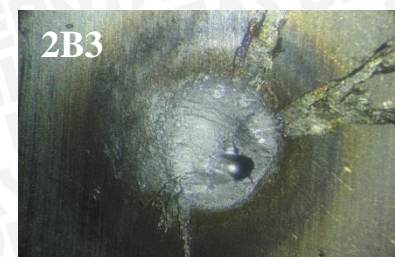
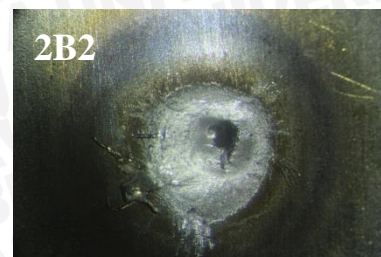
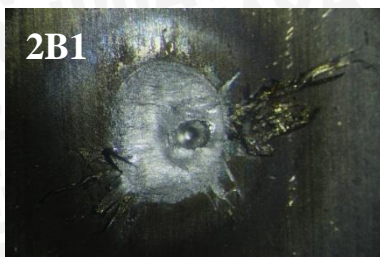
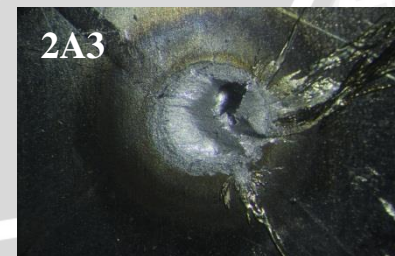
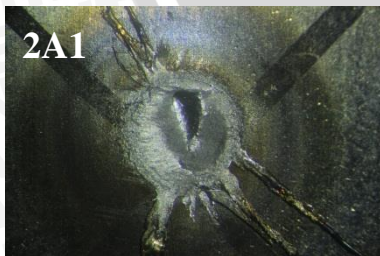
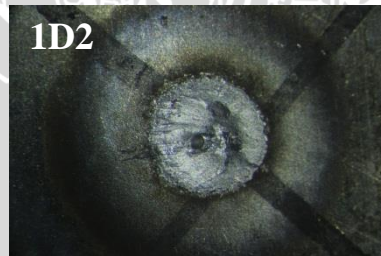
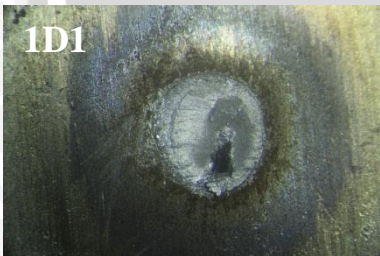
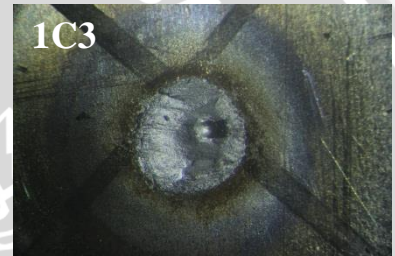
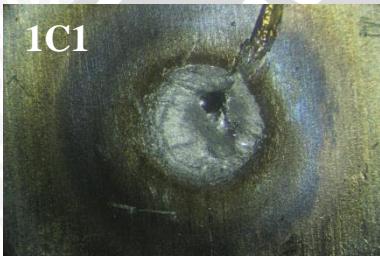
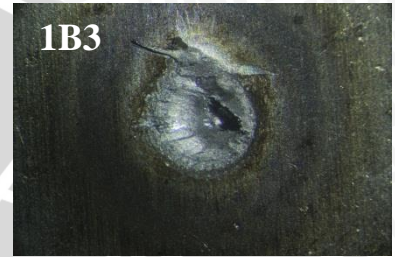
