | Pressure (mbars) 1000.0 | Date/Time 01/03/2019 17:21:40



DATA FOR TEST SUPRA\_32C

RPM	HP (HP)	TQ (N*M)	T LAMBDA 2 (Vol)
5000	6.1	8.26	1.22
5200	6.28	8.26	8.94
5400	6.43	8.26	1.38
5600	6.59	8.26	8.94
5800	6.75	8.26	8.94
6000	6.91	8.26	8.94
6200	7.07	8.26	8.94
6400	7.23	8.26	8.94
6600	7.39	8.26	8.94
6800	7.55	8.26	8.94
7000	7.71	8.26	8.94
7200	7.87	8.26	8.94
7400	8.03	8.26	8.94
7600	8.19	8.26	8.94
7800	8.35	8.26	8.94
8000	8.51	8.26	8.94
8200	8.67	8.26	8.94
8400	8.83	8.26	8.94
8600	8.99	8.26	8.94
8800	9.15	8.26	8.94
9000	9.31	8.26	8.94
9200	9.47	8.26	8.94
9400	9.63	8.26	8.94
9600	9.79	8.26	8.94
9800	9.95	8.26	8.94
10000	10.11	8.26	8.94
10200	10.27	8.26	8.94
10400	10.43	8.26	8.94
10600	10.59	8.26	8.94
10800	10.75	8.26	8.94
11000	10.91	8.26	8.94
11200	11.07	8.26	8.94
11400	11.23	8.26	8.94
11600	11.39	8.26	8.94
11800	11.55	8.26	8.94
12000	11.71	8.26	8.94

