

LAMPIRAN

Lampiran 1. Bantalan

Nomor bantalan			Ukuran luar (mm)				Kapasitas	Kapasitas
Jenis terbuka	Dua sekat	Dua sekat tanpa kontak	<i>d</i>	<i>D</i>	<i>B</i>	<i>r</i>	nominal dinamis spesifik <i>C</i> (kg)	nominal statis spesifik <i>C</i> ₀ (kg)
6000			10	26	8	0,5	360	196
6001	6001ZZ	6001VV	12	28	8	0,5	400	229
6002	02ZZ	02VV	15	32	9	0,5	440	263
6003	6003ZZ	6003VV	17	35	10	0,5	470	296
6004	04ZZ	04VV	20	42	12	1	735	465
6005	05ZZ	05VV	25	47	12	1	790	530
6006	6006ZZ	6006VV	30	55	13	1,5	1030	740
6007	07ZZ	07VV	35	62	14	1,5	1250	915
6008	08ZZ	08VV	40	68	15	1,5	1310	1010
6009	6009ZZ	6009VV	45	75	16	1,5	1640	1320
6010	10ZZ	10VV	50	80	16	1,5	1710	1430
6200	6200ZZ	6200VV	10	30	9	1	400	236
6201	01ZZ	01VV	12	32	10	1	535	305
6202	02ZZ	02VV	15	35	11	1	600	360
6203	6203ZZ	6203VV	17	40	12	1	750	460
6204	04ZZ	04VV	20	47	14	1,5	1000	635
6205	05ZZ	05VV	25	52	15	1,5	1100	730
6206	6206ZZ	6206VV	30	62	16	1,5	1530	1050
6207	07ZZ	07VV	35	72	17	2	2010	1430
6208	08ZZ	08VV	40	80	18	2	2380	1650
6209	6209ZZ	6209VV	45	85	19	2	2570	1880
6210	10ZZ	10VV	50	90	20	2	2750	2100
6300	6300ZZ	6300VV	10	35	11	1	635	365
6301	01ZZ	01VV	12	37	12	1,5	760	450
6302	02ZZ	02VV	15	42	13	1,5	895	545
6303	6303ZZ	6303VV	17	47	14	1,5	1070	660
6304	04ZZ	04VV	20	52	15	2	1250	785
6305	05ZZ	05VV	25	62	17	2	1610	1080
6306	6306ZZ	6306VV	30	72	19	2	2090	1440
6307	07ZZ	07VV	35	80	20	2,5	2620	1840
6308	08ZZ	08VV	40	90	23	2,5	3200	2300
6309	6309ZZ	6309VV	45	100	25	2,5	4150	3100
6310	10ZZ	10VV	50	110	27	3	4850	3650

(Sularso, 2002)

Lampiran 2. Tabel Pajang Sabuk V-Belt

Nomor nominal		Nomor nominal		Nomor nominal		Nomor nominal	
(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)
10	254	45	1143	80	2032	115	2921
11	279	46	1168	81	2057	116	2946
12	305	47	1194	82	2083	117	2972
13	330	48	1219	83	2108	118	2997
14	356	49	1245	84	2134	119	3023
15	381	50	1270	85	2159	120	3048
16	406	51	1295	86	2184	121	3073
17	432	52	1321	87	2210	122	3099
18	457	53	1346	88	2235	123	3124
19	483	54	1372	89	2261	124	3150
20	508	55	1397	90	2286	125	3175
21	533	56	1422	91	2311	126	3200
22	559	57	1448	92	2337	127	3226
23	584	58	1473	93	2362	128	3251
24	610	59	1499	94	2388	129	3277
25	635	60	1524	95	2413	130	3302
26	660	61	1549	96	2438	131	3327
27	686	62	1575	97	2464	132	3353
28	711	63	1600	98	2489	133	3378
29	737	64	1626	99	2515	134	3404
30	762	65	1651	100	2540	135	3429
31	787	66	1676	101	2565	136	3454
32	813	67	1702	102	2591	137	3480
33	838	68	1727	103	2616	138	3505
34	864	69	1753	104	2642	139	3531
35	889	70	1778	105	2667	140	3556
36	914	71	1803	106	2692	141	3581
37	940	72	1829	107	2718	142	3607
39	965	73	1854	108	2743	143	3632
39	991	74	1880	109	2769	144	3658
40	1016	75	1905	110	2794	145	3683
41	1041	76	1930	111	2819	146	3708
42	1067	77	1956	112	2845	147	3734
43	1092	78	1981	113	2870	148	3759
44	1118	79	2007	114	2896	149	3785

(Sularso, 2002)

Lampiran 3. Jenis Selaput Dan Pemakaian Arus (Terheijden,1971)

