

Tabel 9. Persediaan Kebutuhan Material (Import) Kelompok JACK
 Pada PT. Menara Terus Makmur
 Tahun 1993

No	Nama barang	Unit	(Rp.)												Des	Total	
			Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agst	Sept	Okt	Nov				
1	METAL		1,042	2,207	1,600	0	0	0	0	0	0	0	0	0	0	0	4,607
2	FEMALE SCREW		1,232	0	0	0	0	0	0	0	0	0	0	0	0	0	30
3	SH. COMPLETE		2,263	2,100	0	0	0	0	0	0	0	0	0	0	0	0	7,253
4	BERING RACE		229	0	0	0	0	0	0	0	0	0	0	0	0	0	25,226
5	STEEL BALL		10	26,400	49,104	35,200	0	480	101,200	0	65,800	16,200	51,584	118,400	88,000	552,368	3,664
6	SCREW SPK1		1,262	851	1,159	1,250	404	0	0	0	0	0	0	0	0	0	32,492
7	SUB SCREW 28		3,654	1,750	1,804	2,301	1,404	3,150	3,050	2,680	2,953	4,100	3,250	3,050	3,000	32,492	2,263
8	INNER TUBE 28		4,057	1,750	1,804	2,301	1,404	3,150	3,050	2,680	2,953	4,100	3,250	3,050	3,000	32,492	7,108
9	BEVEL GEAR		1,819	1,304	104	750	0	103	0	2	0	0	0	0	0	0	7,106
10	KNOCK PIN		66	7,108	0	0	0	0	0	0	0	0	0	0	0	0	30,167
11	RAM GUIDE 28		1,918	2,000	1,200	2,251	1,802	2,950	3,100	2,300	3,223	3,265	2,700	2,078	3,208	8,100	74,110
12	PINION GUIDE		429	3,504	4,500	4,751	4,402	5,150	5,500	6,500	7,503	8,400	7,000	8,800	8,100	57,158	40,879
13	PINION GEAR		2,076	2,352	3,150	4,000	2,704	3,550	3,350	5,198	9,404	6,300	5,350	6,400	5,400	40,879	5,441
14	OUTER TUBE 28		3,007	1,750	11,806	2,301	1,402	3,150	3,050	2,680	2,853	3,870	2,805	2,260	2,952	1,287,090	3,554
15	SUPPORT		724	223	202	950	700	1,266	0	0	700	1,400	0	0	0	0	14,416
16	BEARING RACE		451	500	408	950	0	10,100	1,100	2,800	3,200	2,950	0	0	0	0	22,008
17	STEEL BALL		14	64,000	80,204	91,800	66,646	74,736	96,300	120,000	128,754	153,900	128,250	146,500	136,000	1,287,090	3,554
18	PIN THRUST BEARING		74	3,554	0	0	0	0	0	0	0	0	0	0	0	0	14,042
19	BOLT WITH WASHER		54	5,232	1,600	0	10	7,574	0	0	0	0	0	0	0	0	4,244
20	NUT		24	4,832	1,600	0	10	7,600	0	0	0	0	0	0	0	0	39,830
21	SCREW SPK2		1,547	355	1,202	1,200	637	650	0	100	100	0	0	0	0	0	35,427
22	SUB SCREW 23		5,081	1,805	2,650	2,900	2,300	2,500	2,300	4,000	4,000	4,400	3,875	5,200	3,900	39,830	3,554
23	RAM GUIDE 23		2,927	1,304	3,300	2,501	2,400	2,400	2,200	4,000	4,028	2,822	2,820	5,064	2,588	35,427	3,554
24	OUTER TUBE 23		4,194	1,805	2,650	2,900	2,300	2,500	2,300	4,000	4,000	4,400	3,875	5,200	3,900	39,830	3,554
25	INNER TUBE 23		5,574	1,805	2,650	2,900	2,300	2,500	2,300	4,000	4,000	4,400	3,875	5,200	3,900	39,830	3,554
26	PINION GEAR ISUZU		2,610	1,200	600	900	1,100	1,400	2,250	1,300	2,500	1,000	4,000	1,000	0	0	17,250
27	STOPPER KNOCKNEW R.G		95	0	3,000	3,000	3,300	600	3,000	9,000	6,000	11,000	12,000	6,000	9,000	65,900	800
28	HEAD PIN		622	0	400	400	0	0	0	0	0	0	0	0	0	0	800
29	PIN SUPPORT FOR HEAD		104	0	800	400	0	0	0	0	0	0	0	0	0	0	1,200

Tabel 10. Persediaan Kebutuhan Material (Import) Kelompok TOOL
 Pada PT Menara Terus Makmur
 Tahun 1993

