



LAMPIRAN

Lampiran A (Hasil Pengujian Baja *Hollow*)



PT. ITOKOH CEPERINDO
Stainless Steel & Alloy Casting




COMPANY : PT. ITOKOH CEPERINDO
 SAMPLE NAME : SEMELE PLATE (UNWAHAS)
 CUSTOMER : Mr. BAGUS BAGASPARA
 FURNACE : V11224E01/1030
 OPERATOR : WENDY
 DATE / TIME : 12-SEP-2017 10:20:25
 TASK : :Comp_Fea METHOD : FEGLEE

	Fe	S	Al	C	NI	Mn	Si	Cr	V
1	99.8240	0.0098	0.0220	0.0257	0.0068	-0.0007	0.0215	0.0220	0.002
2	99.8872	0.0098	0.0211	0.0255	0.0061	-0.0007	0.0214	0.0220	0.002
AVG	99.8957	0.0098	0.0216	0.0254	0.0064	-0.0007	0.0214	0.0220	0.002
SD	0.00237	0.00007	0.00069	0.00018	0.00065	0.00003	0.00010	0.00004	0.000
SD%	0.00	0.76	2.95	0.58	7.00	-4.42	0.46	2.65	0.15

	Nb	Mo	W	B	Cu	Ti	N	B	Pb
1	0.0000	-0.0012	-0.0019	0.0221	0.0181	0.0021	0.0473	0.0014	0.001
2	0.0000	-0.0013	-0.0020	0.0220	0.0180	0.0020	0.0474	0.0014	0.001
AVG	0.0000	-0.0013	-0.0019	0.0221	0.0182	0.0020	0.0474	0.0014	0.001
SD	0.00004	0.00012	0.00012	0.00002	0.00015	0.00004	0.00008	0.00001	0.000
SD%	0.27	8.32	4.78	0.11	0.97	1.89	0.19	0.44	28.51

	Sb	Ca	Mg	Sn	Co
1	0.0020	0.0009	0.0000	0.0006	0.0024
2	0.0020	0.0009	0.0000	0.0005	0.0024
AVG	0.0020	0.0009	0.0000	0.0005	0.0024
SD	0.00004	0.00000	0.00004	0.00002	0.00004
SD%	2.65	0.25	13.29	3.04	1.17



INDONESIA OFFICE & FACTORY : Jl. KH. Hasyim As'ari By Pass Selatan Klaten 57417 PO. BOX 130, Jating - Indonesia
 Phone : (0272) 324208, 324038, Fax : (324213), E-mail : itokohci@indosat.net.id
JAPAN OFFICE : 3-22-2 Motogo, Kawaguchi City, Saitama, Japan
 Phone : 81 482 248 401, Fax : 81 482 242070

Lampiran B (Hasil Data Pengujian Tarik)

