LAMPIRAN

Lampiran 1. Perbandingan Berpasangan AHP

Kriteria	K1	K2	K3	K4	K5	K6	K7
Biaya (K1)	1.00	0.33	3.00	5.00	5.00	3.00	1.00
Safety (K2)	3.00	1.00	5.00	7.00	5.00	5.00	5.00
Added value (K3)	0.33	0.20	1.00	3.00	3.00	3.00	0.33
Usia Mesin (K4)	0.20	0.14	0.33	1.00	0.33	1.00	0.20
Durasi *Trouble shooting* (K5)	0.20	0.20	0.33	3.00	1.00	3.00	0.33
Warehouse backup (K6)	0.33	0.20	0.33	1.00	0.33	1.00	0.33
Penerapan (K7)	1.00	0.20	3.00	5.00	3.00	3.00	1.00

Tabel 1. Perbandingan Berpasangan Antar Kriteria

Kriteria	B1	B2	B3
Spare part (B1)	1.00	0.33	1.00
Pekerja (B2)	3.00	1.00	5.00
Peralatan (B3)	1.00	0.20	1.00

Tabel 2. Perbandingan Berpasangan Antar Sub-kriteria Biaya

Kriteria	P1	P2	P3
Technology (P1)	1.00	0.33	1.00
Skill personel (P2)	3.00	1.00	5.00
Data Pendukung (P3)	1.00	0.20	1.00

Tabel 3. Perbandingan Berpasangan Antar Sub-kriteria Penerapan

Kriteria	A1	A2	A3
Corrective (A1)	1.00	0.20	0.33
Preventive (A2)	5.00	1.00	3.00
Predictive (A3)	3.00	0.33	1.00

Tabel 4. Perbandingan Berpasangan Antar Alternatif Kriteria *Safety*

Kriteria	A1	A2	A3
Corrective (A1)	1.00	0.33	1.00
Preventive (A2)	3.00	1.00	3.00
Predictive (A3)	1.00	0.33	1.00

Tabel 5. Perbandingan Berpasangan Antar Alternatif Kriteria *Added value*

Kriteria	A1	A2	A3
Corrective (A1)	1.00	0.14	0.33
Preventive (A2)	7.00	1.00	5.00
Predictive (A3)	3.00	0.20	1.00

Tabel 6. Perbandingan Berpasangan Alternatif Kriteria Waktu Perbaikan

Kriteria	A1	A2	A3
Corrective (A1)	1.00	2.00	5.00
Preventive (A2)	0.50	1.00	5.00
Predictive (A3)	0.20	0.20	1.00

Tabel 7. Perbandingan Berpasangan Alternatif Kriteria Usia Mesin

Kriteria	A1	A2	A3
Corrective (A1)	1.00	0.14	0.20
Preventive (A2)	7.00	1.00	3.00
Predictive (A3)	5.00	0.33	1.00

Tabel 8. Perbandingan Berpasangan Alternatif Kriteria *Warehouse backup*

Kriteria	A1	A2	A3
Corrective (A1)	1.00	0.14	0.33
Preventive (A2)	7.00	1.00	5.00
Predictive (A3)	3.00	0.20	1.00

Tabel 9. Perbandingan Berpasangan Alternatif Sub-kriteria *Spare part*

Kriteria	A1	A2	A3
Corrective (A1)	1.00	7.00	3.00
Preventive (A2)	0.14	1.00	1.00
Predictive (A3)	0.33	1.00	1.00

Tabel 10. Perbandingan Berpasangan Alternatif Sub-kriteria Pekerja

Kriteria	A1	A2	A3
Corrective (A1)	1.00	3.00	3.00
Preventive (A2)	0.33	1.00	1.00
Predictive (A3)	0.33	1.00	1.00

Tabel 11. Perbandingan Berpasangan Alternatif Sub-kriteria Peralatan

Kriteria	A1	A2	A3
Corrective (A1)	1.00	5.00	3.00
Preventive (A2)	0.20	1.00	1.00
Predictive (A3)	0.33	1.00	1.00

