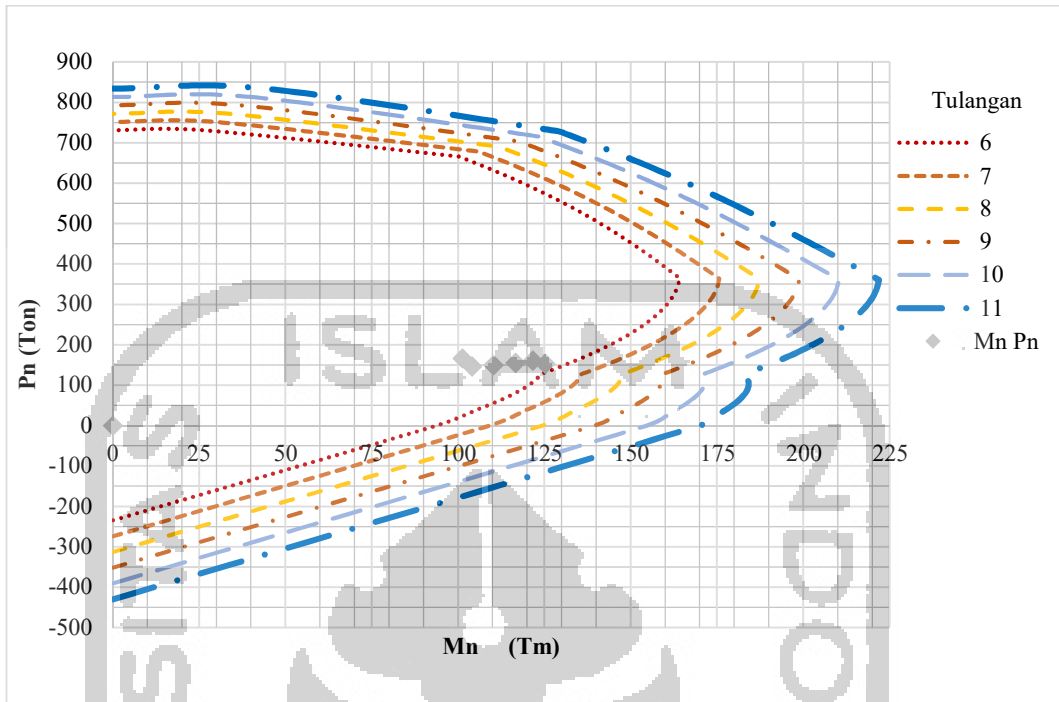


Lampiran 1. Rekapitulasi Perhitungan Mn-Pn Kolom K Tinggi Busur 11 m Arah X

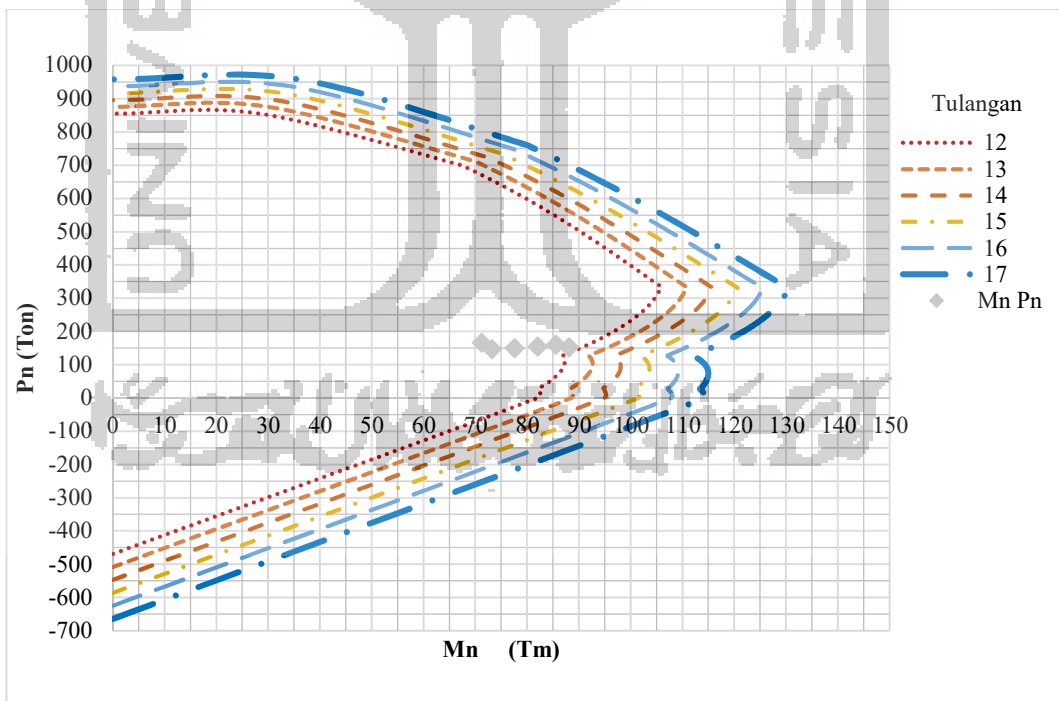
	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	6		7		8		9		10		11		
Rasio tulangan (%)	2.356		2.749		3.142		3.534		3.927		4.320		
Mn = 0	0.000	730.971	0.000	751.650	0.000	772.328	0.000	793.007	0.000	813.686	0.000	834.364	
Desak	1,5	113.342	620.214	119.782	631.241	126.221	642.268	132.661	653.296	139.101	664.323	145.540	675.350
	1,35	130.901	549.113	138.477	557.524	146.053	565.935	153.629	574.347	161.206	582.758	168.782	591.169
	1,2	146.118	474.087	155.115	479.229	164.112	484.370	173.109	489.511	182.106	494.653	191.103	499.794
Balance	364.898	164.091	364.153	175.645	363.408	187.200	362.663	198.755	361.919	210.309	361.174	221.864	
Tarik	0,9	162.707	327.961	174.262	327.216	185.817	326.471	197.371	325.727	208.926	324.982	220.481	324.237
	0,75	157.260	272.556	168.815	271.811	180.369	271.067	191.924	270.322	203.479	269.577	215.033	268.832
	0,6	147.766	217.151	159.321	216.406	170.876	215.662	182.430	214.917	193.985	214.172	205.540	213.427
Pn = 0	93.709	0.000	108.954	0.000	124.189	0.000	139.419	0.000	154.646	0.000	169.871	0.000	