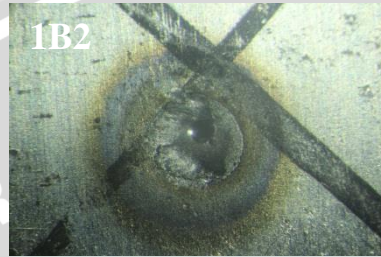
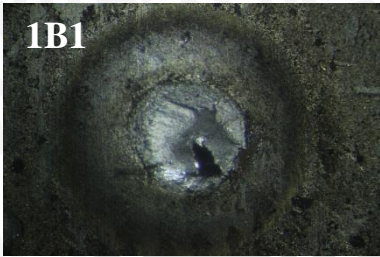
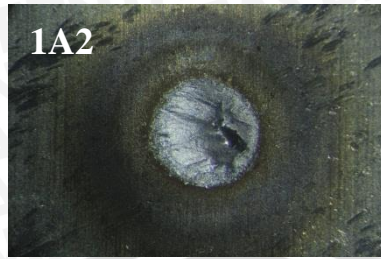
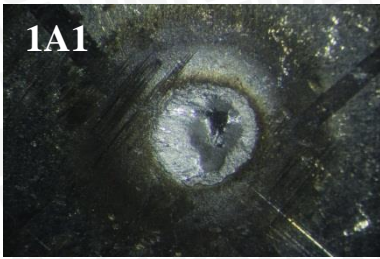
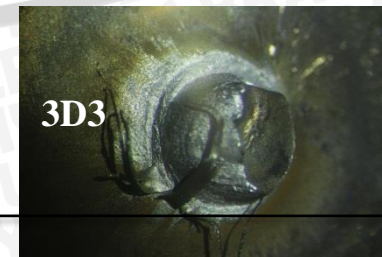
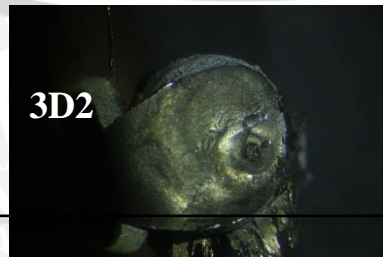
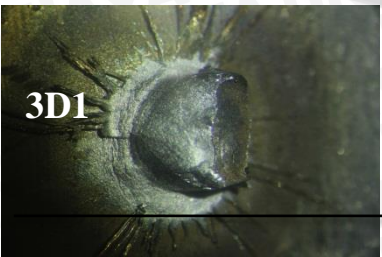
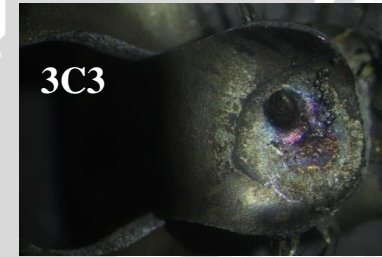
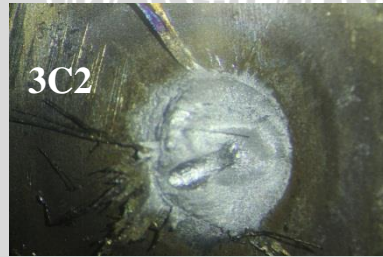
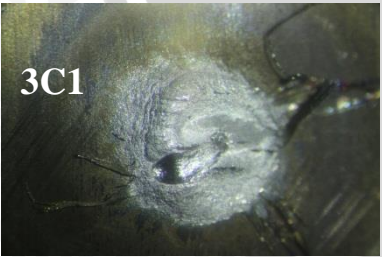
