



**Bakrie Pipe
Industries**

PRODUCT AND SERVICES CATALOGUE



API SPEC 5L

Steel pipe which is used for conveying gas, and oil in the natural gas and oil industries

Pipa baja untuk mengalirkan minyak dan gas pada industri minyak dan gas alam

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Steel pipe which is used for conveying gas,
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Pipa baja untuk mengalirkan gas, dan minyak
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ISO 9001:2008
API SPEC 5L
CERTIFIED

Nominal Size	Outside Diameter	Thickness	Weight	Pressure Test (Minimum Standard)									
				Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
				B or L245	X42 or L290	X46 or L320	X52 or L360	X56 or L390	X60 or L415	X65 or L450	X70 or L485		
inch	inch	mm	inch	mm	lb/ft	kg/m	psi	psi	psi	psi	psi	psi	psi
2 3/8	2.375	60,3	0.083	2,1	2.03	3,01	1 480	1 760					
			0.109	2,8	2.64	3,97	1 980	2 350					
			0.125	3,2	3.01	4,51	2 260	2 680					
			0.141	3,6	3.37	5,03	2 470	2 970					
			0.154	3,9	3.66	5,42	2 470	2 970					
2 7/8	2.875	73,0	0.083	2,1	2.48	3,67	1 230	1 450					
			0.109	2,8	3.22	4,85	1 630	1 940					
			0.125	3,2	3.67	5,51	1 870	2 220					
			0.141	3,6	4.12	6,16	2 100	2 490					
			0.156	4,0	4.53	6,81	2 330	2 770					
			0.172	4,4	4.97	7,44	2 470	2 970					
			0.188	4,8	5.40	8,07	2 470	2 970					
3 1/2	3.500	88,9	0.109	2,8	3.95	5,95	1 340	1 590					
			0.125	3,2	4.51	6,76	1 530	1 820					
			0.141	3,6	5.06	7,57	1 730	2 050					
			0.156	4,0	5.58	8,37	1 920	2 270					
			0.172	4,4	6.12	9,17	2 110	2 500					
			0.188	4,8	6.66	9,95	2 300	2 730					
			0.216	5,5	7.58	11,31	2 470	2 970					
4 1/2	4.500	114,3	0.125	3,2	5.85	8,77	1 190	1 410	1 560	1 750			
			0.141	3,6	6.57	9,83	1 340	1 590	1 750	1 970			
			0.156	4,0	7.24	10,88	1 490	1 770	1 950	2 190			
			0.172	4,4	7.96	11,92	1 640	1 950	2 140	2 410			
			0.188	4,8	8.67	12,96	1 790	2 120	2 340	2 630			
			0.203	5,2	9.32	13,99	1 940	2 300	2 530	2 850			
			0.219	5,6	10.02	15,01	2 090	2 480	2 730	2 970			
			0.237	6,0	10.80	16,02	2 240	2 650	2 920	2 970			
			0.250	6,4	11.36	17,03	2 390	2 830	2 970	2 970			
5 9/16	5.563	141,3	0.188	4,8	10.80	16,16	1 450	1 720					
			0.219	5,6	12.51	18,74	1 690	2 000					
			0.258	6,6	14.63	21,92	1 990	2 360					
6 5/8	6.625	168,3	0.172	4,4	11.87	17,78	1 110	1 650	1 820	2 050			
			0.188	4,8	12.94	19,35	1 220	1 800	1 990	2 230			
			0.203	5,2	13.94	20,91	1 320	1 950	2 150	2 420			
			0.219	5,6	15.00	22,47	1 420	2 100	2 320	2 610			
			0.250	6,4	17.04	25,55	1 620	2 400	2 650	2 980			
			0.280	7,1	18.99	28,22	1 800	2 660	2 940	2 970			
			0.312	7,9	21.06	31,25	2 000	2 960	2 970	2 970			
			0.344	8,7	23.10	34,24	2 200	2 970	2 970	2 970			
			0.375	9,5	25.05	37,2	2 410	2 970	2 970	2 970			
8 5/8	8.625	219,1	0.188	4,8	16.96	25,37	930	1 380	1 530	1 720	1 860		
			0.203	5,2	18.28	27,43	1 010	1 500	1 650	1 860	2 020		
			0.219	5,6	19.68	29,48	1 090	1 610	1 780	2 000	2 170		
			0.250	6,4	22.38	33,57	1 240	1 850	2 030	2 290	2 480		
			0.277	7,0	24.72	36,61	1 360	2 020	2 220	2 500	2 710		
			0.312	7,9	27.73	41,14	1 540	2 280	2 510	2 820	2 970		
			0.322	8,2	28.58	42,65	1 600	2 360	2 610	2 930	2 970		
			0.344	8,7	30.45	45,14	1 690	2 510	2 760	2 970	2 970		
			0.375	9,5	33.07	49,10	1 850	2 740	2 970	2 970	2 970		
			0.438	11,1	38.33	56,94	2 160	2 970	2 970	2 970	2 970		
			0.500	12,7	43.43	64,64	2 470	2 970	2 970	2 970	2 970		
10 3/4	10.750	273,1	0.188	4,8	21.23	31,76	750	1 260	1 390	1 560	1 690	1 800	1 950
			0.203	5,2	22.89	34,35	810	1 360	1 500	1 690	1 830	1 950	2 110
			0.219	5,6	24.65	36,94	870	1 470	1 620	1 820	1 970	2 100	2 280
			0.250	6,4	28.06	42,09	1 000	1 680	1 850	2 080	2 260	2 400	2 600
			0.279	7,1	31.23	46,57	1 110	1 860	2 050	2 310	2 500	2 660	2 890
			0.307	7,8	34.27	51,03	1 220	2 040	2 250	2 540	2 750	2 920	2 970
			0.344	8,7	38.27	56,72	1 360	2 280	2 510	2 830	2 970	2 970	2 970
			0.365	9,3	40.52	60,50	1 450	2 440	2 690	2 970	2 970	2 970	2 970
			0.438	11,1	48.28	71,72	1 730	2 910	2 970	2 970	2 970	2 970	2 970
			0.500	12,7	54.79	81,55	1 980	2 970	2 970	2 970	2 970	2 970	2 970

