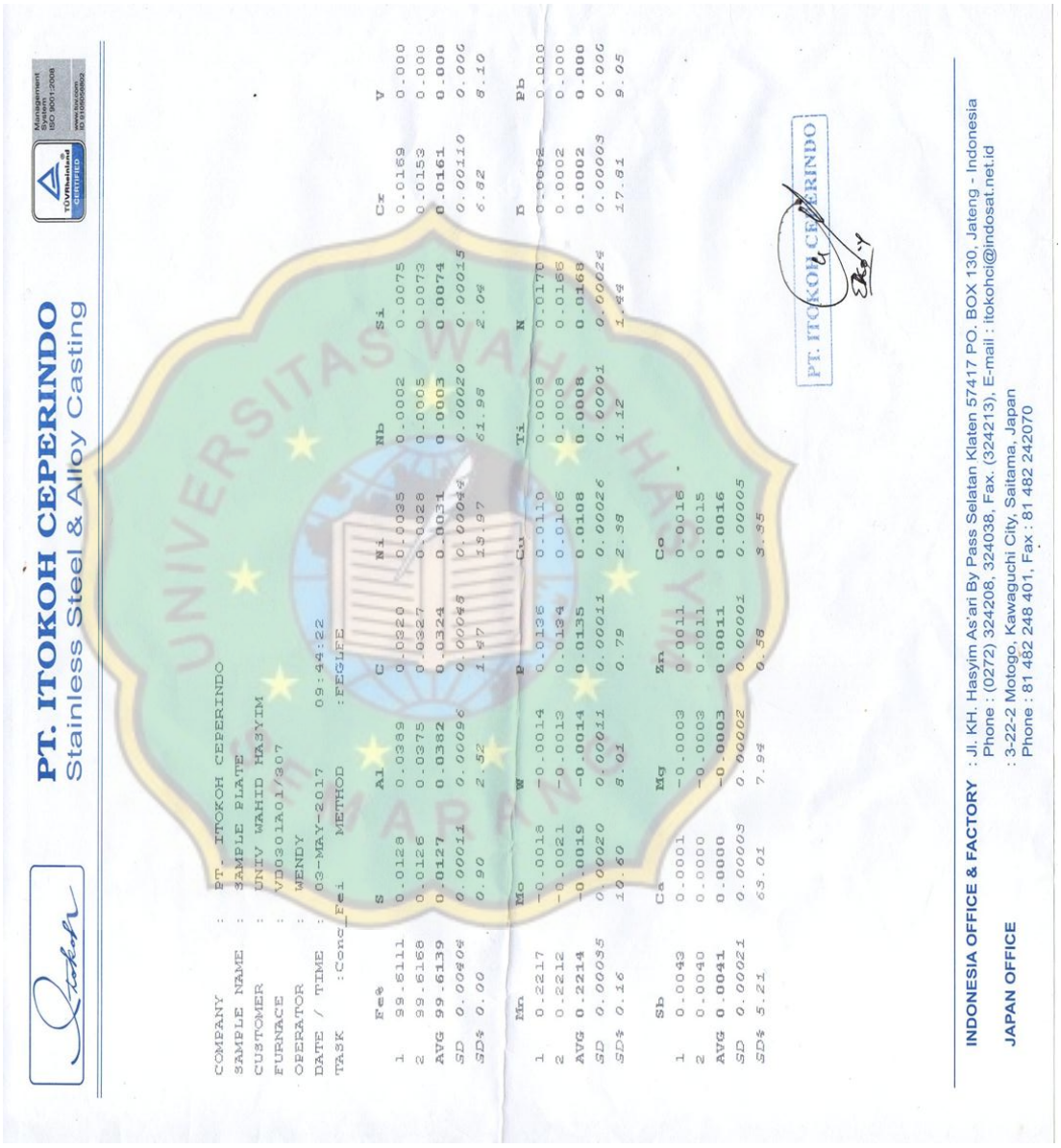
LAMPIRAN A

HASIL UJI KOMPOSISI SPESIMEN



PT. ITOKOH CEPERINDO
Stainless Steel & Alloy Casting

COMPANY : PT. ITOKOH CEPERINDO
SAMPLE NAME : SAMPLE PLATE
CUSTOMER : UNIV WAHID HASYIM
FURNACE : VD301A01/307
OERATOR : WENDY
DATE / TIME : 03-MAY-2017 09:44:22
TASK : Conc_Fe1 METHOD :FEGAFE