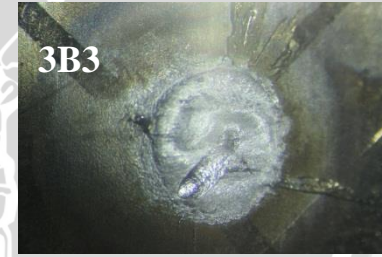
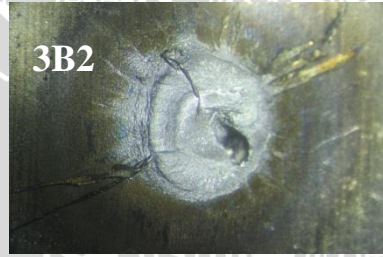
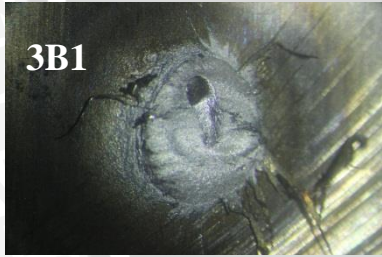
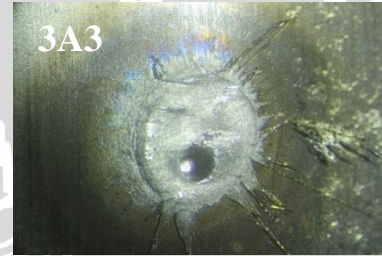
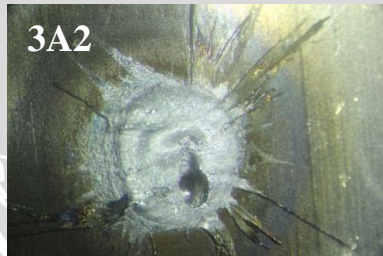
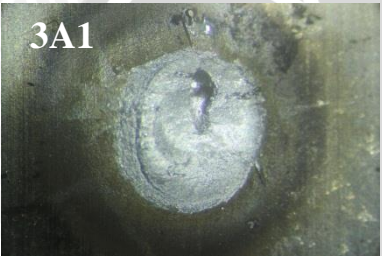
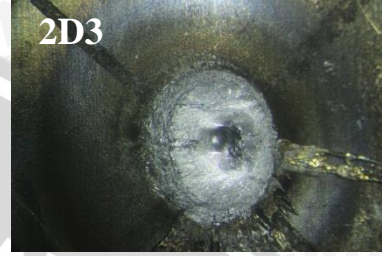
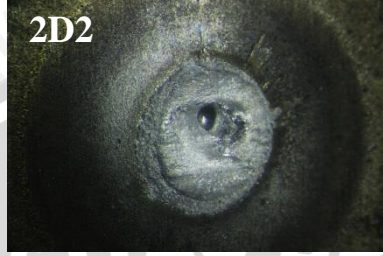
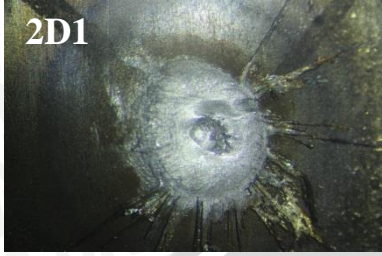