WHEEL 8.8 HP  
 LOSSES -4.0 HP  
 TOTALENGINE: 12.7 HP

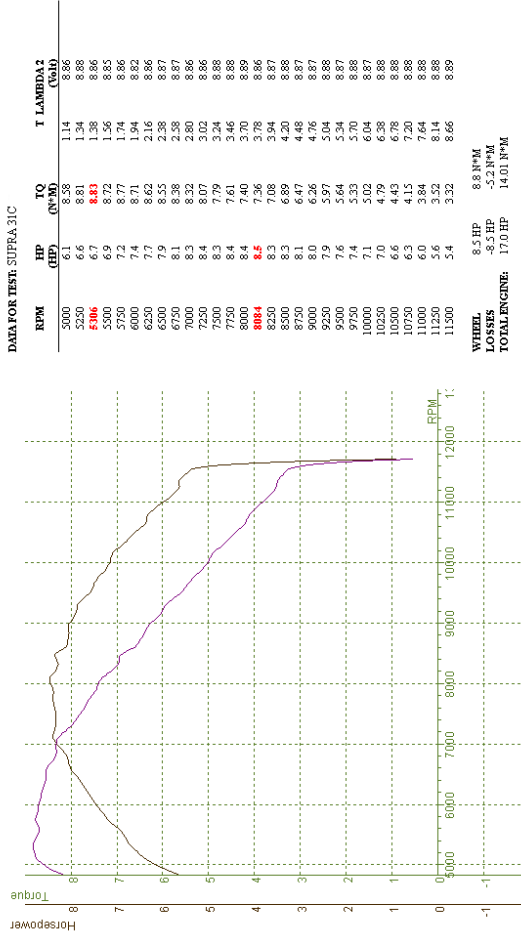
9.0 N\*M  
 -2.4 N\*M  
 11.38 N\*M

# Lampiran 4 Data Hasil Tes Dynotest pada suhu 31<sup>o</sup>C



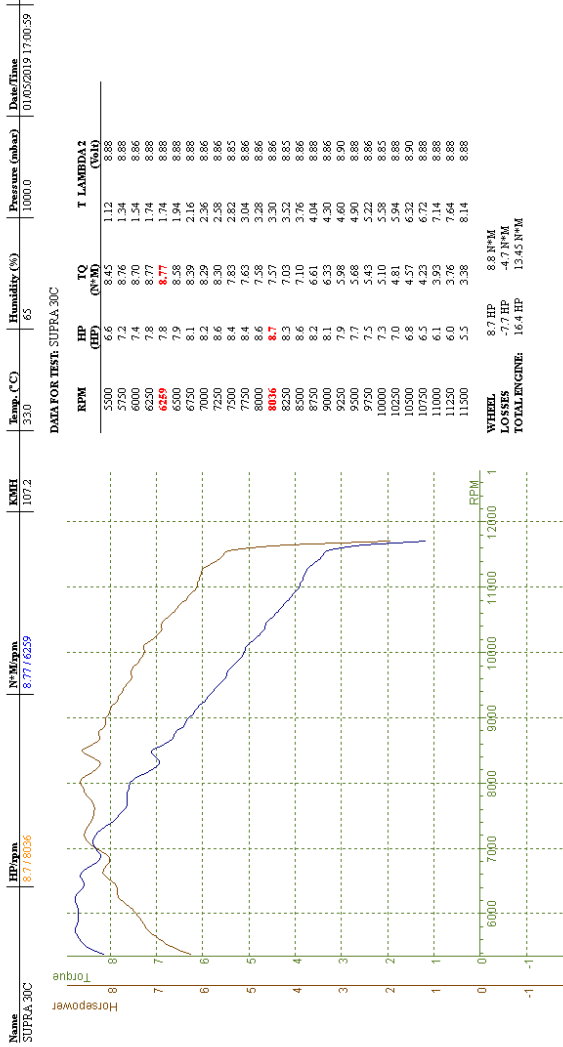
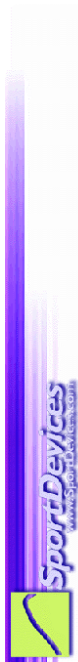
Name SUPRA-31C	HP Max 8578084	N° Myom 6327306	KMH 107.1	Temp. (C) 33.0	Humidity (%) 63	Pressure (mbars) 1000.0	Date/Time 01/03/2019 17:00:36
-------------------	-------------------	--------------------	--------------	-------------------	--------------------	----------------------------	----------------------------------