	Fe%	Al	C	Ni	Nb	Si	Cr	V
1	99.6111	0.0128	0.0320	0.0095	0.0002	0.0075	0.0169	0.000
2	99.6168	0.0126	0.0375	0.0327	0.028	0.0005	0.0073	0.0153	0.000
AVG	99.6139	0.0127	0.0382	0.0324	0.0031	0.0003	0.0074	0.0161	0.000
SD	0.00404	0.00011	0.00096	0.00045	0.00044	0.00020	0.00015	0.00110	0.000
SD%	0.00	0.90	2.52	1.47	13.97	61.98	2.0%	6.82	8.10

	Mn	Mo	W	P	Cu	Ti	N	B	Pb
1	0.2217	-0.0018	-0.0014	0.0136	0.0110	0.0008	0.0170	0.0002	0.000
2	0.2212	-0.0021	-0.0013	0.0134	0.0106	0.0008	0.0165	0.0002	0.000
AVG	0.2214	-0.0019	-0.0014	0.0135	0.0108	0.0008	0.0168	0.0002	0.000
SD	0.00035	0.00020	0.00011	0.00011	0.00026	0.00001	0.00024	0.00003	0.000
SD%	0.16	10.60	8.01	0.79	2.38	1.12	1.4%	17.01	9.05

	Sb	Ca	Mg	Zn	Co
1	0.0043	0.0001	-0.0003	0.0011	0.0016
2	0.0040	0.0000	-0.0003	0.0011	0.0015
AVG	0.0041	0.0000	-0.0003	0.0011	0.0016
SD	0.00021	0.00003	0.00002	0.00001	0.00005
SD%	5.21	69.01	7.9%	0.58	3.35

PT. ITOKOH CEPERINDO

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LAMPIRAN B

PERHITUNGAN LAJU KOROSI BAJA ASTM A36 YANG DICELUP PADA LARUTAN ASAM KLORIDA 16%

B.1 Rumus-rumus perhitungan laju korosi

1. Berat spesimen yang hilang (W)

$$W = Wo - Wi$$

2. Luas penampang spesimen (A)

$$A = 2 \text{ x } p \text{ x } l \text{ x } t$$

3. Rumus menentukan laju korosi:

$$CR = \frac{K \; x \; W}{A \; x \; T \; x \; D}$$

Dimana:

W : Berat yang hilang (g)

W_o : Berat awal (g)

W_i : Berat akhir (g)

CR : Laju korosi (mm/ tahun)

K : Konstanta baja 8,76 x 10^4

A : Luas (cm^2)

T : Waktu (jam)

D : *Density* untuk baja 7,86 (g/cm^3)

P : Panjang (cm)

L : Lebar (cm)

T : Tinggi (cm)

B.2 Perhitungan laju korosi

Diketahui:

$$K = 8{,}76\ x\ 10^4$$

$$W = \text{(Wo – Wi) } 122{,}40 - 122{,}01 = 0{,}39\ \text{g}$$

$$A = 109{,}938$$

$$T = 10\ \text{menit} = 0{,}167\ \text{jam}$$

$$D = 7{,}86$$

Jawaban:

$$CR = \frac{(8{,}76 \times 10^4)(0{,}39)}{(109{,}938\ )(0{,}167)(7{,}86)}$$

$$= \frac{34164}{144{,}307}$$

$$= 236{,}745\ mm/tahun$$