Nama barang (RAW)	(Rp.) Unit												Total
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agst	Sept	Okt	Nov	Des	
1 RM S45C (D11x6)	0	143	147	233	0	176	0	0	0	0	132	213	1044
2 RM S45C (D13x6)	327	820	589	1014	942	971	1664	0	1113	0	179	1462	9081
3 RM S45C (D15x6)	212	0	0	233	0	155	0	0	0	0	0	0	600
4 RM S45C (D16x6)	179	122	456	170	653	108	583	0	13	0	396	0	2680
5 RM S50C (D13x6)	176	0	0	0	1071	150	0	0	0	0	0	1391.5	2798.5
6 RM S45C (D20x6)	364	514	291	347	407	453	0	0	0	0	32	656	3069
7 RM S45C (D22x6)	559	871	44	520	0	582	0	0	0	294	807.5	841	4518.5
8 RM S45C (D30x6)	176	59	70	0	0	0	0	0	0	0	0	6	311
9 RM S45C (D25.4x6)	31	27	88	101	87	141	0	0	45	110	157	165	952
10 RM S35C (D50x5.59)	0	0	0	0	0	0	42	211	21	0	63	0	337
11 RM S35C (D32x5.59)	0	0	0	0	0	0	3	4	74	0	4	0	85
12 RM S15C (D50x5.59)	0	0	0	0	0	0	6	5	0	0	8	0	19
13 RM S45C (D8x6)	0	0	0	0	0	0	0	0	0	461	0	0	461
(Sub Componen)													
14 KARET SPW.16	56	333	3240	2278	3218	1747	0	0	0	0	0	0	13039
15 KARET SPW 20	67	170	300	0	291	398	0	0	0	0	0	0	1359
16 SF HUB NUT W 17x32	10035	0	0	0	0	0	2000	0	2000	0	0	0	4000
17 MC SPANNER 7x8	691	0	0	0	0	0	0	0	0	0	0	2563	2568
18 SC SCREW DRIVER SP	32	0	0	0	0	0	0	0	0	0	0	0	0
19 SC BIS FOR PLIER	131	6950	0	6517	0	0	0	0	0	0	0	0	13467
20 SC NUT FOR PLIER	33	6950	0	5998	0	0	0	0	0	0	0	0	12948
21 SF ADJ WRENCH 200	6231	400	500	700	1100	900	1300	900	1200	775	1500	1500	11175
22 MC SCREW DRIVER BLADE (KF)	525	0	0	0	2500	0	0	0	0	0	0	0	2500
23 MC SCREW DRIVER BLADE (HJ)	375	4600	3000	6000	14000	0	0	0	0	0	0	0	23600

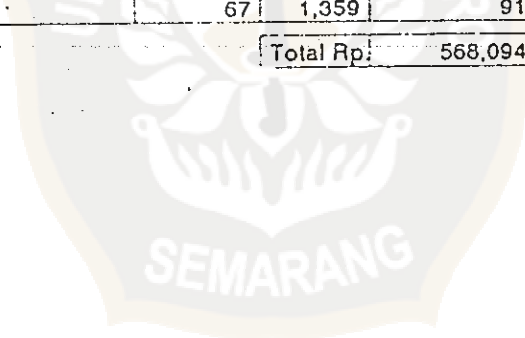
Tabel : II

DAGRAM PARETO
PERSEDIAAN BARANG (IMPORT)
JACKS DIVISION

	Nama barang	(Rp.)	Total	Nilai Penggunaan	Nilai	
		Harga			Kumulatif	%
1	INNER TUBE 23	5,574	39,830	222,012,420	222,012,420	15.73
2	SUB SCREW 23	5,081	39,830	202,376,230	424,388,650	30.08
3	OUTER TUBE 23	4,194	39,830	167,047,020	591,435,670	41.92
4	INNER TUBE 28	4,057	32,492	131,820,044	723,255,714	51.27
5	OUTER TUBE 28	3,007	40,879	122,923,153	846,178,867	59.98
6	SUB SCREW 28	3,654	32,492	118,725,768	964,904,635	68.40
7	PINION GEAR	2,076	57,158	118,660,008	1,083,564,643	76.81
8	RAM GUIDE 23	2,927	35,427	103,694,829	1,187,259,472	84.16
9	RAM GUIDE 28	1,918	30,167	57,860,306	1,245,119,778	88.26
10	PINION GEAR ISUZU	2,610	17,250	45,022,500	1,290,142,278	91.45
11	PINION GUIDE	429	74,110	31,793,190	1,321,935,468	93.71
12	STEEL BALL	14	1,287,090	18,019,260	1,339,954,728	94.99
13	SH.COMPLETE	2,263	7,253	16,413,539	1,356,368,267	96.15
14	BEARING RACE	451	22,008	9,925,608	1,366,293,875	96.85
15	SCREW SPK2	1,547	4,244	6,565,468	1,372,859,343	97.32
16	STOPPER KNOCKNEW R.G	95	65,900	6,260,500	1,379,119,843	97.76
17	BERING RACE	229	25,226	5,776,754	1,384,896,597	98.17
18	STEEL BALL	10	552,368	5,523,680	1,390,420,277	98.56
19	METAL	1,042	4,807	5,008,894	1,395,429,171	98.92
20	SCREW SPK1	1,262	3,664	4,623,968	1,400,053,139	99.25
21	BEVEL GEAR	1,819	2,263	4,116,397	1,404,169,536	99.54
22	SUPPORT	724	5,441	3,939,284	1,408,108,820	99.82
23	BOLT WITH WASHER	54	14,416	778,464	1,408,887,284	99.87
24	HEAD PIN	622	800	497,600	1,409,384,884	99.91
25	KNOCK PIN	66	7,108	469,128	1,409,854,012	99.94
26	NUT	24	14,042	337,008	1,410,191,020	99.96
27	PIN THRUST BEARING	74	3,554	262,996	1,410,454,016	99.98
28	PIN SUPPORT FOR HEAD	104	1,200	124,800	1,410,578,816	99.99
29	FEMALE SCREW	1,232	30	36,960	1,410,615,776	100
			Total Rp	1,410,615,776		

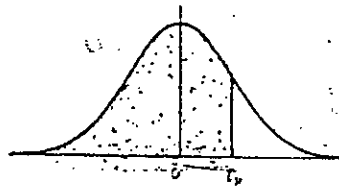
Ok Tabel : 12
 DIAGRAM PARETO
 Persediaan barang
 Tools division