DATA FOR TEST SUPRA-31C

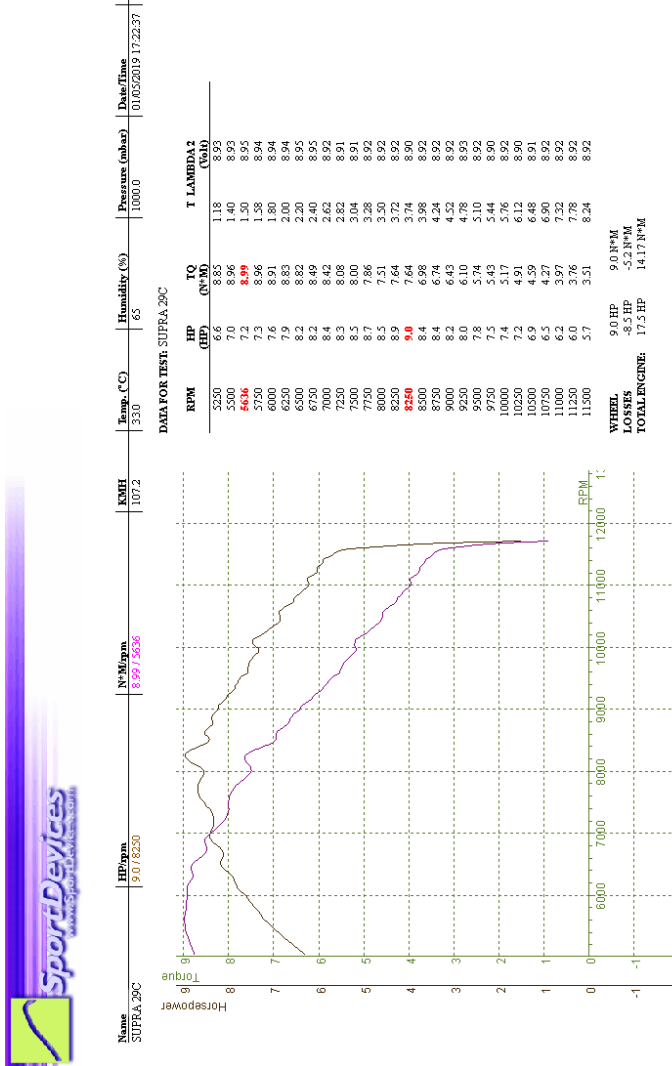


WHEEL 8.5 HP  
 LOSSES -8.5 HP  
 TOTAL ENGINE: 17.0 HP

# Lampiran 5 Data Hasil Tes Dynotest pada suhu 30°C



# Lampiran 6 Data Hasil Tes Dynotest pada suhu 29°C

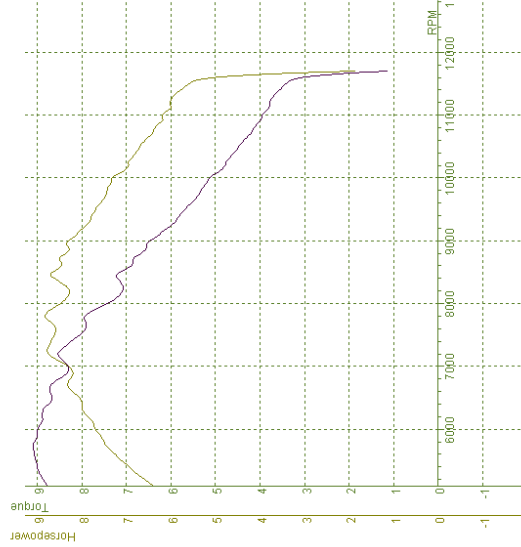




# Lampiran 8 Data Hasil Tes Dynotest pada suhu 27°C



Name: SUPRA\_2TC  
 HP Max: 338,7831  
 RPM Max: 9110,17286  
 KM/H: 107,1  
 Temp. (C): 33,0  
 Humidity (%): 65  
 Pressure (mbars): 1008,0  
 Date/Time: 01/03/2019 17:22:18



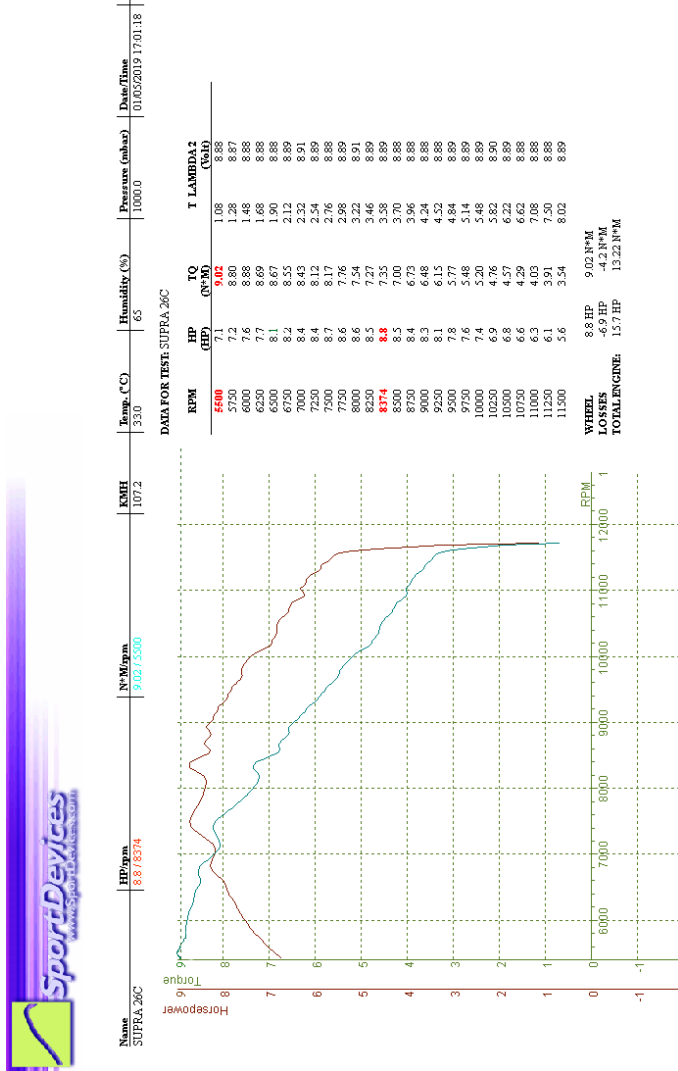
DATA FOR TEST SUPRA\_2TC

RPM	HP (HP)	TQ (N*M)	T LAMBDA 2 (Vol)
5250	7,6	8,82	1,12
5500	7,4	8,92	1,12
5750	7,4	9,10	1,30
6000	7,7	8,99	1,52
6250	7,9	8,89	1,72
6500	8,1	8,69	2,14
6750	8,2	8,54	2,52
7000	8,4	8,51	2,52
7250	8,8	8,48	2,76
7500	8,6	8,05	2,98
7750	8,8	7,93	3,20
8000	8,5	7,91	3,26
8250	8,5	7,47	3,42
8500	8,5	7,15	3,62
8750	8,5	6,83	4,16
9000	8,3	6,49	4,44
9250	7,9	5,99	4,74
9500	7,7	5,68	5,04
9750	7,4	5,37	5,36
10000	7,0	4,97	5,70
10250	7,0	4,77	6,06
10500	6,7	4,47	6,46
10750	6,4	4,17	6,86
11000	6,2	3,94	7,22
11250	6,0	3,75	7,76
11500	5,6	3,42	8,26