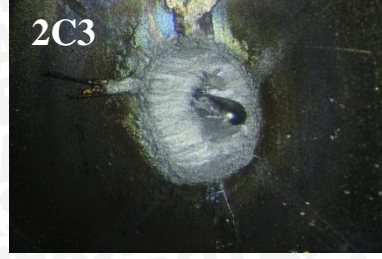
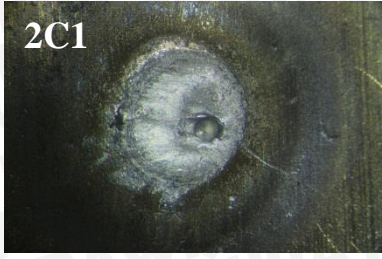
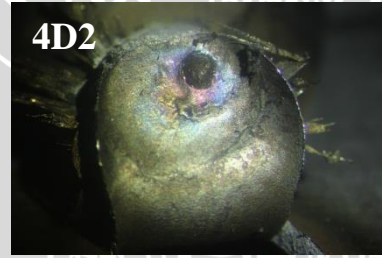
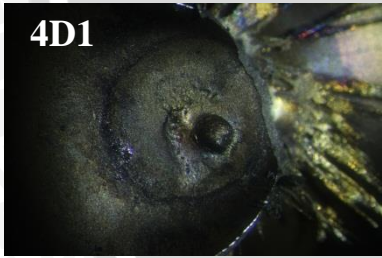
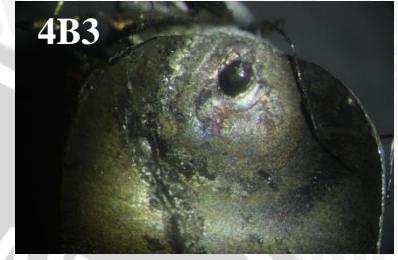
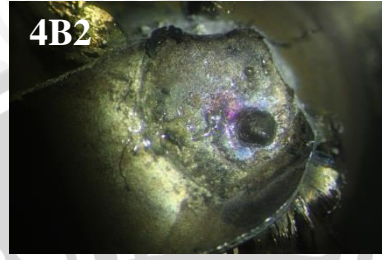
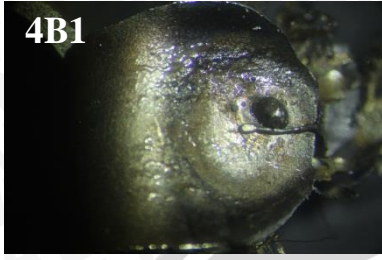
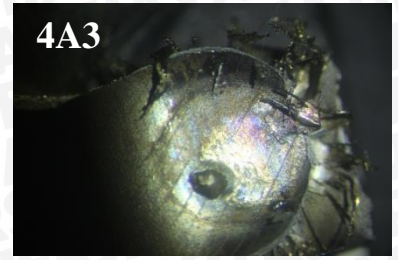
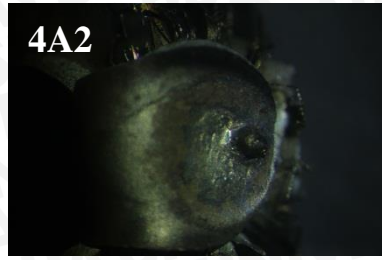
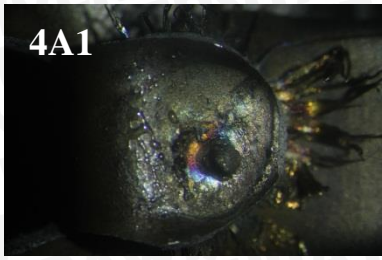