	Nama barang (RAW)	(Rp.)		Nilai		
		Harga	Total	Nilai Penggunaan	Kumulatif	%
1	RM S45C (D22x6)	27,236	4,519	123,065,866	123,065,866	21.66
2	RM S45C (D13x6)	9,505	9,081	86,314,905	209,380,771	36.85
3	SF ADJ WRENCH 200	6,231	11,175	69,631,425	279,012,196	49.11
4	RM S45C (D20x6)	22,575	3,069	69,282,675	348,294,871	61.30
5	SF HUB NUT W 17x32	10,035	4,000	40,140,000	388,434,871	68.37
6	RM S45C (D16x6)	14,532	2,680	38,945,760	427,380,631	75.23
7	RM S45C (D25.4x6)	35,187	952	33,498,024	460,878,655	81.12
8	RM S50C (D13x6)	9,837	2,799	27,528,845	488,407,500	85.97
9	RM S35C (D50x5.59)	79,576	337	26,817,112	515,224,612	90.69
10	RM S45C (D30x6)	50,725	311	15,775,475	531,000,087	93.47
11	MC SCREW DRIVER BLADE (HJ)	375	28,600	10,725,000	541,725,087	95.35
12	RM S45C (D15x6)	12,704	600	7,622,400	549,347,487	96.70
13	RM S45C (D11x6)	6,818	1,044	7,117,992	556,465,479	97.95
14	RM S35C (D32x5.59)	32,613	85	2,772,105	559,237,584	98.44
15	MC SPANNER 7x8	691	2,568	1,774,488	561,012,072	98.75
16	SC BIS FOR PLIER	131	13,467	1,764,177	562,776,249	99.06
17	RM S15C (D50x5.59)	79,586	19	1,512,134	564,288,383	99.33
18	MC SCREW DRIVER BLADE (KF)	525	2,500	1,312,500	565,600,883	99.56
19	RM S45C (D8x6)	2,700	461	1,244,700	566,845,583	99.78
20	KARET SPW.16	56	13,039	730,184	567,575,767	99.90
21	SC NUT FOR PLIER	33	12,948	427,284	568,003,051	99.98
22	KARET SPW 20	67	1,359	91,053	568,094,104	99.99
		Total Rp:		568,094,104		



DAFTAR G

Nilai Persentil
Untuk Distribusi t
 $V = dk - 1$
(Bilangan Dalam Badan Daftar
Menyatakan t_p)



V	t _{0.995}	t _{0.99}	t _{0.975}	t _{0.95}	t _{0.90}	t _{0.80}	t _{0.75}	t _{0.70}	t _{0.50}	t _{0.55}
1	63.66	31.82	12.71	6.31	3.08	1.376	1.000	0.727	0.225	0.158
2	9.92	6.96	4.30	2.92	1.89	1.061	0.816	0.617	0.289	0.142
3	5.84	4.54	3.18	2.35	1.64	0.978	0.765	0.584	0.277	0.137
4	4.60	3.75	2.78	2.13	1.53	0.941	0.741	0.569	0.271	0.131
5	4.03	3.36	2.57	2.02	1.48	0.920	0.727	0.559	0.267	0.132
6	3.71	3.14	2.45	1.94	1.44	0.906	0.718	0.553	0.265	0.131
7	3.50	3.00	2.38	1.90	1.42	0.896	0.711	0.549	0.263	0.130
8	3.36	2.90	2.31	1.86	1.40	0.889	0.706	0.546	0.262	0.130
9	3.25	2.82	2.26	1.83	1.38	0.883	0.703	0.543	0.261	0.129
10	3.17	2.76	2.23	1.81	1.37	0.879	0.700	0.542	0.260	0.129
11	3.11	2.72	2.20	1.80	1.36	0.876	0.697	0.540	0.260	0.129
12	3.06	2.68	2.18	1.78	1.36	0.873	0.695	0.539	0.259	0.128
13	3.01	2.66	2.16	1.77	1.35	0.870	0.694	0.538	0.259	0.128
14	2.98	2.62	2.14	1.76	1.34	0.868	0.692	0.537	0.258	0.128
15	2.95	2.60	2.13	1.75	1.34	0.866	0.691	0.536	0.258	0.128
16	2.92	2.58	2.12	1.75	1.34	0.865	0.690	0.535	0.258	0.128
17	2.90	2.57	2.11	1.74	1.33	0.863	0.689	0.534	0.257	0.128
18	2.88	2.55	2.10	1.73	1.33	0.862	0.688	0.534	0.257	0.127
19	2.86	2.54	2.09	1.73	1.33	0.861	0.688	0.533	0.257	0.127
20	2.84	2.53	2.09	1.72	1.32	0.860	0.687	0.533	0.257	0.127
21	2.83	2.52	2.08	1.72	1.32	0.859	0.686	0.532	0.257	0.127
22	2.82	2.51	2.07	1.72	1.32	0.858	0.686	0.532	0.256	0.127
23	2.81	2.50	2.07	1.71	1.32	0.858	0.685	0.532	0.256	0.127
24	2.80	2.49	2.06	1.71	1.32	0.857	0.685	0.531	0.256	0.127
25	2.79	2.48	2.06	1.71	1.32	0.856	0.684	0.531	0.256	0.127
26	2.78	2.48	2.06	1.71	1.32	0.856	0.684	0.531	0.256	0.127
27	2.77	2.47	2.05	1.70	1.31	0.855	0.684	0.531	0.256	0.127
28	2.76	2.47	2.05	1.70	1.31	0.855	0.683	0.530	0.256	0.127
29	2.76	2.46	2.04	1.70	1.31	0.854	0.683	0.530	0.256	0.127
30	2.75	2.46	2.04	1.70	1.31	0.854	0.683	0.530	0.256	0.127
40	2.70	2.42	2.02	1.68	1.30	0.851	0.681	0.529	0.255	0.126
60	2.68	2.39	2.00	1.67	1.30	0.848	0.679	0.527	0.254	0.126
120	2.62	2.36	1.98	1.66	1.29	0.845	0.677	0.526	0.254	0.126
∞	2.58	2.33	1.96	1.645	1.28	0.842	0.674	0.524	0.253	0.126

Sumber: Statistical Tables for Biological, Agricultural and Medical Research, Fisher, R.A. dan Yates, F.,
Table III, Oliver & Lloyd Ltd, Edinburgh.