PT	0.00	-234.32	0.00	-273.38	0.00	-312.43	0.00	-351.49	0.00	-390.54	0.00	-429.59	

Lampiran 2. Rekapitulasi Perhitungan Mn-Pn kolom K tinggi busur 11 m Arah Y

	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	12		13		14		15		16		17		
Rasio tulangan (%)	4.712		5.105		5.498		5.890		6.283		6.676		
Mn = 0	0.000	855.043	0.000	875.721	0.000	896.400	0.000	917.078	0.000	937.757	0.000	958.435	
Desak	1,5	74.141	647.544	76.875	658.571	79.610	669.599	82.344	680.626	85.079	691.653	87.813	702.681
	1,35	83.673	564.630	86.890	573.041	90.107	581.453	93.324	589.864	96.541	598.275	99.758	606.687
	1,2	92.903	473.868	96.724	479.009	100.544	484.151	104.365	489.292	108.185	494.433	112.005	499.574
Balance	334.540	105.868	333.795	110.774	333.050	115.681	332.305	120.587	331.561	125.493	330.816	130.400	
Tarik	0,9	104.668	300.192	109.574	299.447	114.480	298.702	119.387	297.958	124.293	297.213	129.200	296.468
	0,75	101.410	248.670	106.316	247.926	111.222	247.181	116.129	246.436	121.035	245.691	125.942	244.947
	0,6	96.402	197.149	101.309	196.404	106.215	195.659	111.121	194.915	116.028	194.170	120.934	193.425
Pn = 0	81.973	0.000	88.433	0.000	94.887	0.000	101.337	0.000	107.784	0.000	114.228	0.000	
PT	0.00	-468.65	0.00	-507.70	0.00	-546.75	0.00	-585.81	0.00	-624.86	0.00	-663.92	