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Nominal Size	Outside Diameter		Thickness		Weight		Pressure Test (Minimum Standard)							
							Grade B or L245	Grade X42 or L290	Grade X46 or L320	Grade X52 or L360	Grade X56 or L390	Grade X60 or L415	Grade X65 or L450	Grade X70 or L485
inch	inch	mm	inch	mm	lb/ft	kg/m	psi	psi	psi	psi	psi	psi	psi	psi
12 3/4	12.750	323,9	0.188	4,8	25.25	37,61	630	1 060	1 160	1 310	1 420	1 510	1 640	1 760
			0.203	5,2	27.23	40,87	680	1 150	1 270	1 430	1 550	1 640	1 780	1 920
			0.219	5,6	29.34	43,96	740	1 240	1 360	1 530	1 660	1 770	1 920	2 070
			0.250	6,4	33.41	50,11	840	1 410	1 560	1 750	1 900	2 020	2 190	2 360
			0.281	7,1	37.46	55,47	930	1 570	1 730	1 950	2 110	2 240	2 430	2 620
			0.312	7,9	41.48	61,56	1 040	1 750	1 920	2 160	2 350	2 500	2 710	2 920
			0.330	8,4	43.81	65,35	1 110	1 860	2 050	2 300	2 500	2 650	2 880	2 970
			0.344	8,7	45.62	67,62	1 140	1 920	2 120	2 380	2 580	2 750	2 970	2 970
			0.375	9,5	49.61	73,65	1 250	2 100	2 310	2 600	2 820	2 970	2 970	2 970
			0.406	10,3	53.57	79,65	1 360	2 280	2 510	2 820	2 970	2 970	2 970	2 970
			0.438	11,1	57.65	85,62	1 460	2 450	2 700	2 970	2 970	2 970	2 970	2 970
			0.500	12,7	65.48	97,46	1 670	2 810	2 970	2 970	2 970	2 970	2 970	2 970
			0.562	14,3	73.22	109,18	1 880	2 970	2 970	2 970	2 970	2 970	2 970	2 970
			0.625	15,9	81.01	120,59	2 090	2 970	2 970	2 970	2 970	2 970	2 970	2 970
14	14.000	355,6	0.219	5,6	32.26	48,33	670	1 130	1 240	1 400	1 520	1 610	1 750	1 880
			0.250	6,4	36.75	55,11	770	1 290	1 420	1 600	1 730	1 840	2 000	2 150
			0.281	7,1	41.21	61,02	850	1 430	1 580	1 770	1 920	2 040	2 220	2 390
			0.312	7,9	45.65	67,74	950	1 590	1 750	1 970	2 140	2 270	2 470	2 660
			0.344	8,7	50.22	74,22	1 040	1 750	1 930	2 170	2 350	2 500	2 720	2 920
			0.375	9,5	54.62	81,08	1 140	1 910	2 110	2 370	2 570	2 730	2 970	2 970
			0.406	10,3	59.00	87,71	1 230	2 070	2 290	2 570	2 790	2 960	2 970	2 970
			0.438	11,1	63.50	94,30	1 330	2 230	2 460	2 770	2 970	2 970	2 970	2 970
			0.469	11,9	67.84	100,86	1 430	2 400	2 640	2 970	2 970	2 970	2 970	2 970
			0.500	12,7	72.16	107,39	1 520	2 560	2 820	2 970	2 970	2 970	2 970	2 970
			0.562	14,3	80.73	120,36	1 710	2 880	2 970	2 970	2 970	2 970	2 970	2 970
			0.594	15,1	85.13	126,72	1 810	2 970	2 970	2 970	2 970	2 970	2 970	2 970
			0.625	15,9	89.36	133,04	1 900	2 970	2 970	2 970	2 970	2 970	2 970	2 970
16	16.000	406,4	0.219	5,6	36.95	54,96	580	980	1 080	1 220	1 320	1 400	1 520	1 640
			0.250	6,4	42.09	63,13	670	1 130	1 240	1 400	1 520	1 610	1 750	1 880
			0.281	7,1	47.22	69,91	740	1 250	1 380	1 550	1 680	1 790	1 940	2 090
			0.312	7,9	52.32	77,63	830	1 390	1 530	1 730	1 870	1 990	2 160	2 320
			0.344	8,7	57.57	85,32	910	1 530	1 690	1 900	2 060	2 190	2 380	2 560
			0.375	9,5	62.64	92,98	1 000	1 670	1 840	2 070	2 250	2 390	2 600	2 790
			0.406	10,3	67.68	100,61	1 080	1 810	2 000	2 250	2 440	2 590	2 810	2 970