Angkake-empat	JenisSelaput	PemakaianArus
0	Selulosa–Natrium	DC
1	Selulosa–	AC, DC
2	KaliumRutil–	AC, DC
3	NatriumRutil–	AC, DC
4	KaliumRutil–	AC, DC
5	Serbukbesi	AC, DC
6	Natrium–	AC, DC
7	HydrogenrendahKalium–	AC, DC
8	HydrogenrendahSerbukbesi– OksidabesiSerbukbesi–	AC,DC

Nilai Pedoman Untuk Diameter Elektroda Dan Kekuatan Arus Pada Pengelasan Listrik (Terheijden,1971)

Tebal bahan(mm)	Diameter elektroda (mm)	Arus pengelasan (Ampere)
Dibawah1	1,5	20- 35
1 -1,5	2	35- 60
1,5-2,5	2,5	60- 100
2,5-4	3,25	90- 150
4 -6	4	120-180
6 -10	5	150-220
10 -13	6	200-300
Diatas16	8	280–400

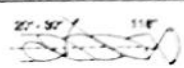


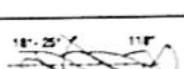

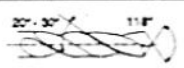
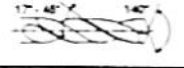
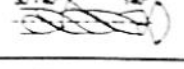

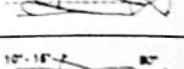
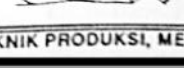
Klasifikasi Elektroda Terhadap Kekuatan Tarik (Harsono ,2000)

Klasifikasi	Kekuatan Tarik	
	Lb/in ²	Kg/mm ²
E 60XX	60.000	42
E 70XX	70000	49
E 80XX	80000	56
E 90XX	90000	63
E 100XX	100000	70
E 110XX	110000	77
E 120XX	120000	84

Lampiran 4. Pedoman untuk kecepatan sayat(v)mm/menit pada penyayatan



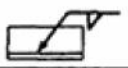
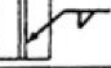


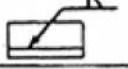


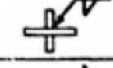
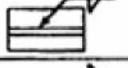

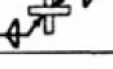
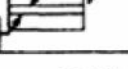


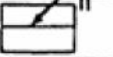





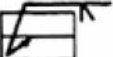







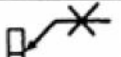
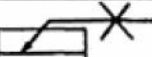

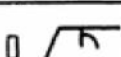
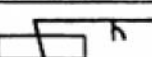

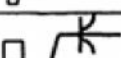


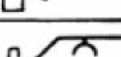
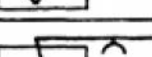

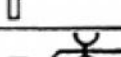
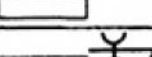
Bahan	Membubut							Memfrais					Menyerut V _{rata-rata} 60
	Pembubutan pendahuluan	Pembubutan akhir	Menggores	Memotong ulir	Menggerek (membor)	Meluaskan	Mengetap	Frais kepala pisau	Frais selubung	Frais jari	Frais keping	Frais dibubut belakang	
Baja bukan paduan sampai 50 kN/cm ²	38	48	21	12	30	9	7	26	21	24	19	15	24
50-60 kN/cm ²	30	38	17	10	24	8	6	21	17	19	15	12	19
60-70 kN/cm ²	26	34	15	9	21	7	5	19	15	17	13	10	17
70-85 kN/cm ²	24	30	13	8	19	6	4	17	13	15	12	9	15
Baja otomatis aal	42	52	24	14	34	11	9	30	24	26	21	17	26
Baja paduan 70-85 kN/cm ²	19	24	11	6	15	5	4	13	11	12	10	8	12
85-100 kN/cm ²	15	19	8	5	12	4	3	11	8	9	7	6	9
100-140 kN/cm ²	12	15	7	4	9	3	2,5	8	7	8	6	5	8
140-180 kN/cm ²	9	12	5	3	7	2,5	2	6	5	6	5	5	6
Baja tuang sampai 50 kN/cm ²	26	34	15	9	21	7	5	19	15	17	13	10	17
50-70 kN/cm ²	17	21	10	6	13	4	3	12	10	11	9	7	11
di atas 70 kN/cm ²	12	15	7	4	9	3	2,5	8	7	8	6	5	8
Besi tuang sampai 200 Brinell	24	30	13	8	19	6	5	17	13	15	12	9	15
200-250 Brinell	15	19	9	5	12	4	3	11	9	10	8	7	10
Besi tuang paduan 250-400 Brinell	12	15	7	4	9	3	2,5	8	7	8	6	5	8
Temperguss 32-38 kN/cm ²	19	24	11	7	15	5	4	13	11	12	10	8	12
Tembaga	67	85	38	24	53	17	13	48	38	42	34	26	42
Kuningan remas	75	95	42	26	60	19	15	53	42	48	38	30	48
Kuningan tuang	60	75	34	20	48	15	12	42	34	38	30	24	38
Perunggu tuang	48	60	26	17	38	12	9	34	26	30	24	19	30
Perunggu remas	60	75	38	20	48	15	12	42	34	38	30	24	38
Aluminium Paduan Al-Si-tuang	240	300	150	30	190	26	20	170	130	150	120	95	130
Paduan Al-remas	67	95	38	24	50	17	13	48	38	42	34	26	42
Logam-logam putih	150	190	85	30	120	30	30	110	85	95	75	60	95
Paduan Mg	85	110	48	-	67	21	17	60	48	53	42	34	53
Paduan Zn	500	700	100	30	420	30	30	380	300	340	250	200	130
Paduan Zn	75	95	42	26	60	19	15	53	42	48	38	30	48
Bahan sintetis Pengeras termis	80	100	48	28	50	22	18	60	48	52	42	34	21
Termoplastik	600	800	350	100	120	30	30	600	500	550	450	150	130