Lampiran 3. Diagram Mn-Pn Kolom K Tinggi Busur 11 Arah X



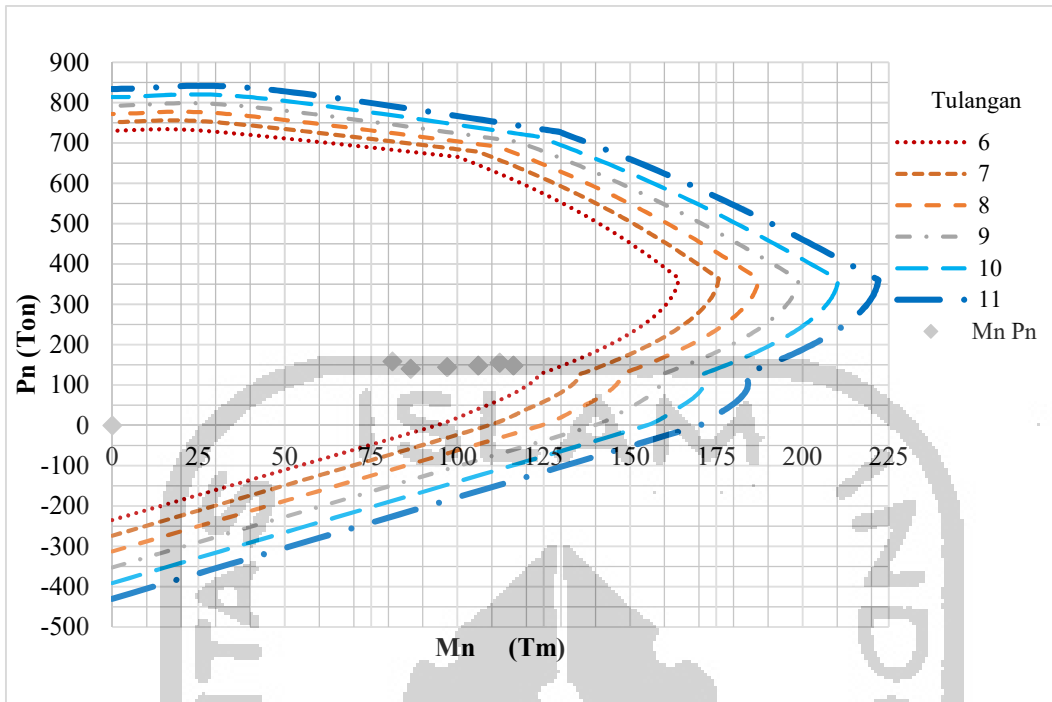
Lampiran 4. Diagram Mn-Pn Kolom K Tinggi Busur 11 Arah Y