			0.438	11,1	72.86	108,20	1 160	1 960	2 150	2 420	2 630	2 800	2 970	2 970
			0.469	11,9	77.87	115,77	1 250	2 100	2 310	2 600	2 820	2 970	2 970	2 970
			0.500	12,7	82.85	123,30	1 330	2 240	2 470	2 770	2 970	2 970	2 970	2 970
			0.562	14,3	92.75	138,27	1 500	2 520	2 780	2 970	2 970	2 970	2 970	2 970
			0.625	15,9	102.72	153,11	1 670	2 800	2 970	2 970	2 970	2 970	2 970	2 970
18	18.000	457,0	0.250	6,4	47.44	71,12	600	1 000	1 110	1 240	1 350	1 430	1 560	1 670
			0.281	7,1	53.23	78,77	660	1 110	1 230	1 380	1 500	1 590	1 730	1 860
			0.312	7,9	58.99	87,49	740	1 240	1 360	1 530	1 650	1 770	1 920	2 070
			0.344	8,7	64.93	96,18	810	1 360	1 500	1 690	1 830	1 950	2 110	2 280
			0.375	9,5	70.65	104,84	890	1 490	1 640	1 850	2 000	2 130	2 310	2 480
			0.406	10,3	76.36	113,46	960	1 610	1 780	2 000	2 170	2 310	2 500	2 670
			0.438	11,1	82.23	122,05	1 040	1 740	1 920	2 160	2 340	2 490	2 700	2 900
			0.469	11,9	87.89	130,62	1 110	1 860	2 050	2 310	2 510	2 670	2 890	2 970
			0.500	12,7	93.54	139,15	1 180	1 990	2 190	2 470	2 670	2 840	2 970	2 970
			0.562	14,3	104.76	156,11	1 330	2 240	2 470	2 780	2 970	2 970	2 970	2 970
			0.625	15,9	116.09	172,95	1 480	2 490	2 740	2 970	2 970	2 970	2 970	2 970
20	20.000	508,0	0.250	6,4	52.78	79,16	540	960	1 050	1 180	1 280	1 370	1 480	1 590
			0.281	7,1	59.23	87,7	600	1 060	1 170	1 310	1 420	1 510	1 640	1 770
			0.312	7,9	65.66	97,43	660	1 180	1 300	1 460	1 580	1 690	1 830	1 970
			0.344	8,7	72.28	107,12	730	1 300	1 430	1 610	1 750	1 860	2 010	2 170
			0.375	9,5	78.67	116,78	800	1 420	1 560	1 760	1 910	2 030	2 200	2 370
			0.406	10,3	85.04	126,41	860	1 540	1 690	1 910	2 070	2 200	2 380	2 570
			0.438	11,1	91.59	136,01	930	1 660	1 830	2 050	2 230	2 370	2 570	2 770
			0.469	11,9	97.92	145,58	1 000	1 780	1 960	2 200	2 390	2 540	2 750	2 960
			0.500	12,7	104.23	155,12	1 070	1 900	2 090	2 350	2 550	2 710	2 940	2 970
			0.562	14,3	116.78	174,10	1 200	2 130	2 350	2 650	2 870	2 970	2 970	2 970
			0.594	15,1	123.23	183,43	1 270	2 250	2 500	2 790	2 970	2 970	2 970	2 970
			0.625	15,9	129.45	192,95	1 330	2 370	2 610	2 940	2 970	2 970	2 970	2 970
24	24.000	610,0	0.250	6,4	63.47	95,26	450	800	880	990	1 070	1 140	1 230	1 330
			0.281	7,1	71.25	105,56	500	880	970	1 090	1 190	1 260	1 370	1 470
			0.312	7,9	79.01	117,30	550	980	1 080	1 220	1 320	1 400	1 520	1 640
			0.344	8,7	86.99	129,00	610	1 080	1 190	1 340	1 450	1 550	1 680	1 810
			0.375	9,5	94.71	140,68	660	1 180	1 300	1 460	1 590	1 690	1 830	1 970
			0.406	10,3	102.40	152,32	720	1 280	1 410	1 590	1 720	1 830	1 990	2 140
			0.438	11,1	110.32	163,93	780	1 380	1 520	1 710	1 850	1 970	2 140	2 300
			0.469	11,9	117.98	175,51	830	1 480	1 630	1 830	1 990	2 110	2 290	2 470
			0.500	12,7	125.61	187,06	890	1 580	1 740	1 960	2 120	2 260	2 450	2 640
			0.562	14,3	140.81	210,07	1 000	1 780	1 960	2 200	2 390	2 540	2 760	2 970
			0.625	15,9	156.17	232,94	1 110	1 980	2 180	2 450	2 660	2 820	2 970	2 970