SEMARANG

Tabel : 13 .

TABEL PERSIAPAN PERAMALAM

JACKS DIVISION

1 INNER TUBE 23

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1805	-6	-10830	36	64980	-216	1296	0	-1805
2	2650	-5	-13250	25	66250	-125	625	-1325	-2294.9
3	2900	-4	-11600	16	46400	-64	256	-2511.4	-1450
4	2300	-3	-6900	9	20700	-27	81	-2300	0
5	2500	-2	-5000	4	10000	-8	16	-2165.0	1250
6	2300	-1	-2300	1	2300	-1	1	-1150	1991.85
7	4000	1	4000	1	4000	1	1	2000	3464.10
8	4000	2	8000	4	16000	8	16	3464.10	2000
9	4400	3	13200	9	39600	27	81	4400	0
10	3875	4	15500	16	62000	64	256	3355.84	-1937.5
11	5200	5	26000	25	130000	125	625	2600	-4503.3
12	3900	6	23400	36	140400	216	1296	0	-3900
Jml	139830	0	40220	182	602630	0	4550	6368.41	-7184.8

RATA RATA (Dg N = 5) = 4275

RATA RATA DG FAKTOR PERATA =

TREND GARIS LURUS =

TERND GARIS LENGKUNG = a = 3319.1 + 220.9 X

b = 3331.5

c = 220.98

d = -0.814

METODA SIKLUS

a = 3319.1

u = -1197.

v = 1061.4

TOOLS DIVISION

1 RM S45C (D22x6)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	559	-6	-3354	36	20124	-216	1296	0	-559
2	871	-5	-4355	25	21775	-125	625	-435.5	-754.30
3	44	-4	-176	16	704	-64	256	-38.103	-22
4	520	-3	-1560	9	4680	-27	81	-520	0
5	0	-2	0	4	0	-8	16	0	0
6	582	-1	-582	1	582	-1	1	-291	504.026
7	0	1	0	1	0	1	1	0	0
8	0	2	0	4	0	8	16	0	0
9	0	3	0	9	0	27	81	0	0
10	294	4	1176	16	4704	64	256	254.611	-147
11	808	5	4040	25	20200	125	625	404	-699.74
12	841	6	5046	36	30276	216	1296	0	-841
Jml	4519	0	235	182	103045	0	4550	-625.99	-2519.0

RATA RATA (Dg N = 5) = 398.6

RATA RATA DG FAKTOR PERATA =

TREND GARIS LURUS =

TERND GARIS LENGKUNG = a = 376.58 + 1.291 X

b = 84.152

c = 1.2912

d = 19.281

METODA SIKLUS

a = 376.58

u = -419.8

v = -104.3

2 SUB SCREW 23

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1805	-6	-10830	36	64980	-216	1296	0	-1805
2	2650	-5	-13250	25	66250	-125	625	-1325	-2294.9
3	2900	-4	-11600	16	46400	-64	256	-2511.4	-1450
4	2300	-3	-6900	9	20700	-27	81	-2300	0
5	2500	-2	-5000	4	10000	-8	16	-2165.0	1250
6	2300	-1	-2300	1	2300	-1	1	-1150	1991.85
7	4000	1	4000	1	4000	1	1	2000	3464.10
8	4000	2	8000	4	16000	8	16	3464.10	2000
9	4400	3	13200	9	39600	27	81	4400	0
10	3875	4	15500	16	62000	64	256	3355.84	-1937.5
11	5200	5	26000	25	130000	125	625	2600	-4503.3
12	3900	6	23400	36	140400	216	1296	0	-3900
Jml	139830	0	40220	182	602630	0	4550	6368.41	-7184.8

RATA RATA (Dg N = 5) = 4275

RATA RATA DG FAKTOR PERATA =

TREND GARIS LURUS = 3319.1 + 220.9 X

TERND GARIS LENGKUNG = a = 3331.5

b = 220.98

c = -0.814

METODA SIKLUS

a = 3319.1

u = -1197.

v = 1061.4

2 RM S45C (D13x6)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	327	-6	-1962	36	11772	-216	1296	0	-327
2	820	-5	-4100	25	20500	-125	625	-410	-710.14
3	589	-4	-2356	16	9424	-64	256	-510.08	-294.5
4	1014	-3	-3042	9	9126	-27	81	-1014	0
5	942	-2	-1884	4	3768	-8	16	-815.79	471
6	971	-1	-971	1	971	-1	1	-485.5	840.910
7	1664	1	1664	1	1664	1	1	832	1441.06
8	0	2	0	4	0	8	16	0	0
9	1113	3	3339	9	10017	27	81	1113	0
10	0	4	0	16	0	64	256	0	0
11	179	5	895	25	4475	125	625	89.5	-155.01
12	1462	6	8772	36	52632	216	1296	0	-1462
Jml	9081	0	355	182	124349	0	4550	-1200.8	-195.68

RATA RATA (Dg N = 5) = 550.8

RATA RATA DG FAKTOR PERATA =

TREND GARIS LURUS = 756.75 + 1.950 X

TERND GARIS LENGKUNG = a = 870.13

b = 1.9508

c = -7.475

METODA SIKLUS

a = 756.75

u = -32.61

v = -200.1

3 OUTER TUBE 23

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1805	-6	-10830	36	64980	-216	1296	0	-1805
2	2650	-5	-13250	25	66250	-125	625	-1325	-2294.9
3	2900	-4	-11600	16	46400	-64	256	-2511.4	-1450
4	2300	-3	-6900	9	20700	-27	81	-2300	0
5	2500	-2	-5000	4	10000	-8	16	-2165.0	1250
6	2300	-1	-2300	1	2300	-1	1	-1150	1991.85
7	4000	1	4000	1	4000	1	1	2000	3464.10
8	4000	2	8000	4	16000	8	16	3464.10	2000
9	4400	3	13200	9	39600	27	81	4400	0
10	3875	4	15500	16	62000	64	256	3355.84	-1937.5
11	5200	5	26000	25	130000	125	625	2600	-4503.3
12	3900	6	23400	36	140400	216	1296	0	-3900
Jml	139830	0	40220	182	602630	0	4550	6368.41	-7184.8

