



LAMPIRAN



Universitas
Esa Unggul



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Lampiran 1

Waktu penyelesaian PO Mei 2021

Stasiun Kerja	Type Proses (Job)	Jumlah Permintaan May (pcs)	Jumlah Mesin	Waktu set up (det)	Waktu Standar (det)	Waktu Penyelesaian (det)	Waktu Penyelesaian (Menit)
M8	321/221/211 item DLD 1x	10.319.061	1	240	0,031	431.845	7.197
	321/221/211 item DLD 2x	14.756.677	1	240	0,061	843.533	14.059
	321/221/211 item DLD 3x	4.815.509	0	240	0,092	1.125.064	18.751
	NON 321	1.300.000	0	240	0,061	837.959	13.966
	DSR	10.210.000	1	240	0,031	438.861	7.314
M9	321/221/211 item DLD 1x	10.319.061	9	180	1,367	1.568.037	26.134
	321/221/211 item DLD 2x	14.756.677	13	180	1,367	1.552.403	25.873
	321/221/211 item DLD 3x	4.815.509	5	180	1,367	1.317.166	21.953
	NON 321	1.300.000	2	180	1,465	952.506	15.875
	DSR	10.210.000	9	180	1,404	1.593.019	26.550
M10	321/221/211 item DLD 1x	10.319.061	18	180	3,232	1.852.857	30.881
	321/221/211 item DLD 2x	14.756.677	54	180	6,463	1.766.449	29.441
	321/221/211 item DLD 3x	4.815.509	32	180	9,695	1.459.147	24.319
	NON 321	1.300.000	3	180	3,232	1.400.587	23.343
	DSR	10.210.000	18	180	2,844	1.613.305	26.888
M11	321/221/211 item DLD 1x	10.319.061	-	-	-	-	-
	321/221/211 item DLD 2x	14.756.677	-	-	-	-	-
	321/221/211 item DLD 3x	4.815.509	-	-	-	-	-
	NON 321	1.300.000	-	-	-	-	-
	DSR	10.210.000	4	300	0,709	1.811.195	30.187
M12	321/221/211 item DLD 1x	10.319.061	0	-	-	-	-
	321/221/211 item DLD 2x	14.756.677	0	-	-	-	-
	321/221/211 item DLD 3x	4.815.509	0	-	-	-	-
	NON 321	1.300.000	0	-	-	-	-
	DSR	10.210.000	11	180	1,180	1.095.856	18.264
M13	321/221/211 item DLD 1x	10.319.061	1	180	0,113	1.161.074	19.351
	321/221/211 item DLD 2x	14.756.677	2	180	0,113	830.243	13.837
	321/221/211 item DLD 3x	4.815.509	1	180	0,113	541.925	9.032
	NON 321	1.300.000	1	180	0,125	162.680	2.711
	DSR	10.210.000	2	180	0,100	510.680	8.511
M14	321/221/211 item DLD 1x	10.319.061	8	180	1,096	1.414.175	23.570
	321/221/211 item DLD 2x	14.756.677	11	180	1,096	1.470.776	24.513
	321/221/211 item DLD 3x	4.815.509	4	180	1,096	1.319.894	21.998
	NON 321	1.300.000	1	180	1,109	1.441.278	24.021
	DSR	10.210.000	8	180	0,862	1.100.557	18.343