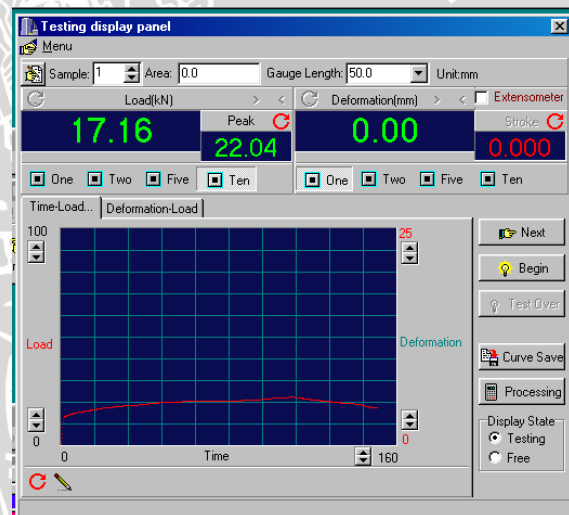
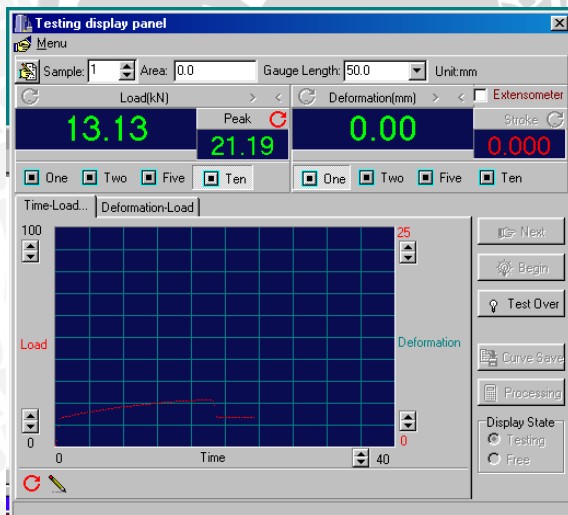
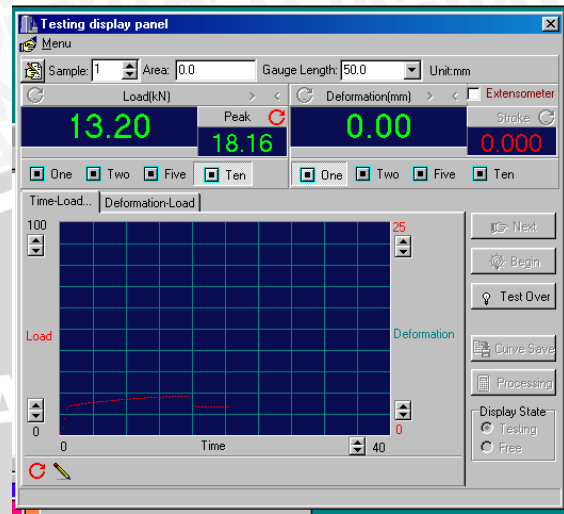
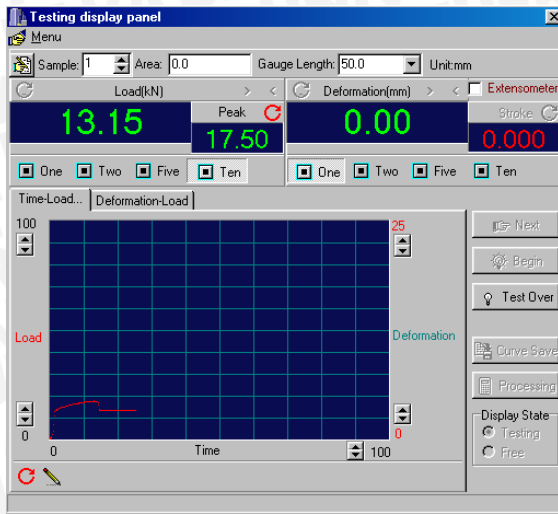
Lampiran 1. Foto Makro