Lampiran 5. Tabel pahat bor

Benda Kerja	2κ	γ_r	α_r	Sketsa gundi	Menurut DIN 1836
Baja u 900 N/mm ²	118°	20°-30°	19°-25°		N
Baja u 900 N/mm ²	125-145°	20°-30°	7°-15°		N
Baja keras (manganese) kondisi austenitic	135°-150°	10°-25°	7°-15°		H
Besi tuang	90°-135°	18°-25°	7°-12°		N
Kuningan	118°	12°	10°-15°		H
Tembaga	100°-118°	20°-30°	10°-15°		N
Aluminium	90°-140°	17°-45°	12°-18°		W
Plastik lunak	118-140°	30°-40°	15°-20°		W
Plastik keras	80°-118°	10°-20°	12°-15°		H
Karet keras	80°-118°	10°-15°	12°-15°		H
Batu, Marmer	80°	10°-15°	7°-12°		H

TEKNIK PRODUKSI, MESIN FTI-ITB

Lampiran 6. Tabel Simbol Pengelasan

SYMBOLS FOR FILLET, SQUARE GROOVE, AND BEVEL GROOVE WELDS	APPLICATION	DESIRED WELD	SECTION OR END	ELEVATION	PLAN
	ARROW-SIDE FILLET WELD				
OTHER-SIDE FILLET WELD					
BOTH-SIDES FILLET WELD, ONE JOINT					
BOTH-SIDES FILLET WELD, TWO JOINTS					
ARROW-SIDE SQUARE GROOVE WELD					
BOTH-SIDES SQUARE GROOVE WELD					
ARROW-SIDE BEVEL GROOVE WELD					
BOTH-SIDES BEVEL GROOVE WELD					
SYMBOLS FOR V-GROOVE, J-GROOVE AND U-GROOVE WELDS	ARROW-SIDE V-GROOVE WELD				
	BOTH-SIDES V-GROOVE WELD				
	ARROW-SIDE J-GROOVE WELD				
	BOTH-SIDES J-GROOVE WELD				
	ARROW-SIDE U-GROOVE WELD				
	BOTH-SIDES U-GROOVE WELD				

Lampiran 7. Toleransi Ukuran

Untuk Ukuran Panjang

Tingkat Ketelitian	Ukuran Nominal (mm)						
	0,5 - 3	>3 - 6	>6 - 30	>30 - 120	>120 - 400	>400 - 1000	>1000 - 2000
	Penyimpangan (mm)						
Halus	± 0,05	± 0,05	± 0,1	± 0,15	± 0,2	± 0,3	± 0,5
Menengah	± 0,1	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2
Kasar	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 2	± 3

Untuk Ukuran Radius dan Kemiringan

Tingkat Ketelitian	Ukuran Nominal (mm)				
	0,5 - 3	>3 - 6	>6 - 30	>30 - 120	>120 - 400
	Penyimpangan (mm)				
Halus	± 0,2	± 0,5	± 1	± 2	± 4
Menengah					
Kasar	± 0,4	± 1	± 2	± 4	± 8

Untuk Ukuran Sudut

Ukuran nominal panjang kaki sudut yang pendek	Ukuran Nominal (mm)							
	<10		>10 - 50		>50 - 120		>120 - 400	
	Penyimpangan (mm)							
Tingkat Ketelitian	Derajat menit	$\frac{\text{mm}}{100 \text{ mm}}$	Menit	$\frac{\text{mm}}{100 \text{ mm}}$	Menit	$\frac{\text{mm}}{100 \text{ mm}}$	Menit	$\frac{\text{mm}}{100 \text{ mm}}$
Halus	± 1°	± 1,7	± 30'	± 0,9	± 20'	± 0,6	± 10'	± 0,3
Menengah								
Kasar	± 1°30'	± 2,5	± 1°	± 1,7	± 30'	± 0,9	± 15'	± 0,4