Lampiran 2

Waktu Penyelesaian PO Juni 2021

Stasiun Kerja	Type Proses (Job)	Jumlah Permintaan Jun (pcs)	Jumlah Mesin	Waktu set up (det)	Waktu Standar (det)	Waktu Penyelesaian (det)	Waktu Penyelesaian (Menit)
M8	321/221/211 item DLD 1x	13.511.285	1	240	0,031	565.363	9.423
	321/221/211 item DLD 2x	19.891.000	1	240	0,061	1.136.942	18.949
	321/221/211 item DLD 3x	5.034.000	0	240	0,092	1.176.100	19.602
	NON 321	1.600.000	0	240	0,061	1.031.278	17.188
	DSR	11.072.000	1	240	0,031	475.892	7.932
M9	321/221/211 item DLD 1x	13.511.285	9	180	1,367	2.053.057	34.218
	321/221/211 item DLD 2x	19.891.000	13	180	1,367	2.092.471	34.875
	321/221/211 item DLD 3x	5.034.000	5	180	1,367	1.376.920	22.949
	NON 321	1.600.000	2	180	1,465	1.172.273	19.538
	DSR	11.072.000	9	180	1,404	1.727.498	28.792
M10	321/221/211 item DLD 1x	13.511.285	18	180	3,232	2.425.987	40.433
	321/221/211 item DLD 2x	19.891.000	54	180	6,463	2.380.991	39.683
	321/221/211 item DLD 3x	5.034.000	32	180	9,695	1.525.344	25.422
	NON 321	1.600.000	3	180	3,232	1.723.757	28.729
	DSR	11.072.000	18	180	2,844	1.749.496	29.158
M11	321/221/211 item DLD 1x	13.511.285	-	-	-	-	-
	321/221/211 item DLD 2x	19.891.000	-	-	-	-	-
	321/221/211 item DLD 3x	5.034.000	-	-	-	-	-
	NON 321	1.600.000	-	-	-	-	-
	DSR	11.072.000	4	300	0,709	1.964.084	32.735
M12	321/221/211 item DLD 1x	13.511.285	0	-	-	-	-
	321/221/211 item DLD 2x	19.891.000	0	-	-	-	-
	321/221/211 item DLD 3x	5.034.000	0	-	-	-	-
	NON 321	1.600.000	0	-	-	-	-
	DSR	11.072.000	11	180	1,180	1.188.361	19.806
M13	321/221/211 item DLD 1x	13.511.285	1	180	0,113	1.520.200	25.337
	321/221/211 item DLD 2x	19.891.000	2	180	0,113	1.119.049	18.651
	321/221/211 item DLD 3x	5.034.000	1	180	0,113	566.505	9.442
	NON 321	1.600.000	1	180	0,125	200.180	3.336
	DSR	11.072.000	2	180	0,100	553.780	9.230
M14	321/221/211 item DLD 1x	13.511.285	8	180	1,096	1.851.597	30.860
	321/221/211 item DLD 2x	19.891.000	11	180	1,096	1.982.444	33.041
	321/221/211 item DLD 3x	5.034.000	4	180	1,096	1.379.772	22.996
	NON 321	1.600.000	1	180	1,109	1.773.839	29.564
	DSR	11.072.000	8	180	0,862	1.193.458	19.891

Lampiran 3

Waktu Penyelesaian PO Juli 2021

Stasiun Kerja	Type Proses (Job)	Jumlah Permintaan Jul (pcs)	Jumlah Mesin	Waktu set up (det)	Waktu Standar (det)	Waktu Penyelesaian (det)	Waktu Penyelesaian (Menit)
M8	321/221/211 item DLD 1x	15.521.220	1	240	0,031	649.430	10.824
	321/221/211 item DLD 2x	17.833.000	1	240	0,061	1.019.335	16.989
	321/221/211 item DLD 3x	6.627.000	0	240	0,092	1.548.199	25.803
	NON 321	1.654.000	0	240	0,061	1.066.076	17.768
	DSR	12.800.000	1	240	0,031	550.127	9.169
M9	321/221/211 item DLD 1x	15.521.220	9	180	1,367	2.358.443	39.307
	321/221/211 item DLD 2x	17.833.000	13	180	1,367	1.875.995	31.267
	321/221/211 item DLD 3x	6.627.000	5	180	1,367	1.812.587	30.210
	NON 321	1.654.000	2	180	1,465	1.211.831	20.197
	DSR	12.800.000	9	180	1,404	1.997.079	33.285
M10	321/221/211 item DLD 1x	15.521.220	18	180	3,232	2.786.849	46.447
	321/221/211 item DLD 2x	17.833.000	54	180	6,463	2.134.663	35.578
	321/221/211 item DLD 3x	6.627.000	32	180	9,695	2.007.979	33.466
	NON 321	1.654.000	3	180	3,232	1.781.928	29.699
	DSR	12.800.000	18	180	2,844	2.022.511	33.709
M11	321/221/211 item DLD 1x	15.521.220	-	-	-	-	-
	321/221/211 item DLD 2x	17.833.000	-	-	-	-	-
	321/221/211 item DLD 3x	6.627.000	-	-	-	-	-
	NON 321	1.654.000	-	-	-	-	-
	DSR	12.800.000	4	300	0,709	2.270.570	37.843
M12	321/221/211 item DLD 1x	15.521.220	0	-	-	-	-
	321/221/211 item DLD 2x	17.833.000	0	-	-	-	-
	321/221/211 item DLD 3x	6.627.000	0	-	-	-	-
	NON 321	1.654.000	0	-	-	-	-
	DSR	12.800.000	11	180	1,180	1.373.800	22.897
M13	321/221/211 item DLD 1x	15.521.220	1	180	0,113	1.746.317	29.105
	321/221/211 item DLD 2x	17.833.000	2	180	0,113	1.003.286	16.721
	321/221/211 item DLD 3x	6.627.000	1	180	0,113	745.718	12.429
	NON 321	1.654.000	1	180	0,125	206.930	3.449
	DSR	12.800.000	2	180	0,100	640.180	10.670
M14	321/221/211 item DLD 1x	15.521.220	8	180	1,096	2.127.013	35.450
	321/221/211 item DLD 2x	17.833.000	11	180	1,096	1.777.351	29.623
	321/221/211 item DLD 3x	6.627.000	4	180	1,096	1.816.342	30.272
	NON 321	1.654.000	1	180	1,109	1.833.700	30.562
	DSR	12.800.000	8	180	0,862	1.379.692	22.995