RATA RATA (Dg N = 5) = 4275
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 3319.1 + 220.9 X
 TERND GARIS LENGKUNG = a = 3331.5
 b = 220.98
 c = -0.814
 METODA SIKLUS a = 3319.1
 u = -1197.
 v = 1061.4

3 SF ADJ WRENCH 200

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	400	-6	-2400	36	14400	-216	1296	0	-400
2	400	-5	-2000	25	10000	-125	625	-200	-346.41
3	500	-4	-2000	16	8000	-64	256	-433.01	-250
4	700	-3	-2100	9	6300	-27	81	-700	0
5	1100	-2	-2200	4	4400	-8	16	-952.62	550
6	900	-1	-900	1	900	-1	1	-450	779.422
7	1300	1	1300	1	1300	1	1	650	1125.83
8	900	2	1800	4	3600	8	16	779.422	450
9	1200	3	3600	9	10800	27	81	1200	0
10	775	4	3100	16	12400	64	256	671.169	-387.5
11	1500	5	7500	25	37500	125	625	750	-1299.0
12	1500	6	9000	36	54000	216	1296	0	-1500
Jml	11175	0	14700	182	163600	0	4550	1314.95	-1277.6

RATA RATA (Dg N = 5) = 1175
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 931.25 + 80.76 X
 TERND GARIS LENGKUNG = a = 981.14
 b = 80.769
 c = -3.289
 METODA SIKLUS a = 931.25
 u = -212.9
 v = 219.15

4 INNER TUBE 28

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1750	-6	-10500	36	63000	-216	1296	0	-1750
2	1804	-5	-9020	25	45100	-125	625	-902	-1562.3
3	2301	-4	-9204	16	36816	-64	256	-1992.7	-1150.5
4	1404	-3	-4212	9	12636	-27	81	-1404	0
5	3150	-2	-6300	4	12600	-8	16	-2727.9	1575
6	3050	-1	-3050	1	3050	-1	1	-1525	2641.37
7	2680	1	2680	1	2680	1	1	1340	2320.94
8	2953	2	5906	4	11812	8	16	2557.37	1476.5
9	4100	3	12300	9	36900	27	81	4100	0
10	3250	4	13000	16	52000	64	256	2814.58	-1625
11	3050	5	15250	25	76250	125	625	1525	-2641.3
12	3000	6	18000	36	108000	216	1296	0	-3000
Jm1	32492	0	24850	182	460844	0	4550	3785.25	-3715.3

RATA RATA (Dg N = 5) = 3270.6
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 2707.6 + 136.5 X
 TERND GARIS LENGKUNG =
 a = 2978.4
 b = 136.53
 c = -17.85
 a = 2707.6
 u = -619.2
 v = 630.87

METODA SIKLUS

4 RM. S45C (D20x6)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	364	-6	-2184	36	13104	-216	1296	0	-364
2	514	-5	-2570	25	12850	-125	625	-257	-445.13
3	291	-4	-1164	16	4656	-64	256	-252.01	-145.5
4	349	-3	-1047	9	3141	-27	81	-349	0
5	407	-2	-814	4	1628	-8	16	-352.47	203.5
6	458	-1	-458	1	458	-1	1	-229	396.639
7	0	1	0	1	0	1	1	0	0
8	0	2	0	4	0	8	16	0	0
9	0	3	0	9	0	27	81	0	0
10	0	4	0	16	0	64	256	0	0
11	32	5	160	25	800	125	625	16	-27.712
12	656	6	3936	36	23616	216	1296	0	-656
Jm1	3071	0	-4141	182	60253	0	4550	-1423.4	-1038.2

RATA RATA (Dg N = 5) = 137.6
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 255.91 + -22.7 X
 TERND GARIS LENGKUNG =
 a = 140.01
 b = -22.75
 c = 7.6417
 a = 255.91
 u = -173.0
 v = -237.2

METODA SIKLUS

5 OUTER TUBE 28

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1750	-6	-10500	36	63000	-216	1296	0	-1750
2	1806	-5	-9030	25	45150	-125	625	-903	-1564.0
3	2301	-4	-9204	16	36816	-64	256	-1992.7	-1150.5
4	1402	-3	-4206	9	12618	-27	81	-1402	0
5	3150	-2	-6300	4	12600	-8	16	-2727.9	1575
6	3050	-1	-3050	1	3050	-1	1	-1525	2641.37
7	2680	1	2680	1	2680	1	1	1340	2320.94
8	2853	2	5706	4	11412	8	16	2470.77	1426.5
9	3870	3	11610	9	34830	27	81	3870	0
10	2805	4	11220	16	44880	64	256	2429.20	-1402.5
11	2260	5	11300	25	56500	125	625	1130	-1957.2
12	2952	6	17712	36	106272	216	1296	0	-2952
Jml	130879	0	17938	182	429808	0	4550	2689.26	-2812.4

RATA RATA (Dg N = 5) = 2948
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 2573.2 + 98.5 X
 TERND GARIS LENGKUNG = a = 2899.7
 b = 98.560
 c = -21.52
 METODA SIKLUS a = 2573.2
 u = -468.7
 v = 448.21