Lampiran 5. Rekapitulasi Perhitungan Mn-Pn Kolom K Tinggi Busur 12 m Arah X

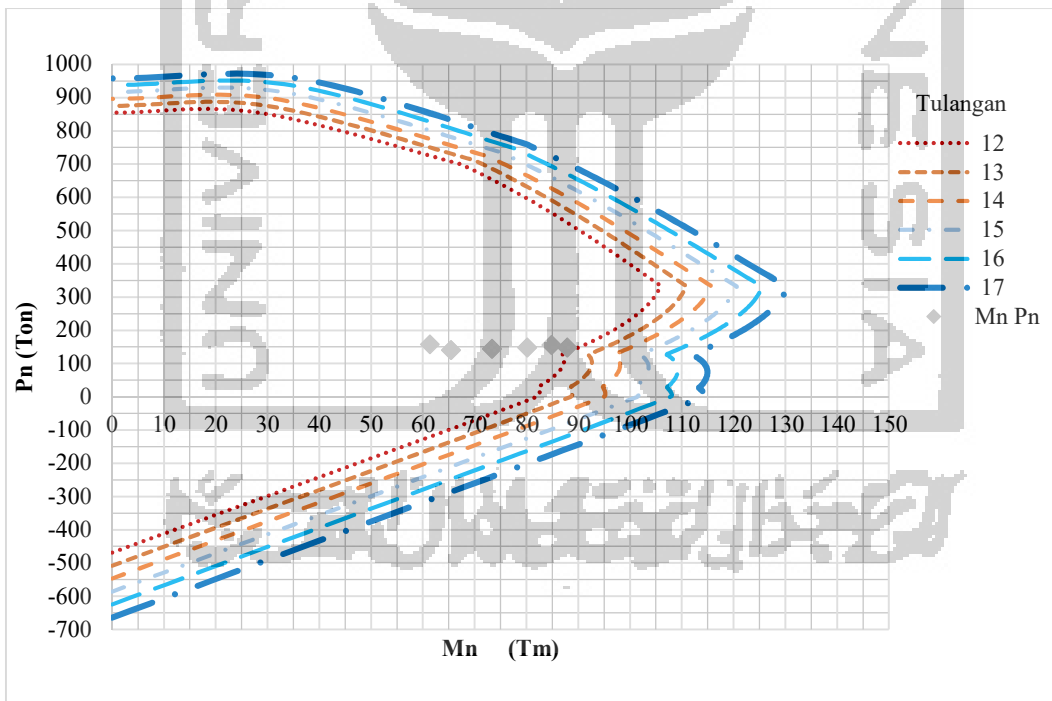
	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	6		7		8		9		10		11		
Rasio tulangan (%)	2.356		2.749		3.142		3.534		3.927		4.320		
Mn = 0	0.000	730.971	0.000	751.650	0.000	772.328	0.000	793.007	0.000	813.686	0.000	834.364	
Desak	1,5	113.342	620.214	119.782	631.241	126.221	642.268	132.661	653.296	139.101	664.323	145.540	675.350
	1,35	130.901	549.113	138.477	557.524	146.053	565.935	153.629	574.347	161.206	582.758	168.782	591.169
	1,2	146.118	474.087	155.115	479.229	164.112	484.370	173.109	489.511	182.106	494.653	191.103	499.794
Balance	364.898	164.091	364.153	175.645	363.408	187.200	362.663	198.755	361.919	210.309	361.174	221.864	
Tarik	0,9	162.707	327.961	174.262	327.216	185.817	326.471	197.371	325.727	208.926	324.982	220.481	324.237
	0,75	157.260	272.556	168.815	271.811	180.369	271.067	191.924	270.322	203.479	269.577	215.033	268.832
	0,6	147.766	217.151	159.321	216.406	170.876	215.662	182.430	214.917	193.985	214.172	205.540	213.427
Pn = 0	93.709	0.000	108.954	0.000	124.189	0.000	139.419	0.000	154.646	0.000	169.871	0.000	
PT	0.00	-234.32	0.00	-273.38	0.00	-312.43	0.00	-351.49	0.00	-390.54	0.00	-429.59	

Lampiran 6. Rekapitulasi Perhitungn Mn-Pn kolom K tinggi busur 12 m Arah Y

	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	12		13		14		15		16		17		
Rasio tulangan (%)	4.712		5.105		5.498		5.890		6.283		6.676		
Mn = 0	0.000	855.043	0.000	875.721	0.000	896.400	0.000	917.078	0.000	937.757	0.000	958.435	
Desak	1,5	74.141	647.544	76.875	658.571	79.610	669.599	82.344	680.626	85.079	691.653	87.813	702.681
	1,35	83.673	564.630	86.890	573.041	90.107	581.453	93.324	589.864	96.541	598.275	99.758	606.687
	1,2	92.903	473.868	96.724	479.009	100.544	484.151	104.365	489.292	108.185	494.433	112.005	499.574
Balance	334.540	105.868	333.795	110.774	333.050	115.681	332.305	120.587	331.561	125.493	330.816	130.400	
Tarik	0,9	104.668	300.192	109.574	299.447	114.480	298.702	119.387	297.958	124.293	297.213	129.200	296.468
	0,75	101.410	248.670	106.316	247.926	111.222	247.181	116.129	246.436	121.035	245.691	125.942	244.947
	0,6	96.402	197.149	101.309	196.404	106.215	195.659	111.121	194.915	116.028	194.170	120.934	193.425
Pn = 0	81.973	0.000	88.433	0.000	94.887	0.000	101.337	0.000	107.784	0.000	114.228	0.000	
PT	0.00	-468.65	0.00	-507.70	0.00	-546.75	0.00	-585.81	0.00	-624.86	0.00	-663.92	