Lampiran 4

Waktu Penyelesaian PO Agustus 2021

Stasiun Kerja	Type Proses (Job)	Jumlah Permintaan Agust (pcs)	Jumlah Mesin	Waktu set up (det)	Waktu Standar (det)	Waktu Penyelesaian (det)	Waktu Penyelesaian (Menit)
M8	321/221/211 item DLD 1x	14.675.000	1	240	0,031	614.036	10.234
	321/221/211 item DLD 2x	17.780.700	1	240	0,061	1.016.346	16.939
	321/221/211 item DLD 3x	6.528.000	0	240	0,092	1.525.074	25.418
	NON 321	1.683.000	0	240	0,061	1.084.763	18.079
	DSR	12.800.000	1	240	0,031	550.127	9.169
M9	321/221/211 item DLD 1x	14.675.000	9	180	1,367	2.229.870	37.164
	321/221/211 item DLD 2x	17.780.700	13	180	1,367	1.870.493	31.175
	321/221/211 item DLD 3x	6.528.000	5	180	1,367	1.785.512	29.759
	NON 321	1.683.000	2	180	1,465	1.233.075	20.551
	DSR	12.800.000	9	180	1,404	1.997.079	33.285
M10	321/221/211 item DLD 1x	14.675.000	18	180	3,232	2.634.919	43.915
	321/221/211 item DLD 2x	17.780.700	54	180	6,463	2.128.403	35.473
	321/221/211 item DLD 3x	6.528.000	32	180	9,695	1.977.985	32.966
	NON 321	1.683.000	3	180	3,232	1.813.168	30.219
	DSR	12.800.000	18	180	2,844	2.022.511	33.709
M11	321/221/211 item DLD 1x	14.675.000	-	-	-	-	-
	321/221/211 item DLD 2x	17.780.700	-	-	-	-	-
	321/221/211 item DLD 3x	6.528.000	-	-	-	-	-
	NON 321	1.683.000	-	-	-	-	-
	DSR	12.800.000	4	300	0,709	2.270.570	37.843
M12	321/221/211 item DLD 1x	14.675.000	0	-	-	-	-
	321/221/211 item DLD 2x	17.780.700	0	-	-	-	-
	321/221/211 item DLD 3x	6.528.000	0	-	-	-	-
	NON 321	1.683.000	0	-	-	-	-
	DSR	12.800.000	11	180	1,180	1.373.800	22.897
M13	321/221/211 item DLD 1x	14.675.000	1	180	0,113	1.651.118	27.519
	321/221/211 item DLD 2x	17.780.700	2	180	0,113	1.000.344	16.672
	321/221/211 item DLD 3x	6.528.000	1	180	0,113	734.580	12.243
	NON 321	1.683.000	1	180	0,125	210.555	3.509
	DSR	12.800.000	2	180	0,100	640.180	10.670
M14	321/221/211 item DLD 1x	14.675.000	8	180	1,096	2.011.058	33.518
	321/221/211 item DLD 2x	17.780.700	11	180	1,096	1.772.139	29.536
	321/221/211 item DLD 3x	6.528.000	4	180	1,096	1.789.210	29.820
	NON 321	1.683.000	1	180	1,109	1.865.847	31.097
	DSR	12.800.000	8	180	0,862	1.379.692	22.995