5 SF HUB NUT W 17x32

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	0	-6	0	36	0	-216	1296	0	0
2	0	-5	0	25	0	-125	625	0	0
3	0	-4	0	16	0	-64	256	0	0
4	0	-3	0	9	0	-27	81	0	0
5	0	-2	0	4	0	-8	16	0	0
6	0	-1	0	1	0	-1	1	0	0
7	2000	1	2000	1	2000	1	1	1000	1732.05
8	0	2	0	4	0	8	16	0	0
9	2000	3	6000	9	18000	27	81	2000	0
10	0	4	0	16	0	64	256	0	0
11	0	5	0	25	0	125	625	0	0
12	0	6	0	36	0	216	1296	0	0
Jml	4000	0	8000	182	20000	0	4550	3000	1732.05

RATA RATA (Dg N = 5) = 400
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 333.33 + 43.9 X
 TERND GARIS LENGKUNG = a = 677.96
 b = 43.956
 c = -22.72
 METODA SIKLUS a = 333.33
 u = 288.67
 v = 500

6 SUB SCREW 28

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1750	-6	-10500	36	63000	-216	1296	0	-1750
2	1804	-5	-9020	25	45100	-125	625	-902	-1562.3
3	2301	-4	-9204	16	36816	-64	256	-1992.7	-1150.5
4	1404	-3	-4212	9	12636	-27	81	-1404	0
5	3150	-2	-6300	4	12600	-8	16	-2727.9	1575
6	3050	-1	-3050	1	3050	-1	1	-1525	2641.37
7	2680	1	2680	1	2680	1	1	1340	2320.94
8	2953	2	5906	4	11812	8	16	2557.37	1476.5
9	4100	3	12300	9	36900	27	81	4100	0
10	3250	4	13000	16	52000	64	256	2814.58	-1625
11	3050	5	15250	25	76250	125	625	1525	-2641.3
12	3000	6	18000	36	108000	216	1296	0	-3000

Jml 132492 0 24850 182 460844 0 4550 3785.25 -3715.3

RATA RATA (Dg N = 5) = 3270.6
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 2707.6 + 136. X
 TERND GARIS LENGKUNG = a = 2978.4
 b = 136.53
 c = -17.85
 METODA SIKLUS a = 2707.6
 u = -619.2
 v = 630.87

RM S45C (D16x6)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	179	-6	-1074	36	6444	-216	1296	0	-179
2	122	-5	-610	25	3050	-125	625	-61	-105.65
3	456	-4	-1824	16	7296	-64	256	-394.90	-228
4	170	-3	-510	9	1530	-27	81	-170	0
5	653	-2	-1306	4	2612	-8	16	-565.51	326.5
6	108	-1	-108	1	108	-1	1	-54	93.5307
7	583	1	583	1	583	1	1	291.5	504.892
8	0	2	0	4	0	8	16	0	0
9	13	3	39	9	117	27	81	13	0
10	0	4	0	16	0	64	256	0	0
11	396	5	1980	25	9900	125	625	198	-342.94
12	0	6	0	36	0	216	1296	0	0

Jml 2680 0 -2830 182 31640 0 4550 -742.92 69.3223

RATA RATA (Dg N = 5) = 81.8
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 223.33 + -15. X
 TERND GARIS LENGKUNG = a = 299.66
 b = -15.54
 c = -5.032
 METODA SIKLUS a = 223.33
 u = 11.553
 v = -123.8

7 PINION GEAR

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1200	-6	-7200	36	43200	-216	1296	0	-1200
2	600	-5	-3000	25	15000	-125	625	-300	-519.61
3	900	-4	-3600	16	14400	-64	256	-779.42	-450
4	1100	-3	-3300	9	9900	-27	81	-1100	0
5	1400	-2	-2800	4	5600	-8	16	-1212.4	700
6	2250	-1	-2250	1	2250	-1	1	-1125	1948.55
7	1300	1	1300	1	1300	1	1	650	1125.83
8	2500	2	5000	4	10000	8	16	2165.06	1250
9	1000	3	3000	9	9000	27	81	1000	0
10	4000	4	16000	16	64000	64	256	3464.10	-2000
11	1000	5	5000	25	25000	125	625	500	-866.02
12	0	6	0	36	0	216	1296	0	0
Jml	117250	0	8150	182	199650	0	4550	3262.30	-11.250

RATA RATA (Dg N = 5) = 1700
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 1437.5 + 44.7 X
 TERND GARIS LENGKUNG = a = 1962.7
 b = 44.780
 c = -34.62
 METODA SIKLUS a = 1437.5
 u = -1.875
 v = 543.71

7 RM S45C (25.4x6)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	31	-6	-186	36	1116	-216	1296	0	-31
2	27	-5	-135	25	675	-125	625	-13.5	-23.382
3	88	-4	-352	16	1408	-64	256	-76.210	-44
4	101	-3	-303	9	909	-27	81	-101	0
5	87	-2	-174	4	348	-8	16	-75.344	43.5
6	141	-1	-141	1	141	-1	1	-70.5	122.109
7	0	1	0	1	0	1	1	0	0
8	0	2	0	4	0	8	16	0	0
9	45	3	135	9	405	27	81	45	0
10	110	4	440	16	1760	64	256	95.2627	-55
11	157	5	785	25	3925	125	625	78.5	-135.96
12	165	6	990	36	5940	216	1296	0	-165
Jml	952	0	1059	182	16627	0	4550	-117.79	-288.73

RATA RATA (Dg N = 5) = 95.4
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 79.333 + 5.81 X
 TERND GARIS LENGKUNG = a = 60.788
 b = 5.8186
 c = 1.2227
 METODA SIKLUS a = 79.333
 u = -48.12
 v = -19.63