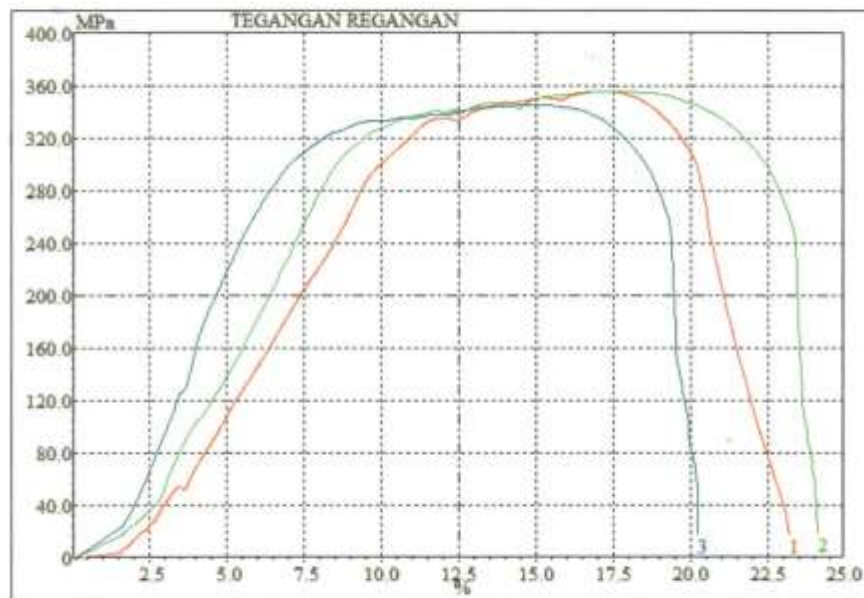


Nama : BAGUS
Instansi : unswaha

Bahan : PIPA HOLLOW
Standard : ASTM A370

HASIL PENGUJIAN TARIK

No	Material	Area mm ²	Yield Point N	Yield Stress MPa	Max. Load N	Max. Stress MPa	Break N	Break MPa	Extension mm	Elongation %
1	1G	12.000	3866.197	322.183	4274.564	356.214	211.508	17.626	7.412	23.164
2	1G	12.000	3862.455	321.871	4273.441	356.120	213.497	17.791	7.713	24.102
3	1G	12.000	3752.848	312.737	4146.883	345.574	207.259	17.272	6.475	20.234



Semarang, 07-11-2017
Kepala Laboratorium

Helny Purwanto, ST., MT
NPP. 05.01.1.0060

Tested By : Nur Kholis, ST
NPP. 02.14.0.0303

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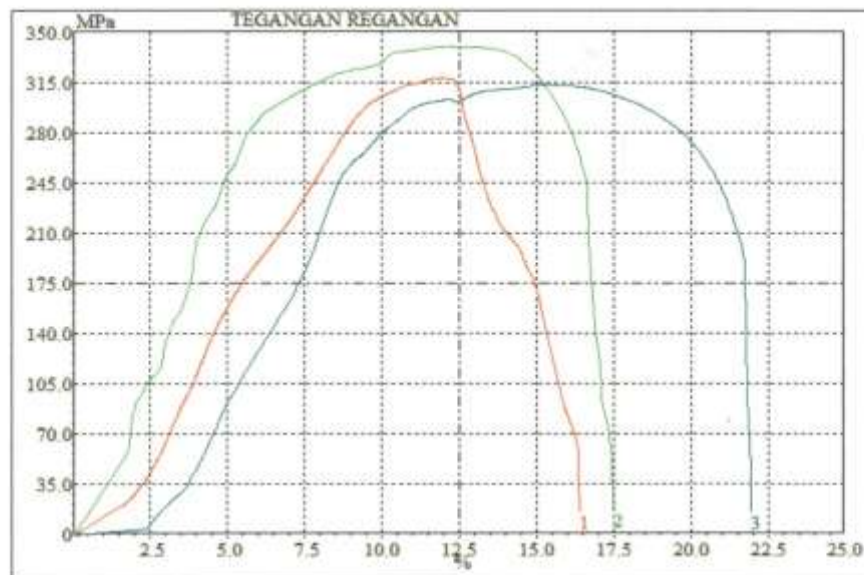


Nama : BAGUS
Instansi : uwasahas

Bahan : PIPA HOLLOW
Standard : ASTM A370

HASIL PENGUJIAN TARIK

No	Material	Area mm ²	Yield Point N	Yield Stress MPa	Max. Load N	Max. Stress MPa	Break N	Break MPa	Extension mm	Elongation %
1	2 G	12.000	3466.936	288.911	3820.092	318.341	179.128	14.927	5.238	16.367
2	2 G	12.000	3680.628	306.719	4083.781	340.315	201.219	16.768	5.588	17.461
3	2 G	12.000	3409.264	284.105	3761.829	313.486	177.277	14.773	7.025	21.953