Lampiran 5

Waktu Penyelesaian Job PO September 2021

Stasiun Kerja	Type Proses (Job)	Jumlah Permintaan Sep (pcs)	Jumlah Mesin	Waktu set up (det)	Waktu Standar (det)	Waktu Penyelesaian (det)	Waktu Penyelesaian (Menit)
M8	321/221/211 item DLD 1x	14.870.465	1	240	0,031	622.212	10.370
	321/221/211 item DLD 2x	15.489.000	1	240	0,061	885.383	14.756
	321/221/211 item DLD 3x	7.623.000	0	240	0,092	1.780.848	29.681
	NON 321	1.645.000	0	240	0,061	1.060.276	17.671
	DSR	12.800.000	1	240	0,031	550.127	9.169
M9	321/221/211 item DLD 1x	14.870.465	9	180	1,367	2.259.568	37.659
	321/221/211 item DLD 2x	15.489.000	13	180	1,367	1.629.434	27.157
	321/221/211 item DLD 3x	7.623.000	5	180	1,367	2.084.982	34.750
	NON 321	1.645.000	2	180	1,465	1.205.238	20.087
	DSR	12.800.000	9	180	1,404	1.997.079	33.285
M10	321/221/211 item DLD 1x	14.870.465	18	180	3,232	2.670.013	44.500
	321/221/211 item DLD 2x	15.489.000	54	180	6,463	1.854.103	30.902
	321/221/211 item DLD 3x	7.623.000	32	180	9,695	2.309.740	38.496
	NON 321	1.645.000	3	180	3,232	1.772.233	29.537
	DSR	12.800.000	18	180	2,844	2.022.511	33.709
M11	321/221/211 item DLD 1x	14.870.465	-	-	-	-	-
	321/221/211 item DLD 2x	15.489.000	-	-	-	-	-
	321/221/211 item DLD 3x	7.623.000	-	-	-	-	-
	NON 321	1.645.000	-	-	-	-	-
	DSR	12.800.000	4	300	0,709	2.270.570	37.843
M12	321/221/211 item DLD 1x	14.870.465	0	-	-	-	-
	321/221/211 item DLD 2x	15.489.000	0	-	-	-	-
	321/221/211 item DLD 3x	7.623.000	0	-	-	-	-
	NON 321	1.645.000	0	-	-	-	-
	DSR	12.800.000	11	180	1,180	1.373.800	22.897
M13	321/221/211 item DLD 1x	14.870.465	1	180	0,113	1.673.107	27.885
	321/221/211 item DLD 2x	15.489.000	2	180	0,113	871.436	14.524
	321/221/211 item DLD 3x	7.623.000	1	180	0,113	857.768	14.296
	NON 321	1.645.000	1	180	0,125	205.805	3.430
	DSR	12.800.000	2	180	0,100	640.180	10.670
M14	321/221/211 item DLD 1x	14.870.465	8	180	1,096	2.037.842	33.964
	321/221/211 item DLD 2x	15.489.000	11	180	1,096	1.543.757	25.729
	321/221/211 item DLD 3x	7.623.000	4	180	1,096	2.089.300	34.822
	NON 321	1.645.000	1	180	1,109	1.823.723	30.395
	DSR	12.800.000	8	180	0,862	1.379.692	22.995

Lampiran 6

Nilai L Max PO April

Job	Job 1 / M10	Job 2 / M10	Job 5 / M11	Job 3/M10	Job 2 / M9	Job 5/M10	Job 1/M9	Job 5/M9	Job 3/M9	Job 4/M10
<i>P_{ij}</i>	36.884	35.995	35.478	33.436	31.633	31.602	31.214	31.205	30.182	28.729
<i>r_{ij}</i>	91.075	95.708	124.429	98.625	100.070	128.305	96.745	128.703	101.878	69.626
<i>d_{ij}</i>	159.907	159.907	159.907	159.907	159.907	159.907	159.907	159.907	159.907	159.907
CT	127.959	163.954	199.432	232.868	264.501	296.103	327.317	358.522	388.704	417.433
L	(31.948)	(28.204)	-	(27.846)	(28.204)	-	(31.948)	-	(27.846)	(61.552)
Urutan	1	2	3	4	5	6	7	8	9	10
L max	(31.948)	(28.204)	-	(27.846)	(28.204)	-	(31.948)	-	(27.846)	(61.552)