B RAM GUIDE 28

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1304	-6	-7824	36	46944	-216	1296	0	-1304
2	3300	-5	-16500	25	82500	-125	625	-1650	-2857.8
3	2501	-4	-10004	16	40016	-64	256	-2165.9	-1250.5
4	2400	-3	-7200	9	21600	-27	81	-2400	0
5	2400	-2	-4800	4	9600	-8	16	-2078.4	1200
6	2200	-1	-2200	1	2200	-1	1	-1100	1905.25
7	4000	1	4000	1	4000	1	1	2000	3464.10
8	4028	2	8056	4	16112	8	16	3488.35	2014
9	2822	3	8466	9	25398	27	81	2822	0
10	2820	4	11280	16	45120	64	256	2442.19	-1410
11	5064	5	25320	25	126600	125	625	2532	-4385.5
12	2588	6	15528	36	93168	216	1296	0	-2588

Jml 135427 0 24122 182 513258 0 4550 3890.15 -5212.5

RATA RATA (Dg N = 5) = 3464.4
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 2952.2 + 132. X
 TERND GARIS LENGKUNG = a = 3156.0
 b = 132.53
 c = -13.43
 a = 2952.2
 u = -868.7
 v = 648.35

METODA SIKLUS

B RM SSOC. (D13x6)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	176	-6	-1056	36	6336	-216	1296	0	-176
2	0	-5	0	25	0	-125	625	0	0
3	0	-4	0	16	0	-64	256	0	0
4	0	-3	0	9	0	-27	81	0	0
5	1071	-2	-2142	4	4284	-8	16	-927.51	535.5
6	160	-1	-160	1	160	-1	1	-80	138.564
7	0	1	0	1	0	1	1	0	0
8	0	2	0	4	0	8	16	0	0
9	0	3	0	9	0	27	81	0	0
10	0	4	0	16	0	64	256	0	0
11	0	5	0	25	0	125	625	0	0
12	1392	6	8352	36	50112	216	1296	0	-1392

Jml 2799 0 4994 182 60892 0 4550 -1007.5 -893.93

RATA RATA (Dg N = 5) = 278.4
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 233.25 + 27.4 X
 TERND GARIS LENGKUNG = a = 76.974
 b = 27.439
 c = 10.303
 a = 233.25
 u = -148.9
 v = -167.9

METODA SIKLUS

9 RAM GUIDE 23

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	2000	-6	-12000	36	72000	-216	1296	0	-2000
2	1200	-5	-6000	25	30000	-125	625	-600	-1039.2
3	2251	-4	-9004	16	36016	-64	256	-1949.4	-1125.5
4	1802	-3	-5406	9	16218	-27	81	-1802	0
5	2950	-2	-5900	4	11800	-8	16	-2554.7	1475
6	3100	-1	-3100	1	3100	-1	1	-1550	2684.67
7	2300	1	2300	1	2300	1	1	1150	1991.85
8	3223	2	6446	4	12892	8	16	2791.19	1611.5
9	3265	3	9795	9	29385	27	81	3265	0
10	2700	4	10800	16	43200	64	256	2338.26	-1350
11	2078	5	10390	25	51950	125	625	1039	-1799.6
12	3298	6	19788	36	118728	216	1296	0	-3298

Jml 130167 0 18109 182 427589 0 4550 2127.27 -2849.2

RATA RATA (Dg N = 5) = 2912.8
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 2513.9 + 99.5 X
 TERND GARIS LENGKUNG = a = 2767.6
 b = 99.5
 c = -16.73
 METODA SIKLUS a = 2513.9
 u = -474.8
 v = 354.54

9 RM S35C (D50x5.59)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	0	-6	0	36	0	-216	1296	0	0
2	0	-5	0	25	0	-125	625	0	0
3	0	-4	0	16	0	-64	256	0	0
4	0	-3	0	9	0	-27	81	0	0
5	0	-2	0	4	0	-8	16	0	0
6	0	-1	0	1	0	-1	1	0	0
7	42	1	42	1	42	1	1	21	36.3730
8	211	2	422	4	844	8	16	182.731	105.5
9	21	3	63	9	189	27	81	21	0
10	0	4	0	16	0	64	256	0	0
11	63	5	315	25	1575	125	625	31.5	-54.559
12	0	6	0	36	0	216	1296	0	0

Jml 337 0 842 182 2650 0 4550 256.231 87.3134

RATA RATA (Dg N = 5) = 59
 RATA RATA DG FAKTOR PERATA =
 TREND GARIS LURUS = 28.083 + 4.62 X
 TERND GARIS LENGKUNG = a = 48.940
 b = 4.6263
 c = -1.375
 METODA SIKLUS a = 28.083
 u = 14.552
 v = 42.705

10 PINION GEAR ISUZU

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	1200	-6	-7200	36	43200	-216	1296	0	-1200
2	600	-5	-3000	25	15000	-125	625	-300	-519.61
3	900	-4	-3600	16	14400	-64	256	-779.42	-450
4	1100	-3	-3300	9	9900	-27	81	-1100	0
5	1400	-2	-2800	4	5600	-8	16	-1212.4	700
6	2250	-1	-2250	1	2250	-1	1	-1125	1948.55
7	1300	1	1300	1	1300	1	1	650	1125.83
8	2500	2	5000	4	10000	8	16	2165.06	1250
9	1000	3	3000	9	9000	27	81	1000	0
10	4000	4	16000	16	64000	64	256	3464.10	-2000
11	1000	5	5000	25	25000	125	625	500	-866.02
12	6	6	36	36	216	216	1296	0	-6
Jml	17256	0	8186	182	199866	0	4550	3262.30	-17.250

ATA RATA (Dg N = 5) = 1701.2
 ATA RATA DG FAKTOR PERATA =
 REND GARIS LURUS = 1438 + 44.9 X
 REND GARIS LENGKUNG = a = 1962.1
 b = 44.978
 c = -34.55
 a = 1438
 u = -2.875
 v = 543.71