Lampiran 7. Diagram Mn-Pn Kolom K Tinggi Busur 12 M Arah X



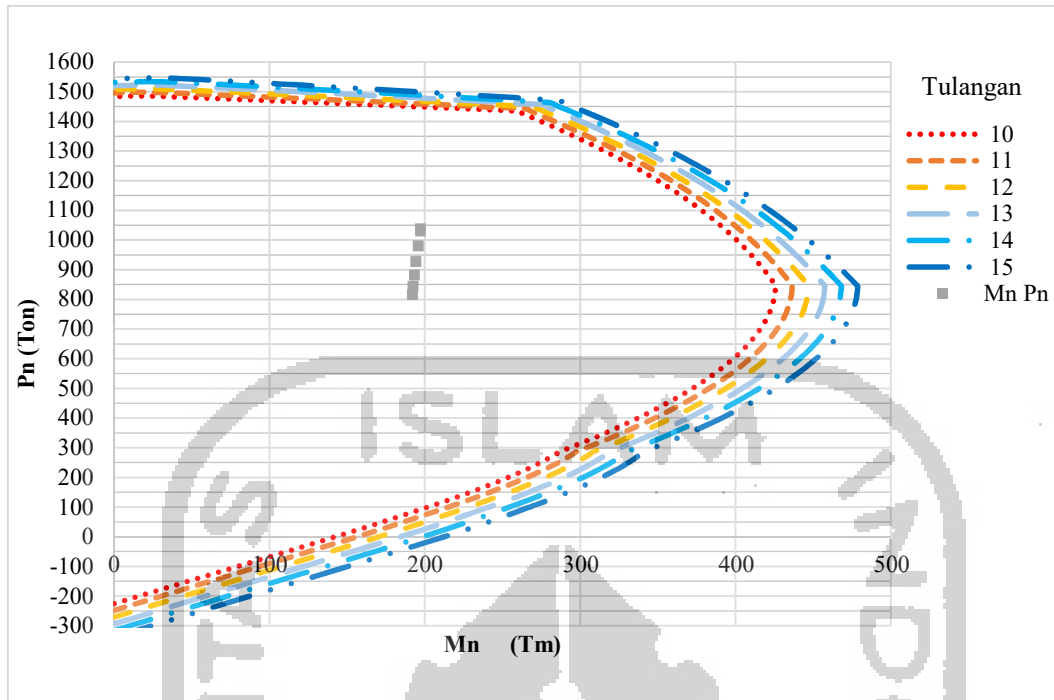
Lampiran 8. Diagram Mn-Pn Kolom K Tinggi Busur 12 M Arah Y