Job	Job 1/M13	Job 5/M12	Job 4/M9	Job 4/M8	Job 2/M8	Job 2/M13	Job 3/M13	Job 5/M13	Job 1/M8	Job 5/M8	Job 4/M13
<i>P_{ij}</i>	23.113	21.466	19.538	17.188	17.188	16.917	12.417	10.003	8.596	8.596	3.336
<i>r_{ij}</i>	104.846	138.441	78.818	81.167	114.515	114.785	119.643	149.904	119.363	151.311	95.019
<i>d_{ij}</i>	159.907	159.907	159.907	159.907	159.907	159.907	159.907	159.907	159.907	159.907	159.907
CT	466.326	487.792	507.330	524.518	541.706	558.623	571.041	581.044	589.640	598.236	601.572
L	(31.948)	-	(61.552)	(61.552)	(28.204)	(28.204)	(27.846)	-	(31.948)	-	(61.552)
Urutan	12	13	14	15	16	17	18	19	20	21	22
L max	(31.948)	-	(61.552)	(61.552)	(28.204)	(28.204)	(27.846)	-	(31.948)	-	(61.552)

Job	Job 3/M14	Job 2/M14	Job 4/M14	Job 1/M14	Job 5/M14
<i>P_{ij}</i>	30.245	29.970	29.564	28.151	21.558
<i>r_{ij}</i>	101.816	101.733	68.791	99.808	138.349
<i>d_{ij}</i>	159.907	159.907	159.907	159.907	159.907
CT	631.817	661.787	691.351	719.502	741.060
L	(27.846)	(28.204)	-	(31.948)	-
Urutan	23	24	25	26	27
L max	(27.846)	(28.204)	-	(31.948)	-

Nilai L max Po Bulan Mei 2021

Job	Job 1 / M10	Job 5 / M11	Job 2 / M10	Job 5/M10	Job 5/M9	Job 1/M9	Job 2 / M9	Job 3/M10	Job 4/M10	Job 3/M9	Job 1/M13
<i>P_{ij}</i>	30.881	30.187	29.441	26.888	26.550	26.134	25.873	24.319	23.343	21.953	19.351
<i>r_{ij}</i>	76.252	105.871	78.283	109.169	109.508	80.999	81.850	71.734	56.574	74.100	87.782
<i>d_{ij}</i>	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058
CT	107.133	137.320	166.761	193.649	220.199	246.333	272.207	296.526	319.869	341.822	361.173
L	(28.925)	-	(28.334)	-	-	(28.925)	(28.334)	(40.005)	(56.141)	(40.005)	(28.925)
Urutan	1	2	3	4	5	6	7	8	9	10	11
L max	(28.925)	-	(28.334)	-	-	(28.925)	(28.334)	(40.005)	(56.141)	(40.005)	(28.925)

Job	Job 3/M8	Job 5/M12	Job 4/M9	Job 4/M8	Job 2/M8	Job 2/M13	Job 3/M13	Job 5/M13	Job 1/M8	Job 5/M8	Job 4/M13
<i>P_{ij}</i>	18.751	18.264	15.875	14.059	14.059	13.837	9.032	8.511	7.197	7.314	2.711
<i>r_{ij}</i>	77.302	117.794	64.042	65.951	93.665	93.886	87.021	127.547	99.936	128.744	77.205
<i>d_{ij}</i>	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058	136.058
CT	379.924	398.188	414.063	428.122	442.181	456.018	465.051	473.562	480.759	488.074	490.785
L	(40.005)	-	(56.141)	(56.048)	(28.334)	(28.334)	(40.005)	-	(28.925)	-	(56.141)
Urutan	12	13	14	15	16	17	18	19	20	21	22
L max	(40.005)	-	(56.141)	(56.048)	(28.334)	(28.334)	(40.005)	-	(28.925)	-	(56.141)

Job	Job 2/M14	Job 4/M14	Job 1/M14	Job 3/M14	Job 5/M14
<i>P_{ij}</i>	24.513	24.021	23.570	21.998	18.343
<i>r_{ij}</i>	83.210	55.896	83.564	74.055	117.715
<i>d_{ij}</i>	136.058	136.058	136.058	136.058	136.058
CT	515.298	539.319	562.889	584.887	603.230
L	(28.334)	-	(28.925)	(40.005)	-
Urutan	23	24	25	26	27
L max	(28.334)	-	(28.925)	(40.005)	-