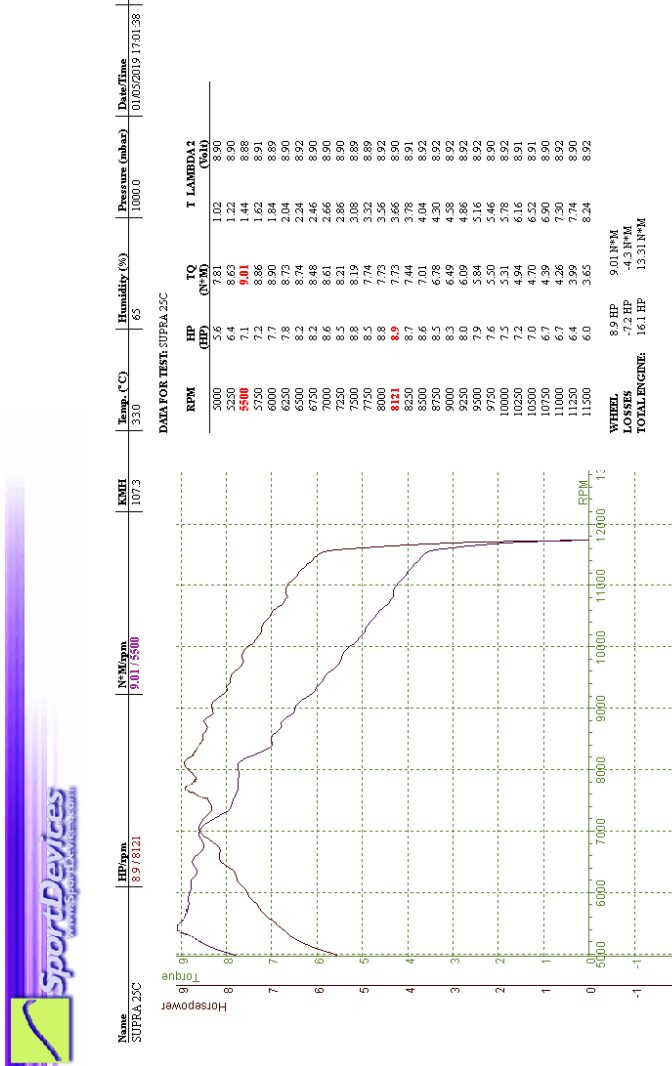
WHEEL LOSSES: 8,8 HP  
 -8,6 HP  
 TOTAL ENGINE: 17,4 HP  
 9,1 N\*M  
 -5,2 N\*M  
 14,34 N\*M



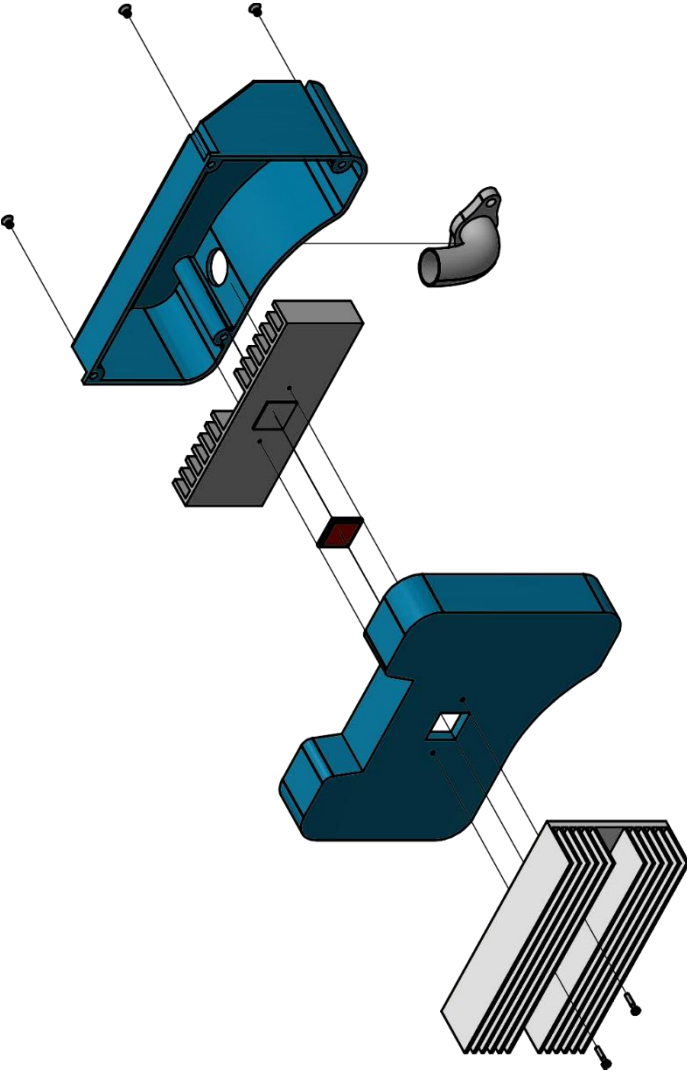
# Lampiran 9 Data Hasil Tes Dynotest pada suhu 26°C