Semarang, 07-11-2017
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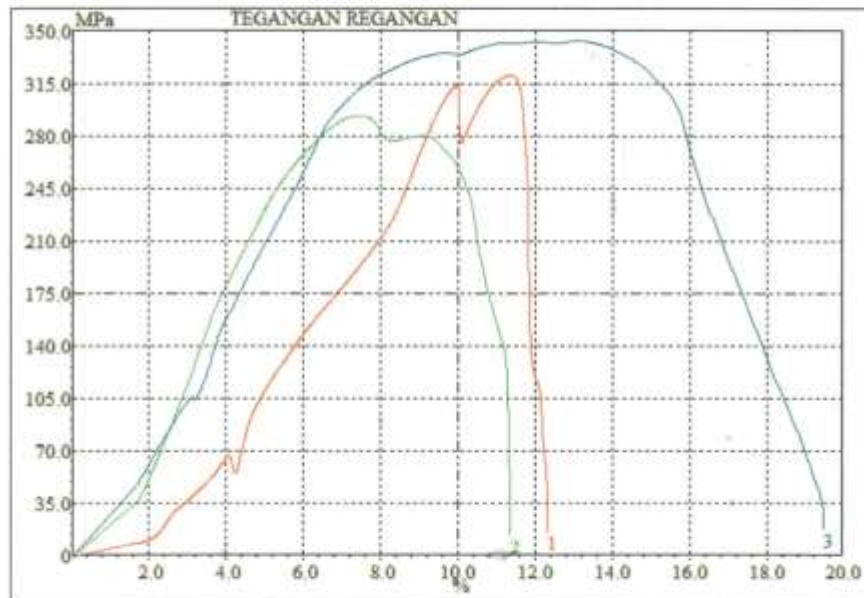
Laboratorium
Material Teknik
JURUSAN TEKNIK MESIN FAKULTAS TEKNIK
UNIVERSITAS WAHID HASYIM

Nama : BAGUS
Instansi : uovahas

Bahan : PIPA HOLLOW
Standard : ASTM A370

HASIL PENGUJIAN TARIK

No	Material	Area mm ²	Yield Point N	Yield Stress MPa	Max. Load N	Max. Stress MPa	Break N	Break MPa	Extension mm	Elongation %
1	3 G	12.000	3520.229	293.352	3850.741	320.895	192.078	16.006	3.938	12.305
2	3 G	12.000	3211.081	267.590	3523.700	293.642	162.643	13.554	3.625	11.328
3	3 G	12.000	3738.859	311.572	4126.486	343.874	206.290	17.191	6.225	19.453



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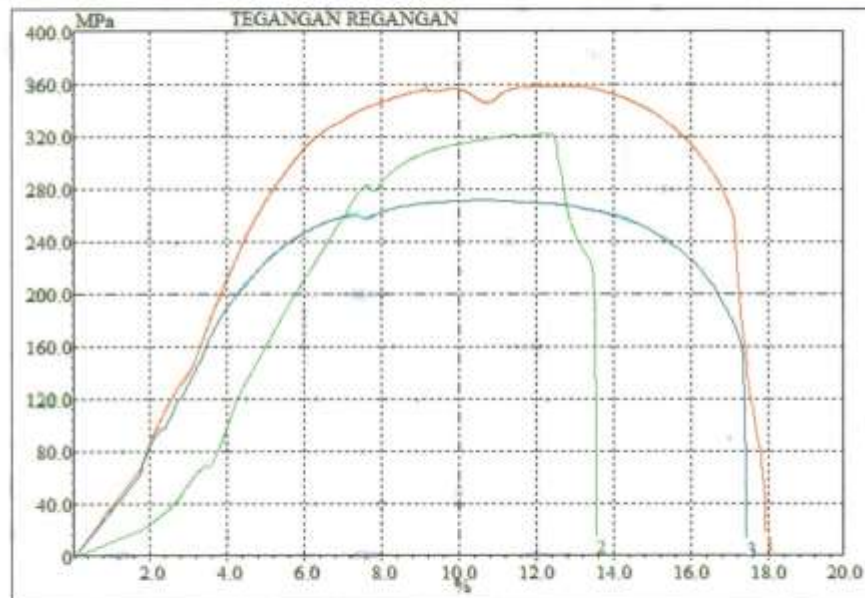


Nama : BAGUS
Istansi : unvahas

Bahan : PIPA HOLLOW
Standard: ASTM A370

HASIL PENGUJIAN TARIK

No	Material	Area mm ²	Yield Point N	Yield Stress MPa	Max. Load N	Max. Stress MPa	Break N	Break MPa	Extension mm	Elongation %
1	4 G	12.000	3896.479	324.707	4306.549	358.879	204.932	17.078	5.738	17.930
2	4 G	12.000	3401.119	283.427	3866.725	322.227	181.929	15.161	4.338	13.555
3	4 G	12.000	2961.645	246.804	3263.848	271.987	161.278	13.440	5.588	17.461



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Lampiran C (Foto Patahan Spesimen Uji Tarik)**(a) Spesimen 1G****(b) Spesimen 2G****(c) Spesimen 3G****(d) Spesimen 4G****(e) Spesimen Raw Material**