Nilai L Max PO Juni

Job	Job 5/M12	Job 3/M8	Job 4/M9	Job 4/M8	Job 2/M8	Job 2/M13	Job 3/M13	Job 5/M13	Job 1/M8	Job 5/M8	Job 4/M13
P_{ij}	19.806	19.602	19.538	18.949	18.949	18.651	9.442	9.230	9.423	7.932	3.336
rij	127.737	80.809	78.818	81.167	126.249	126.547	90.969	138.313	130.847	139.611	95.019
d_{ij}	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543
CT	461.973	481.575	501.113	520.062	539.011	557.661	567.103	576.333	585.756	593.687	597.023
L	-	(47.132)	(49.187)	(47.426)	(2.345)	(2.345)	(47.132)	-	(7.273)	-	(49.187)
Urutan	12	13	14	15	16	17	18	19	20	21	22
L max	-	(47.132)	(49.187)	(47.426)	(2.345)	(2.345)	(47.132)	-	(7.273)	-	(49.187)

Job	Job 1 / M10	Job 2 / M10	Job 2 / M9	Job 1/M9	Job 5 / M11	Job 5/M10	Job 5/M9	Job 4/M10	Job 3/M10	Job 1/M13	Job 3/M9
P_{ij}	40.433	39.683	34.875	34.218	32.735	29.158	28.792	28.729	25.422	25.337	22.949
rij	99.837	105.515	110.324	106.052	114.808	118.385	118.751	69.626	74.988	114.933	77.462
d_{ij}	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543	147.543
CT	140.270	179.953	214.828	249.045	281.780	310.938	339.730	368.459	393.882	419.218	442.167
L	(7.273)	(2.345)	(2.345)	(7.273)	-	-	-	(49.187)	(47.132)	(7.273)	(47.132)
Urutan	1	2	3	4	5	6	7	8	9	10	11
L max	(7.273)	(2.345)	(2.345)	(7.273)	-	-	-	(49.187)	(47.132)	(7.273)	(47.132)

Job	Job 2/M14	Job 1/M14	Job 4/M14	Job 3/M14	Job 5/M14
P_{ij}	33.041	30.860	29.564	22.996	19.891
rij	112.158	109.410	68.791	77.414	127.652
d_{ij}	147.543	147.543	147.543	147.543	147.543
CT	630.064	660.924	690.488	713.484	733.375
L	(2.345)	(7.273)	-	(47.132)	-
Urutan	23	24	25	26	27
L max	(2.345)	(7.273)	-	(47.132)	-

Nilai L Max PO Juli

Job	Job 1 / M10	Job 1/M9	Job 5 / M11	Job 2 / M10	Job 5/M10	Job 3/M10	Job 5/M9	Job 2 / M9	Job 3/M9	Job 4/M10	Job 1/M13
P _{ij}	46.447	39.307	37.843	35.578	33.709	33.466	33.285	31.267	30.210	29.699	29.105
r _{ij}	114.687	121.827	132.723	94.599	136.857	98.714	137.281	98.911	101.971	71.976	132.029
d _{ij}	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566
CT	161.134	200.442	238.284	273.862	307.571	341.037	374.322	405.588	435.798	465.497	494.602
L	(9.432)	(9.432)	-	(40.389)	-	(38.386)	-	(40.389)	(38.386)	(68.892)	(9.432)
Urutan	1	2	3	4	5	6	7	8	9	10	11
L max	(9.432)	(9.432)	-	(40.389)	-	(38.386)	-	(40.389)	(38.386)	(68.892)	(9.432)

Job	Job 3/M8	Job 5/M12	Job 4/M9	Job 4/M8	Job 2/M8	Job 2/M13	Job 3/M13	Job 5/M13	Job 1/M8	Job 5/M8	Job 4/M13
P _{ij}	25.803	22.897	20.197	16.989	16.989	16.721	12.429	10.670	10.824	9.169	3.449
r _{ij}	106.377	147.669	81.477	83.906	113.188	113.456	119.752	159.896	150.310	161.397	98.226
d _{ij}	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566
CT	520.405	543.302	563.499	580.488	597.477	614.199	626.627	637.297	648.121	657.289	660.738
L	(38.386)	-	(68.892)	(69.671)	(40.389)	(40.389)	(38.386)	-	(9.432)	-	(68.892)
Urutan	12	13	14	15	16	17	18	19	20	21	22
L max	(38.386)	-	(68.892)	(69.671)	(40.389)	(40.389)	(38.386)	-	(9.432)	-	(68.892)