Lampiran 9. Rekapitulasi Perhitungan Mn-Pn kolom KP tinggi busur 11 m Arah X

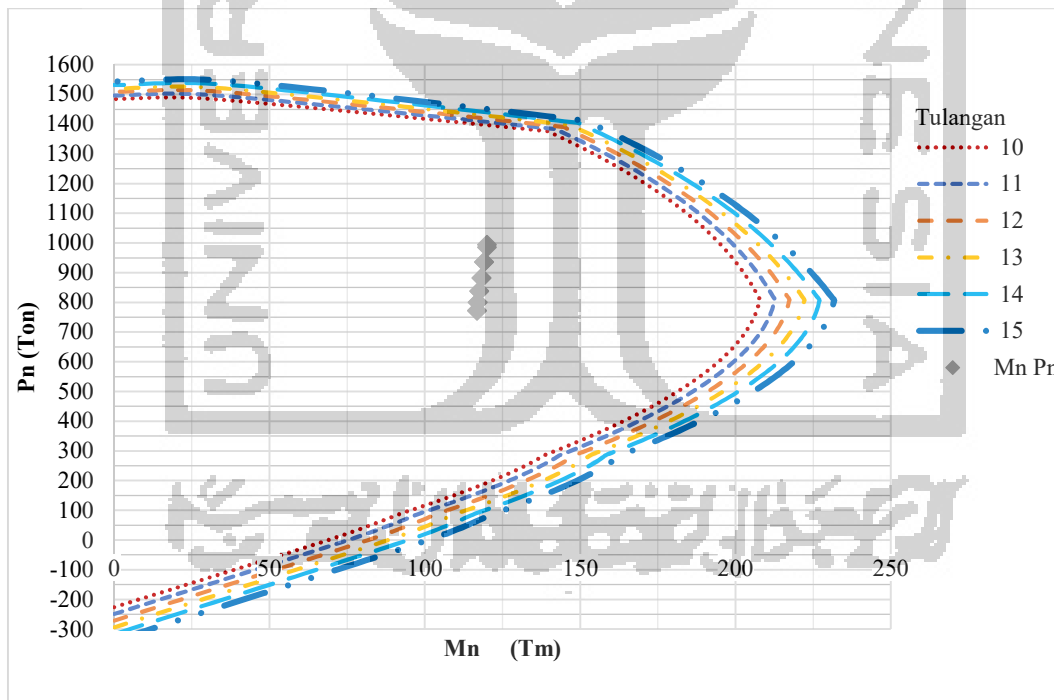
	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	10		11		12		13		14		15		
Rasio tulangan (%)	1.008		1.109		1.210		1.311		1.411		1.512		
Mn = 0	0.000	1484.964	0.000	1496.908	0.000	1508.852	0.000	1520.796	0.000	1532.740	0.000	1544.684	
Desak	1,5	299.551	1342.099	305.437	1348.468	311.322	1354.838	317.207	1361.207	323.093	1367.576	328.978	1373.946
	1,35	350.499	1199.148	357.424	1204.007	364.348	1208.865	371.272	1213.723	378.196	1218.582	385.120	1223.440
	1,2	389.682	1052.420	397.905	1055.390	406.128	1058.359	414.350	1061.329	422.573	1064.298	430.796	1067.268
Balance	847.968	425.645	847.538	436.205	847.108	446.765	846.677	457.325	846.247	467.885	845.817	478.445	
Tarik	0,9	422.365	762.741	432.925	762.311	443.485	761.881	454.045	761.450	464.605	761.020	475.165	760.590
	0,75	405.476	634.901	416.036	634.470	426.596	634.040	437.156	633.610	447.716	633.180	458.276	632.750
	0,6	374.225	507.060	384.785	506.630	395.345	506.200	405.905	505.770	416.465	505.339	427.026	504.909
Pn = 0	142.422	0.000	156.388	0.000	170.347	0.000	184.301	0.000	198.251	0.000	212.198	0.000	
PT	0.000	-225.575	0.000	-248.133	0.000	-270.691	0.000	-293.248	0.000	-315.806	0.000	-338.363	

Lampiran 10. Rekapitulasi Perhitungan Mn-Pn kolom KP tinggi busur 11 m Arah Y

	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	10		11		12		13		14		15		
Rasio tulangan (%)	1.008		1.109		1.210		150.000		0.000		0.000		
Mn = 0	0.000	1484.964	0.000	1496.908	0.000	1508.852	0.000	1520.796	0.000	1532.740	0.000	1544.684	
Desak	1,5	156.800	1286.516	159.475	1292.885	162.151	1299.255	164.826	1305.624	167.501	1311.994	170.176	1318.363
	1,35	178.083	1149.124	181.231	1153.982	184.378	1158.840	187.525	1163.699	190.673	1168.557	193.820	1173.416
	1,2	193.976	1007.954	197.714	1010.923	201.452	1013.893	205.189	1016.862	208.927	1019.832	212.664	1022.802
Balance	810.913	207.702	810.483	212.502	810.052	217.302	809.622	222.102	809.192	226.902	808.762	231.702	
Tarik	0,9	204.872	729.391	209.672	728.961	214.472	728.531	219.272	728.101	224.072	727.671	228.872	727.240
	0,75	195.152	607.109	199.952	606.679	204.752	606.249	209.552	605.819	214.352	605.388	219.152	604.958
	0,6	178.862	484.827	183.662	484.397	188.462	483.967	193.262	483.536	198.062	483.106	202.862	482.676
Pn = 0	68.702	0.000	75.133	0.000	81.550	0.000	87.956	0.000	94.352	0.000	100.739	0.000	
PT	0.000	-225.575	0.000	-248.133	0.000	-270.691	0.000	-293.248	0.000	-315.806	0.000	-338.363	