Tabel 12. Perbandingan Berpasangan Alternatif Sub-kriteria *Technology*

Kriteria	A1	A2	A3
Corrective (A1)	1.00	3.00	3.00
Preventive (A2)	0.33	1.00	1.00
Predictive (A3)	0.33	1.00	1.00

Tabel 13. Perbandingan Berpasangan Alternatif Sub-kriteria Worker’s Skill

Kriteria	A1	A2	A3
Corrective (A1)	1.00	1.00	5.00
Preventive (A2)	1.00	1.00	3.00
Predictive (A3)	0.20	0.33	1.00

Tabel 14. Perbandingan Berpasangan Alternatif Sub-kriteria Ketersediaan Data

Lampiran 2. Perhitungan Bobot Prioritas AHP

Kriteria	K1	K2	K3	K4	K5	K6	K7	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Biaya (K1)	0.16	0.15	0.23	0.20	0.28	0.16	0.12	1.30	0.19	1.48	7.92
Safety (K2)	0.49	0.44	0.38	0.28	0.28	0.26	0.61	2.75	0.39	3.13	7.95
Added value (K3)	0.05	0.09	0.08	0.12	0.17	0.16	0.04	0.71	0.10	0.77	7.58
Usia Mesin (K4)	0.03	0.06	0.03	0.04	0.02	0.05	0.02	0.26	0.04	0.27	7.26
Durasi *Trouble shooting* (K5)	0.03	0.09	0.03	0.12	0.06	0.16	0.04	0.52	0.07	0.53	7.06
Warehouse backup (K6)	0.05	0.09	0.03	0.04	0.02	0.05	0.04	0.32	0.05	0.34	7.33
Penerapan (K7)	0.16	0.09	0.23	0.20	0.17	0.16	0.12	1.13	0.16	1.28	7.88

Tabel 15. Bobot Prioritas Setiap Kriteria

Kriteria	B1	B2	B3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Spare part (B1)	0.20	0.22	0.14	0.56	0.19	0.56	3.01
Pekerja (B2)	0.60	0.65	0.71	1.97	0.66	2.00	3.06
Peralatan (B3)	0.20	0.13	0.14	0.47	0.16	0.48	3.01

Tabel 16. Bobot Prioritas Sub-kriteria Biaya

Kriteria	P1	P2	P3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Technology (P1)	0.20	0.22	0.14	0.56	0.19	0.56	3.01
Skill personel (P2)	0.60	0.65	0.71	1.97	0.66	2.00	3.06
Data Pendukung (P3)	0.20	0.13	0.14	0.47	0.16	0.48	3.01

Tabel 17. Bobot Prioritas Sub-kriteria Penerapan

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.11	0.13	0.08	0.32	0.11	0.32	3.01
Preventive (A2)	0.56	0.65	0.69	1.90	0.63	1.95	3.07
Predictive (A3)	0.33	0.22	0.23	0.78	0.26	0.79	3.03

Tabel 18. Bobot Prioritas Kriteria *Safety*

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.20	0.20	0.20	0.60	0.20	0.60	3.00
Preventive (A2)	0.60	0.60	0.60	1.80	0.60	1.80	3.00
Predictive (A3)	0.20	0.20	0.20	0.60	0.20	0.60	3.00

Tabel 19. Bobot Prioritas Kriteria *Added value*

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.09	0.11	0.05	0.25	0.08	0.25	3.01
Preventive (A2)	0.64	0.74	0.79	2.17	0.72	2.27	3.14
Predictive (A3)	0.27	0.15	0.16	0.58	0.19	0.59	3.04

Tabel 20. Bobot Prioritas Kriteria Durasi *Trouble shooting*

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.59	0.63	0.45	1.67	0.56	1.72	3.09
Preventive (A2)	0.29	0.31	0.45	1.06	0.35	1.08	3.06
Predictive (A3)	0.12	0.06	0.09	0.27	0.09	0.27	3.01

Tabel 21. Bobot Prioritas Kriteria Umur Mesin

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.08	0.10	0.05	0.22	0.07	0.22	3.01
Preventive (A2)	0.54	0.68	0.71	1.93	0.64	2.01	3.12
Predictive (A3)	0.38	0.23	0.24	0.85	0.28	0.87	3.06