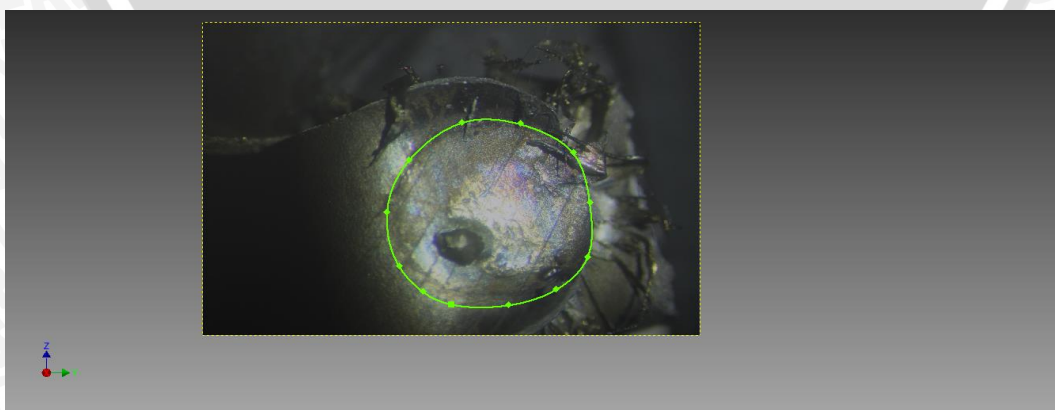
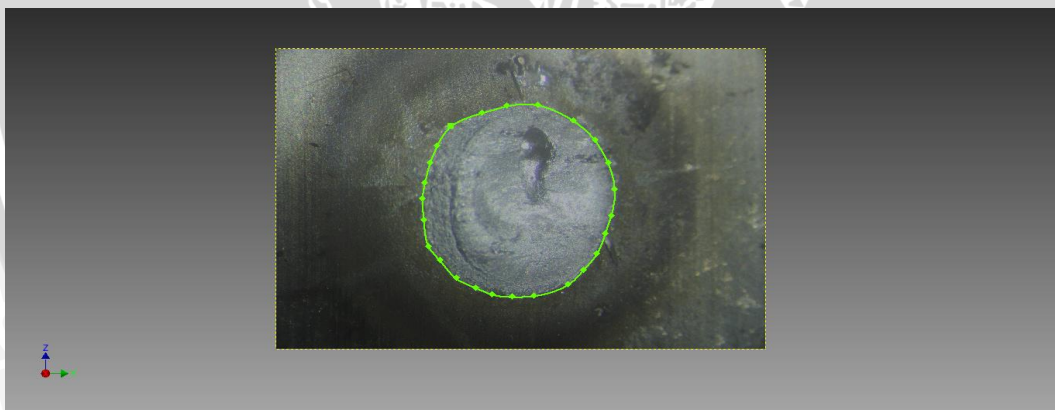
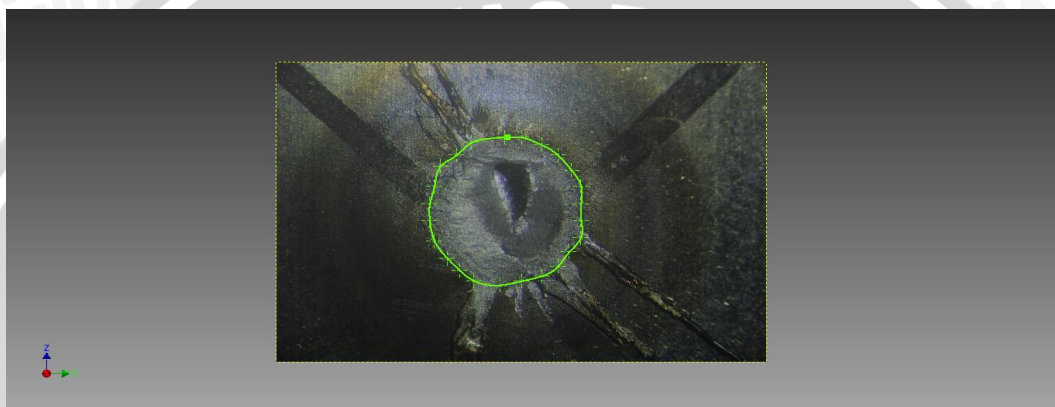
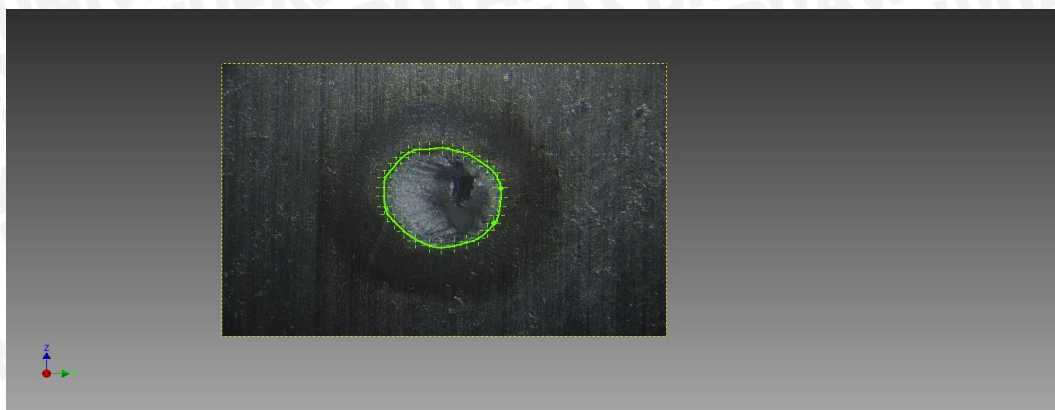