# Lampiran 10 Data Hasil Tes Dynotest pada suhu 25°C




Lampiran 11 Perencanaan Modifikasi Filter Motor



Lampiran 12 Filter Udara Motor yang Telah Dimodifikasi



## Lampiran 13 Scan Lembar Asistensi



**UNIVERSITAS MUHAMMADIYAH SURABAYA**  
**FAKULTAS TEKNIK**  
**PROGRAM STUDI S-1 TEKNIK MESIN, S-1 TEKNIK ARSITEKTUR, S-1 TEKNIK SIPIL, S-1 TEKNIK PERKAPALAN, S-1 TEKNIK ELEKTRO, D-3 TEKNIK KOMPUTER**  
 Alamat : Jalan Sutorejo 59 Surabaya  
 Telp./Fax: 031-3811966 ext.138

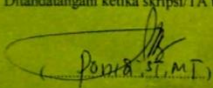
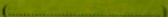
---

Nama : TEGIH WIDIANTO  
 NIM : 2019 135 1107  
 Judul Skripsi : Analisa Pengaruh Penempatan Letak Motor Pada Variabel Motor Honda Supra X 200 Terhadap Throm Electric Cukir Terhadap Waktu Kerja Mesin  
 Pembimbing Pendamping : 27 Oktober 2018  
 Mulai Bimbingan :

No.	Tgl	Materi	Paraf Pembimbing		Paraf Mahasiswa
			I	II	
1	27/10/18	Bab I • Latar Belakang • Rumusan Masalah • Batasan Masalah	<i>[Signature]</i>		
2	10/11/18	Bab I • Rumusan Masalah • Batasan Masalah • Penulisan	<i>[Signature]</i>		
3	24/11/18	Bab II • Penelitian Sekelompok • Penelitian	<i>[Signature]</i>		
4	8/12/18	Bab II • Teori Pendukung Penelitian	<i>[Signature]</i>		
5	15/12/18	Bab II • Teori Pendukung Penelitian	<i>[Signature]</i>		
6	2/3/19	Bab II • Teori Pendukung Penelitian	<i>[Signature]</i>		
7	16/3/19	Bab III • Variabel Penelitian • Diagram Alir Penelitian • Prosedur Pengujian	<i>[Signature]</i>		
8	27/4/19	Bab III • Variabel Penelitian • Diagram Alir Penelitian	<i>[Signature]</i>		
9	25/5/19	Bab IV • Hasil Pengujian • Penambahan Gambar Penelitian	<i>[Signature]</i>		
10	22/6/19	Bab IV • Grafik Hasil Pengujian • Penjelasan Grafik	<i>[Signature]</i>		
11	28/6/19	Bab IV • Kesimpulan	<i>[Signature]</i>		
12	6/7/19	Bab IV • Kesimpulan • Saran	<i>[Signature]</i>		
13					
14					

Bimbingan dinyatakan selesai

Surabaya, 20 Juli 2019

Pembimbing Utama Ditandatangani ketika skripsi/TA tuntas 	Pembimbing Pendamping Ditandatangani ketika skripsi/TA tuntas 
--	---



PERPUSTAKAAN  
UNIVERSITAS MUHAMMADIYAH SURABAYA

ASLI

SURAT KETERANGAN BUKTI BEBAS PLAGIASI

Naskah tugas akhir / skripsi / karya tulis / tesis\* yang diserahkan atas :

Nama : JESSAM NIMANITA  
 NIM : 2014 032 107  
 Fakultas/Jurusan : TEKNIK J. TEKNIK MESIN  
 Alamat : P. SENGAPURAN RT. 11/150 KEMAYUKAN SALIBA KEDUNTAH KAHAMAHAN  
 Judul : Analisis Pengaruh P. ZAKARIAN SALIBA KEDUNTAH KAHAMAHAN  
 Moch. Honda Satria X 125 Terhadap Kualitas Sirkuit Mesin  
 telah diserahkan dan memenuhi kriteria batas maksimal yang sudah ditentukan

Surabaya, 24 Juli 2019  
Mahasiswa,

Petugas perpustakaan

*Ardi Surya*

Mengetahui,  
 Kepala Perpustakaan  
  
 Dra. Mas Ulia, M.A.

TEGUA WINDI AYO