10 RUMAH SIKLUS

10 RM S45C (D30x6)

No	Y	X	XY	X ²	X ² Y	X ³	X ⁴	Ysin X	Ycos X
1	176	-6	-1056	36	6336	-216	1296	0	-176
2	59	-5	-295	25	1475	-125	625	-29.5	-51.095
3	70	-4	-280	16	1120	-64	256	-60.621	-35
4	0	-3	0	9	0	-27	81	0	0
5	0	-2	0	4	0	-8	16	0	0
6	0	-1	0	1	0	-1	1	0	0
7	0	1	0	1	0	1	1	0	0
8	0	2	0	4	0	8	16	0	0
9	0	3	0	9	0	27	81	0	0
10	0	4	0	16	0	64	256	0	0
11	0	5	0	25	0	125	625	0	0
12	6	6	36	36	216	216	1296	0	-6
Jml	311	0	-1595	182	9147	0	4550	-90.121	-268.09

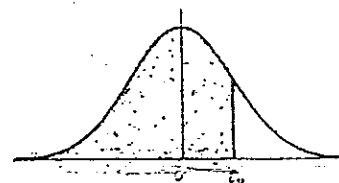
ATA RATA (Dg N = 5) = 1.2
 ATA RATA DG FAKTOR PERATA =
 REND GARIS LURUS = 25.916 + -8.7 X
 REND GARIS LENGKUNG = a = -11.62
 b = -8.763
 c = 2.4754
 a = 25.916
 u = -44.68
 v = -15.02

10 RUMAH SIKLUS

DAFTAR G

Nilai Persentil
Untuk Distribusi t
 $V = dk^2$

(Bilangan Dalam Badan Daftar
Menyatakan t_p)



V	t _{0.995}	t _{0.99}	t _{0.975}	t _{0.95}	t _{0.90}	t _{0.80}	t _{0.75}	t _{0.70}	t _{0.60}	t _{0.55}
1	63.66	31.82	12.71	6.31	3.08	1.376	1.000	0.727	0.325	0.158
2	9.92	6.96	4.30	2.92	1.89	1.061	0.816	0.617	0.289	0.142
3	5.84	4.54	3.18	2.35	1.64	0.978	0.765	0.584	0.277	0.137
4	4.60	3.75	2.78	2.13	1.53	0.941	0.741	0.569	0.271	0.131
5	4.03	3.36	2.57	2.02	1.48	0.920	0.727	0.559	0.267	0.132
6	3.71	3.14	2.45	1.94	1.44	0.906	0.718	0.553	0.265	0.131
7	3.50	3.00	2.36	1.90	1.42	0.896	0.711	0.549	0.263	0.130
8	3.36	2.90	2.31	1.86	1.40	0.889	0.706	0.546	0.262	0.130
9	3.25	2.82	2.26	1.83	1.38	0.883	0.703	0.543	0.261	0.129
10	3.17	2.76	2.23	1.81	1.37	0.879	0.700	0.542	0.260	0.129
11	3.11	2.72	2.20	1.80	1.36	0.876	0.697	0.540	0.260	0.129
12	3.06	2.68	2.18	1.78	1.36	0.873	0.695	0.539	0.259	0.128
13	3.01	2.65	2.16	1.77	1.35	0.870	0.694	0.538	0.259	0.128
14	2.98	2.62	2.14	1.76	1.34	0.868	0.692	0.537	0.258	0.128
15	2.95	2.60	2.13	1.75	1.34	0.866	0.691	0.536	0.258	0.128
16	2.92	2.58	2.12	1.75	1.34	0.865	0.690	0.535	0.258	0.128
17	2.90	2.57	2.11	1.74	1.33	0.863	0.689	0.534	0.257	0.128
18	2.88	2.55	2.10	1.73	1.33	0.862	0.688	0.534	0.257	0.127
19	2.86	2.54	2.09	1.73	1.33	0.861	0.688	0.533	0.257	0.127
20	2.84	2.53	2.09	1.72	1.32	0.860	0.687	0.533	0.257	0.127
21	2.83	2.52	2.08	1.72	1.32	0.859	0.686	0.532	0.257	0.127
22	2.82	2.51	2.07	1.72	1.32	0.858	0.686	0.532	0.256	0.127
23	2.81	2.50	2.07	1.71	1.32	0.858	0.685	0.532	0.256	0.127
24	2.80	2.49	2.06	1.71	1.32	0.857	0.685	0.531	0.256	0.127
25	2.79	2.48	2.06	1.71	1.32	0.856	0.684	0.531	0.256	0.127
26	2.78	2.48	2.05	1.71	1.32	0.856	0.684	0.531	0.256	0.127
27	2.77	2.47	2.05	1.70	1.31	0.855	0.684	0.531	0.256	0.127
28	2.76	2.47	2.05	1.70	1.31	0.855	0.683	0.530	0.256	0.127
29	2.76	2.46	2.04	1.70	1.31	0.854	0.683	0.530	0.256	0.127
30	2.75	2.46	2.04	1.70	1.31	0.854	0.683	0.530	0.256	0.127
40	2.70	2.42	2.02	1.68	1.30	0.851	0.681	0.529	0.255	0.126
60	2.66	2.39	2.00	1.67	1.30	0.848	0.679	0.527	0.254	0.126
120	2.62	2.36	1.98	1.66	1.29	0.845	0.677	0.526	0.254	0.126
∞	2.58	2.33	1.96	1.645	1.28	0.842	0.674	0.524	0.253	0.126

Sumber: Statistical Tables for Biological, Agricultural and Medical Research, Fisher, R.A. dan Yates, F.,
Table III, Oliver & Boyd Ltd, Edinburgh.