Job	Job 1/M14	Job 4/M14	Job 3/M14	Job 2/M14	Job 5/M14
P _{ij}	35.450	30.562	30.272	29.623	22.995
r _{ij}	125.684	71.113	101.908	100.555	147.571
d _{ij}	170.566	170.566	170.566	170.566	170.566
CT	786.645	751.195	691.011	720.633	809.640
L	(9.432)	-	(38.386)	(40.389)	-
Urutan	23	24	25	26	27
L max	(9.432)	-	(38.386)	(40.389)	-

Nilai L Max PO bulan Agustus

Job	Job 1 / M10	Job 5 / M11	Job 1/M9	Job 2 / M10	Job 5/M10	Job 5/M9	Job 3/M10	Job 2 / M9	Job 4/M10	Job 3/M9	Job 1/M13
<i>P_{ij}</i>	43.915	37.843	37.164	35.473	33.709	33.285	32.966	31.175	30.219	29.759	27.519
<i>r_{ij}</i>	108.435	132.723	115.186	94.322	136.857	137.281	97.240	98.621	73.237	100.447	124.831
<i>d_{ij}</i>	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566
CT	152.350	190.193	227.357	262.831	296.539	329.824	362.790	393.965	424.185	453.943	481.462
L	(18.216)	-	(18.216)	(40.771)	-	-	(40.360)	(40.771)	(67.109)	(40.360)	(18.216)
Urutan	1	2	3	4	5	6	7	8	9	10	11
L max	(18.216)	-	(18.216)	(40.771)	-	-	(40.360)	(40.771)	(67.109)	(40.360)	(18.216)

Job	Job 3/M8	Job 5/M12	Job 4/M9	Job 4/M8	Job 2/M8	Job 2/M13	Job 3/M13	Job 5/M13	Job 1/M8	Job 5/M8	Job 4/M13
<i>P_{ij}</i>	25.418	22.897	20.551	16.939	16.939	16.672	12.243	10.670	10.234	9.169	3.509
<i>r_{ij}</i>	104.788	147.669	82.906	85.377	112.856	113.123	117.963	159.896	142.116	161.397	99.948
<i>d_{ij}</i>	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566
CT	506.880	529.776	550.328	567.267	584.206	600.878	613.121	623.791	634.025	643.194	646.703
L	(40.360)	-	(67.109)	(68.249)	(40.771)	(40.771)	(40.360)	-	(18.216)	-	(67.109)
Urutan	12	13	14	15	16	17	18	19	20	21	22
L max	(40.360)	-	(67.109)	(68.249)	(40.771)	(40.771)	(40.360)	-	(18.216)	-	(67.109)

Job	Job 1/M14	Job 4/M14	Job 3/M14	Job 2/M14	Job 5/M14
<i>P_{ij}</i>	33.518	31.097	29.820	29.536	22.995
<i>r_{ij}</i>	118.832	72.359	100.386	100.260	147.571
<i>d_{ij}</i>	170.566	170.566	170.566	170.566	170.566
CT	680.221	711.318	741.138	770.674	793.669
L	(18.216)	-	(40.360)	(40.771)	-
Urutan	23	24	25	26	27
L max	(18.216)	-	(40.360)	(40.771)	-

Nilai L Max PO Bulan September 2021

Job	Job 1 / M10	Job 3/M10	Job 5 / M11	Job 1/M9	Job 3/M9	Job 5/M10	Job 5/M9	Job 2 / M10	Job 3/M8	Job 4/M10	Job 1/M13
P_{ij}	44.500	38.496	37.843	37.659	34.750	33.709	33.285	30.902	29.681	29.537	27.885
rij	109.879	113.548	132.723	116.720	117.294	136.857	137.281	82.167	122.363	71.584	126.494
d_{ij}	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566
CT	154.379	192.875	230.718	268.377	303.127	336.835	370.120	401.022	430.702	460.240	488.125
L	(16.187)	(18.522)	-	(16.187)	(18.522)	-	-	(57.497)	(18.522)	(69.445)	(16.187)
Urutan	1	2	3	4	5	6	7	8	9	10	11
L max	(16.187)	(18.522)	-	(16.187)	(18.522)	-	-	(57.497)	(18.522)	(69.445)	(16.187)