Tabel 22. Bobot Prioritas Kriteria *Warehouse backup*

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.09	0.11	0.05	0.25	0.08	0.25	3.01
Preventive (A2)	0.64	0.74	0.79	2.17	0.72	2.27	3.14
Predictive (A3)	0.27	0.15	0.16	0.58	0.19	0.59	3.04

Tabel 23. Bobot Prioritas Alternatif Terhadap Sub-kriteria *Spare part*

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.68	0.78	0.60	2.06	0.69	2.17	3.17
Preventive (A2)	0.10	0.11	0.20	0.41	0.14	0.41	3.04
Predictive (A3)	0.23	0.11	0.20	0.54	0.18	0.54	3.04

Tabel 24. Bobot Prioritas Alternatif Terhadap Sub-kriteria Pekerja

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.60	0.60	0.60	1.80	0.60	1.80	3.00
Preventive (A2)	0.20	0.20	0.20	0.60	0.20	0.60	3.00
Predictive (A3)	0.20	0.20	0.20	0.60	0.20	0.60	3.00

Tabel 25. Bobot Prioritas Alternatif Terhadap Sub-kriteria Peralatan

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.65	0.71	0.60	1.97	0.66	2.00	3.06
Preventive (A2)	0.13	0.14	0.20	0.47	0.16	0.48	3.01
Predictive (A3)	0.22	0.14	0.20	0.56	0.19	0.56	3.01

Tabel 26. Bobot Prioritas Alternatif Terhadap Sub-kriteria *Technology*

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.60	0.60	0.60	1.80	0.60	1.80	3.00
Preventive (A2)	0.20	0.20	0.20	0.60	0.20	0.60	3.00
Predictive (A3)	0.20	0.20	0.20	0.60	0.20	0.60	3.00

Tabel 27. Bobot Prioritas Alternatif Terhadap Sub-kriteria Skill Pekerja

Kriteria	A1	A2	A3	Total Weight	Mean Weight	Perkalian Matriks	Priority Weight
Corrective (A1)	0.45	0.65	0.71	1.82	0.61	1.87	3.08
Preventive (A2)	0.45	0.65	0.43	1.54	0.51	1.57	3.07
Predictive (A3)	0.09	0.22	0.14	0.45	0.15	0.44	2.94

Tabel 28. Bobot Prioritas Alternatif Terhadap Sub-kriteria Data Tersedia

Lampiran 3. Perhitungan *Consistency ratio* AHP

Kriteria	Mean Weight	Perkalian Matriks	PM/ MW	Lamda Max	CI	IR	CR
Biaya (K1)	0.19	1.48	7.92				
Safety (K2)	0.39	3.13	7.95				
Added value (K3)	0.10	0.77	7.58				
Usia Mesin (K4)	0.04	0.27	7.26				
Durasi *Trouble shooting* (K5)	0.07	0.53	7.06				
Warehouse backup (K6)	0.05	0.34	7.33				
Penerapan (K7)	0.16	1.28	7.88	7.57	0.09	1.32	0.07

Tabel 29. Perhitungan *Consistency ratio* Bobot Kriteria

Kriteria	Mean Weight	Perkalian Matriks	PM/M W	Lamda Max	CI	IR	CR
Spare part	0.19	0.56	3.01				
Pekerja	0.66	2.00	3.06		0.0	0.5	0.02
Peralatan	0.16	0.48	3.01	3.03	1	8	5

Tabel 30. Perhitungan *Consistency ratio* Bobot Sub-kriteria Biaya

Kriteria	Mean Weight	Perkalian Matriks	PM/M W	Lamda Max	CI	IR	CR
Technology	0.19	0.56	3.01				
Skill personel	0.66	2.00	3.06				
Data					0.0	0.5	0.02
Pendukung	0.16	0.48	3.01	3.03	1	8	5

Tabel 31. Perhitungan *Consistency ratio* Bobot Sub-kriteria Penerepan

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.11	0.32	3.01				
Preventive	0.63	1.95	3.07		0.0	0.5	0.03
Predictive	0.26	0.79	3.03	3.04	2	8	3