Lampiran 2. Sample Data Gaya Geser



Lampiran 3. Sample Pengukuran Luasan Daerah Lasan



Lampiran 4. Hasil Uji Komposisi Kimia Spesimen

17-Jun-2016 11:05:27

Sample results - Averages

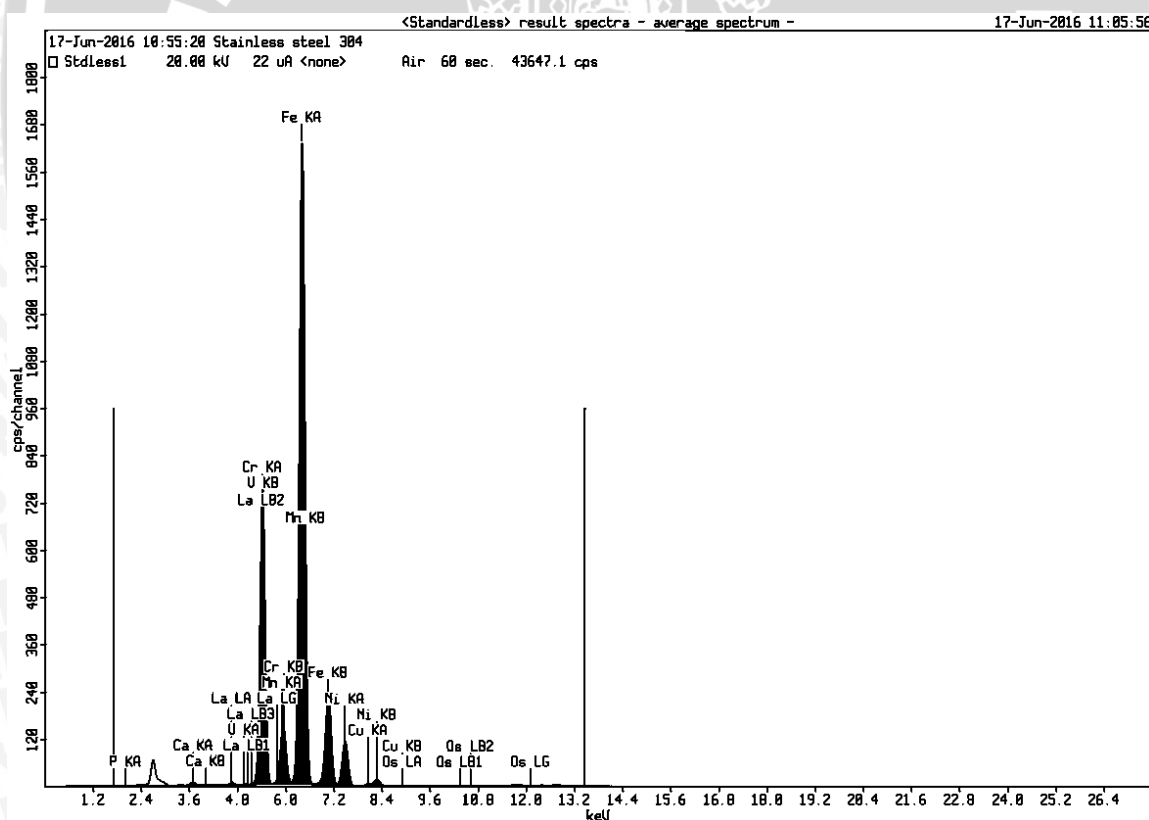
Page 1

Sample ident
Stainless steel 304

Application	<Standardless>
Sequence	Average of 3
Measurement period - start	17-Jun-2016 10:50:39
Measurement period - end	17-Jun-2016 10:55:20
Position	1

Compound	P	Ca	V	Cr	Mn	Fe
Conc	0.2 +/- 0.0097	0.20 +/- 0.01	0.039 +/- 0.001	17.2 +/- 0.09	1.89 +/- 0.12	71.49 +/- 0.18
Unit	%	%	%	%	%	%

Compound	Ni	Cu	La	Os
Conc	8.44 +/- 0.05	0.48 +/- 0.02	0.04 +/- 0.001	0.1 +/- 0.02
Unit	%	%	%	%



Lampiran 5. Surat Keterangan Telah Melakukan Pengelasan Titik



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
POLITEKNIK NEGERI MALANG
JURUSAN TEKNIK MESIN

Jl.Sukarno-Hatta No 09 PO. Box 04 Malang 65145 Telp/Fax. (0341)550180
<http://www.poltek-malang.ac.id>