Job	Job 2 / M9	Job 5/M12	Job 4/M9	Job 4/M8	Job 2/M8	Job 2/M13	Job 3/M13	Job 5/M13	Job 1/M8	Job 5/M8	Job 4/M13
P_{ij}	27.157	22.897	20.087	14.756	14.756	14.524	14.296	10.670	10.370	9.169	3.430
rij	85.911	147.669	81.034	83.450	98.312	98.545	137.748	159.896	144.009	161.397	97.691
d_{ij}	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566	170.566
CT	515.282	538.179	558.266	573.022	587.779	602.303	616.599	627.268	637.639	646.807	650.238
L	(57.497)	-	(69.445)	(72.360)	(57.497)	(57.497)	(18.522)	-	(16.187)	-	(69.445)
Urutan	12	13	14	15	16	17	18	19	20	21	22
L max	(57.497)	-	(69.445)	(72.360)	(57.497)	(57.497)	(18.522)	-	(16.187)	-	(69.445)

Job	Job 3/M14	Job 1/M14	Job 4/M14	Job 2/M14	Job 5/M14
P_{ij}	34.822	33.964	30.395	25.729	22.995
rij	117.222	120.415	70.726	87.339	147.571
d_{ij}	170.566	170.566	170.566	170.566	170.566
CT	685.059	719.023	749.419	775.148	798.143
L	(18.522)	(16.187)	-	(57.497)	-
Urutan	23	24	25	26	27
L max	(18.522)	(16.187)	-	(57.497)	-

Lampiran 7 Perhitungan Makespan Berdasarkan Pengurutan Job

Urutan	Job 1	Job 2	Job 3	Job 5	Job 4
Pij	36.884	35.995	33.436	31.602	28.729
rij	31.214	95.708	98.625	135.044	137.917
dij	104.983	166.646	166.646	166.646	166.646
CT	68.099	104.093	137.529	169.131	197.861
Lateness	- 67.333	- 62.553	- 29.117	2.485	31.214

Urutan	Job 2	Job 1	Job 3	Job 4	Job 5
CT	166.646	240.415	273.851	302.580	334.182
dij	166.646	104.983	166.646	166.646	166.646
Lateness	-	135.432	107.205	135.934	167.536

Urutan	Job 3	Job 1	Job 2	Job 4	Job 5
CT	166.646	203.531	239.525	268.255	299.856
dij	166.646	104.983	166.646	166.646	166.646
Lateness	-	98.547	72.879	101.608	133.210

Urutan	Job 3	Job 1	Job 2	Job 5	Job 4
CT	166.646	203.531	239.525	271.127	299.856
dij	166.646	104.983	166.646	166.646	166.646
Lateness	-	98.547	72.879	104.481	133.210

Urutan	Job 5	Job 4	Job 3	Job 2	Job 1
CT	166.646	195.376	228.812	264.806	301.691
dij	166.646	166.646	166.646	166.646	104.983
Lateness	-	28.729	62.165	98.160	196.707

Lampiran 8

Tabel penyesuaian berdasarkan metoda Westinghouse :

Faktor	Kelas	Lambang		Penyesuaian
Keterampilan	Superskill	A1	+	0.15
		A2	+	0.13
	Excellent	B1	+	0.11
		B2	+	0.08
	Good	C1	+	0.06
		C2	+	0.03
	Average	D		0
	Fair	E1	-	0.05
		E2	-	0.1
	Poor	F1	-	0.16
F2		-	0.22	
Usaha	Excessive	A1	+	0.13
		A2	+	0.12
	Excellent	B1	+	0.1
		B2	+	0.08
	Good	C1	+	0.05
		C2	+	0.02
	Average	D		0
	Fair	E1	-	0.04
		E2	-	0.08
	Poor	F1	-	0.12
F2		-	0.17	
Kondisi Kerja	Ideal	A	+	0.06
	Excellent	B	+	0.04
	Good	C	+	0.02
	Average	D		0
	Fair	E	-	0.03
	Poor	F	-	0.07
Konsistensi	Perfect	A	+	0.04
	Excellent	B	+	0.03
	Good	C	+	0.01
	Average	D		0
	Fair	E	-	0.02
	Poor	F	-	0.04

Sumber : Iftikar Z. Satalaksana, Teknik Perancangan Sistem Kerja