Lampiran 11. Diagram Mn-Pn Kolom KP Tinggi Busur 11 Arah X



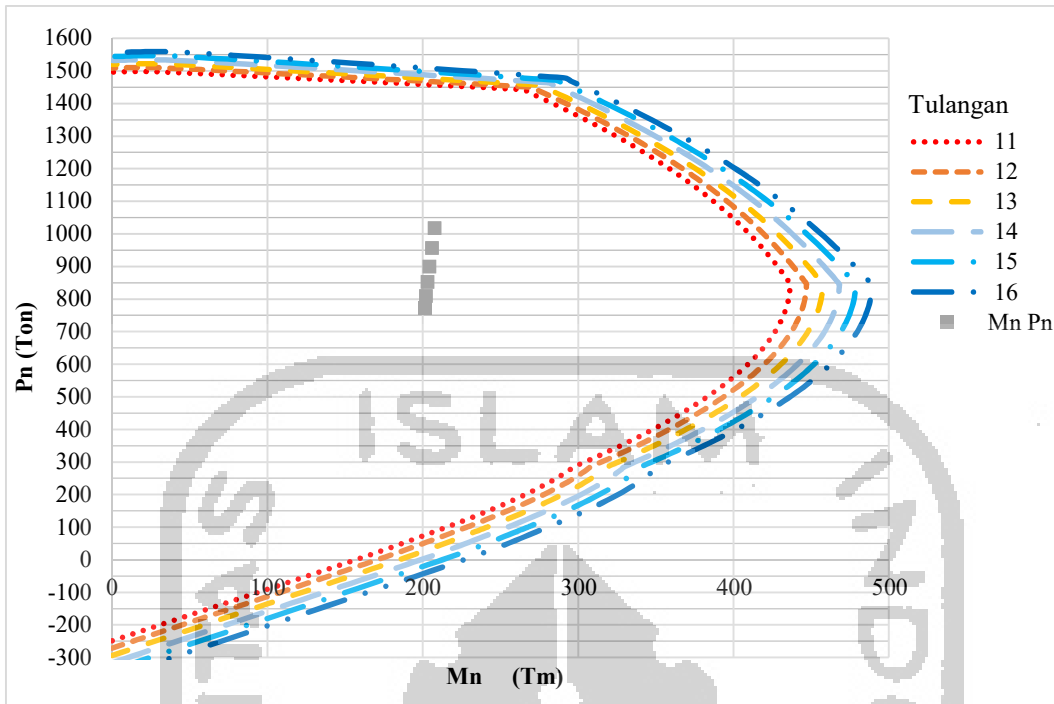
Lampiran 12. Diagram Mn-Pn Kolom KP Tinggi Busur 11 Arah Y