SURAT KETERANGAN

No : 0059/TM/LL/2016

Menerangkan bahwa mahasiswa sebagai berikut:

Nama : Heru Wahyudi
NIM : 125060200111061
Jurusan : Fakultas Teknik Universitas Brawijaya Malang

Telah menggunakan sarana Lab. Produksi (Mesin Las titik)

di Jurusan Teknik Mesin Politeknik Negeri Malang mulai tanggal 05 April 2016
s/d 04 Mei 2016

Demikian keterangan ini saya buat sekiranya dapat digunakan untuk melengkapi
persyaratan tugas akhir atau skripsi mahasiswa.

Mengetahui,
Ketua Jurusan Teknik Mesin

Ir. Kasijanto, M.T.
NIP NIP. 1958081519931001

Malang, 10 Mei 2016

Ka. Produksi,

A. Agus Hardjito, S.T., M.T.
NIP. 19610822 198803 1 001



Lampiran 6. Surat Keterangan Telah Melakukan Pengujian Geser



The Learning University

LABORATORIUM STRUKTUR
JURUSAN TEKNIK SIPIL
FAKULTAS TEKNIK UNIVERSITAS NEGERI MALANG
Gedung D9 Lt 2 Kampus UM Jl. Semarang No. 5 Malang Telp/Fax: (0341) 587 082 Ext. 2051

SURAT KETERANGAN

No. 17c.06.2016

Yang bertandatangan di bawah ini Laboran/ Teknisi Laboratorium Jurusan Teknik Sipil Fakultas Teknik Universitas Negeri Malang, menerangkan bahwa,

Nama : Heru Eko Wahyudi

NIM : 125060201111061

Instansi : Jurusan Teknik Mesin – Fakultas Teknik – Universitas Brawijaya

Telah melakukan pengujian tarik sambungan *Stainless Steel* 304 sebanyak 48 benda uji pada tanggal 13 Juni 2016 di Laboratorium Struktur-Teknik Sipil-FT-UM.

Demikian keterangan ini dibuat untuk dipergunakan sebagaimana mestinya.

Mengetahui,
Kepala Laboratorium
Teknik Sipil-FT-UM



Dr. Karjadi, M.P., M.T
NIP. 19610312 198703 1 001

Malang, 17 Juni 2016
Koordinator Uji
Laboratorium Struktur-FT-UM

Lusti Mustikasari, Amd
NIP. -



Lampiran 7. Surat Keterangan Telah Melakukan Foto Makro



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
JURUSAN MESIN FAKULTAS TEKNIK UNIVERSITAS BRAWIJAYA
LABORATORIUM PENGUJIAN BAHAN

Jl. Mayjen Haryono 167 Telp. 553286 Pes. 1214 Malang 65145

Surat Keterangan Penelitian
Nomor : 024/PT.13.FT.6.M/VI/2016

Yang bertanda tangan di bawah ini menerangkan dengan sesungguhnya bahwa mahasiswa:

Nama : Heru Eko Wahyudi
Nim. : 125060200111061
Jurusan : S-1 Teknik Mesin
Univ./Instansi : Universitas Brawijaya Malang

Benar-benar telah melaksanakan penelitian / pengambilan data Pengujian Foto Makro di Laboratorium Pengujian Bahan Fakultas Teknik Jurusan Mesin Universitas Brawijaya Malang pada tanggal 14 Juni 2016 dengan judul Penelitian :

" Pengaruh Variasi Arus dan Lama Pengelasan Sambungan *Stainless Steel* 304 Terhadap Kekuatan Geser Dan Struktur Makro Pada Mesin *Spot Welding*"

Demikian surat keterangan ini di buat dengan sebenar benarnya dan diberikan kepada yang bersangkutan untuk dipergunakan dengan seperlunya.



Malang, 16 Juni 2016
Ka. Lab. Pengujian Bahan

Ir. Erwin Sulisty, MT.
NIP. 19661215 199802 1 007