Tabel 32. Perhitungan *Consistency ratio* Bobot Alternatif terhadap Kriteria *Safety*

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.20	0.60	3.00				
Preventive	0.60	1.80	3.00				
Predictive	0.20	0.60	3.00	3.00	0.00	0.58	0.000

Tabel 33. Perhitungan *Consistency ratio* Bobot Alternatif terhadap Kriteria *Added value*

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.08	0.25	3.01				
Preventive	0.72	2.27	3.14				
Predictive	0.19	0.59	3.04	3.07	0.03	0.58	0.057

Tabel 34. Perhitungan CR Alternatif Terhadap Kriteria Durasi *Trouble shooting*

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.56	1.72	3.09				
Preventive	0.35	1.08	3.06				
Predictive	0.09	0.27	3.01	3.05	0.03	0.58	0.046

Tabel 35. Perhitungan CR Alternatif Terhadap Kriteria Usia Mesin

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.07	0.22	3.01				
Preventive	0.64	2.01	3.12				
Predictive	0.28	0.87	3.06	3.07	0.03	0.58	0.056

Tabel 36. Perhitungan CR Alternatif Terhadap Kriteria *Warehouse backup*

Kriteria	Mean Weight	Perkalian atriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.08	0.25	3.01				
Preventive	0.72	2.27	3.14				
Predictive	0.19	0.59	3.04	3.07	0.03	0.58	0.057

Tabel 37. Perhitungan CR Alternatif Terhadap Sub-kriteria *Spare part*

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.69	2.17	3.17				
Preventive	0.14	0.41	3.04				
Predictive	0.18	0.54	3.04	3.08	0.04	0.58	0.070

Tabel 38. Perhitungan CR Alternatif Terhadap Sub-kriteria Pekerja

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.60	1.80	3.00				
Preventive	0.20	0.60	3.00				
Predictive	0.20	0.60	3.00	3.00	0.00	0.58	0.000

Tabel 39. Perhitungan CR Alternatif Terhadap Sub-kriteria Peralatan

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.66	2.00	3.06				
Preventive	0.16	0.48	3.01				
Predictive	0.19	0.56	3.01	3.03	0.01	0.58	0.03

Tabel 40. Perhitungan CR Alternatif Terhadap Sub-kriteria *Technology*

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.60	1.80	3.00				
Preventive	0.20	0.60	3.00				
Predictive	0.20	0.60	3.00	3.00	0.00	0.58	0.000

Tabel 41. Perhitungan CR Alternatif Terhadap Sub-kriteria Worker's Skill

Kriteria	Mean Weight	Perkalian Matriks	PM/MW	Lamda Max	CI	IR	CR
Corrective	0.61	1.87	3.08	3.03	0.02	0.58	0.026
Preventive	0.51	1.57	3.07				
Predictive	0.15	0.44	2.94				
Total							

Tabel 42 Perhitungan CR Alternatif Terhadap Sub-kriteria Ketersediaan Data

Lampiran 3. Perhitungan *Consistency ratio* AHP

Bobot Kriteria	**Kriteria**											***Alt. Weight Evaluation***
	Biaya			***Safety***	***Value Added***	**Usia Mesin**	**Durasi *Trouble shooting***	***Warehouse backup***	**Penerapan**			
	0.19								0.16			
	Spare Part	**Pekerja**	**Peralatan**						***Technology***	***Skill***	**Data**	
	0.19	0.66	0.16	0.39	0.10	0.04	0.07	0.05	0.19	0.66	0.16	
Alternatif												
Corrective	0.08	0.69	0.60	0.11	0.20	0.56	0.08	0.07	0.66	0.60	0.61	0.30
Preventive	0.72	0.14	0.20	0.63	0.60	0.35	0.72	0.64	0.16	0.20	0.51	0.49
Predictive	0.19	0.18	0.20	0.26	0.20	0.09	0.19	0.28	0.19	0.20	0.15	0.22

Tabel 43. Perhitungan Evaluasi Bobot Kriteria dan Alternatif