Lampiran 13. Rekapitulasi Perhitungan Mn-Pn kolom KP tinggi busur 12 m Arah X

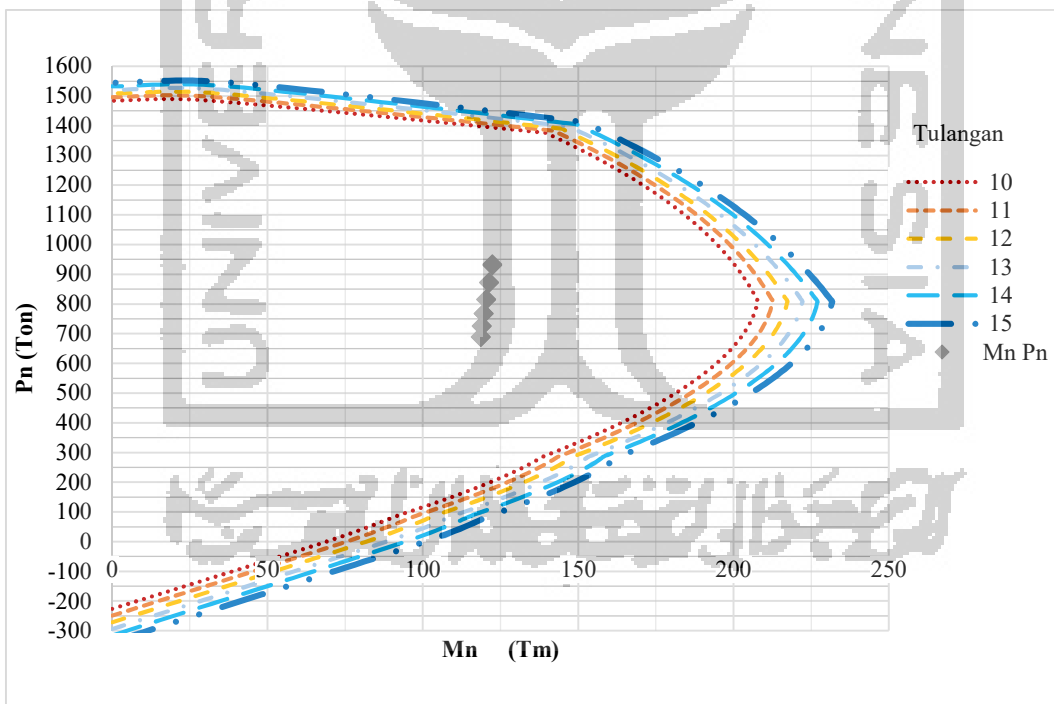
	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	10		11		12		13		14		15		
Rasio tulangan (%)	1.008		1.109		1.210		1.311		1.411		1.512		
Mn = 0	0.000	1484.964	0.000	1496.908	0.000	1508.852	0.000	1520.796	0.000	1532.740	0.000	1544.684	
Desak	1,5	299.551	1342.099	305.437	1348.468	311.322	1354.838	317.207	1361.207	323.093	1367.576	328.978	1373.946
	1,35	350.499	1199.148	357.424	1204.007	364.348	1208.865	371.272	1213.723	378.196	1218.582	385.120	1223.440
	1,2	389.682	1052.420	397.905	1055.390	406.128	1058.359	414.350	1061.329	422.573	1064.298	430.796	1067.268
Balance	847.968	425.645	847.538	436.205	847.108	446.765	846.677	457.325	846.247	467.885	845.817	478.445	
Tarik	0,9	422.365	762.741	432.925	762.311	443.485	761.881	454.045	761.450	464.605	761.020	475.165	760.590
	0,75	405.476	634.901	416.036	634.470	426.596	634.040	437.156	633.610	447.716	633.180	458.276	632.750
	0,6	374.225	507.060	384.785	506.630	395.345	506.200	405.905	505.770	416.465	505.339	427.026	504.909
Pn = 0	142.422	0.000	156.388	0.000	170.347	0.000	184.301	0.000	198.251	0.000	212.198	0.000	
PT	0.000	-225.575	0.000	-248.133	0.000	-270.691	0.000	-293.248	0.000	-315.806	0.000	-338.363	

Lampiran 14. Rekapitulasi Perhitungan Mn-Pn kolom KP tinggi busur 12 m Arah Y

	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	Mn (T.m)	Pn (Ton)	
n tulangan	10		11		12		13		14		15		
Rasio tulangan (%)	1.008		1.109		1.210		150.000		0.000		0.000		
Mn = 0	0.000	1484.964	0.000	1496.908	0.000	1508.852	0.000	1520.796	0.000	1532.740	0.000	1544.684	
Desak	1,5	156.800	1286.516	159.475	1292.885	162.151	1299.255	164.826	1305.624	167.501	1311.994	170.176	1318.363
	1,35	178.083	1149.124	181.231	1153.982	184.378	1158.840	187.525	1163.699	190.673	1168.557	193.820	1173.416
	1,2	193.976	1007.954	197.714	1010.923	201.452	1013.893	205.189	1016.862	208.927	1019.832	212.664	1022.802
Balance	810.913	207.702	810.483	212.502	810.052	217.302	809.622	222.102	809.192	226.902	808.762	231.702	
Tarik	0,9	204.872	729.391	209.672	728.961	214.472	728.531	219.272	728.101	224.072	727.671	228.872	727.240
	0,75	195.152	607.109	199.952	606.679	204.752	606.249	209.552	605.819	214.352	605.388	219.152	604.958
	0,6	178.862	484.827	183.662	484.397	188.462	483.967	193.262	483.536	198.062	483.106	202.862	482.676
Pn = 0	68.702	0.000	75.133	0.000	81.550	0.000	87.956	0.000	94.352	0.000	100.739	0.000	
PT	0.000	-225.575	0.000	-248.133	0.000	-270.691	0.000	-293.248	0.000	-315.806	0.000	-338.363	



Lampiran 15. Diagram Mn-Pn Kolom KP Tinggi Busur 12 M Arah X



Lampiran 16. Diagram Mn-Pn Kolom KP Tinggi Busur 12 M Arah Y