Marking Example :

In USC Unit :  API Spec 5L - X Y AA-BB 14 0.375 X52M PSL 2 HFW
40.0 ft 54.62 lb/ft
PIPE NO. HEAT NO.

Bakrie Pipe Industries

Note :

X = BPI License Number

Y = API Monogram

AA = Month when the API monogram applied

BB = 2 last digits of the year when the API monogram applied

In SI Unit :  API Spec 5L - X Y AA-BB 355,6 9,5 L360M X52M PSL 2 HFW
12,20 m 81,08 kg/m
PIPE NO. HEAT NO.

Bakrie Pipe Industries



**Bakrie Pipe
Industries**

API SPEC 5CT

Steel pipe for
casing and tubing
in petroleum and
gas application

Pipa baja untuk
Casing dan Tubing
pada aplikasi minyak
dan gas bumi

API SPEC 5CT

Steel pipe for casing and tubing in petroleum and gas application

Pipa baja untuk Casing dan Tubing pada aplikasi minyak dan gas bumi

ISO 9001:2008
API SPEC 5CT
CERTIFIED

Label		Outside Diameter		Nominal Weight Plain End		Grade	Thickness		Inside Diameter	Drift Diameter	Hydrostatic Pressure	Collapse Resistance	Pipe Body Yield Strength	Internal Yield Pressure Resistance	Joint Strength		
1	2														Short Round	Long Round	Regular Butress
inch	lb/ft	inch	mm	lb/ft	kg/m		inch	mm	inch	inch	psi	psi	1000 lbs	psi	1000 lbs	1000 lbs	1000 lbs
8 5/8	28.00	8.625	219.08	27.04	40.24	H-40	0.304	7.72	8.017	7.892	2 300	1 610	318	2 470	233	-	-
	32.00			31.13	46.33	H-40	0.352	8.94	7.921	7.796	2 600	2 200	366	2 860	279	-	-
	24.00	8.625	219.08	23.60	35.14	J-55	0.264	6.71	8.097	7.972	2 700	1 370	381	2 950	244	-	-
	32.00			31.13	46.33	J-55	0.352	8.94	7.921	7.796	3 600	2 530	503	3 930	372	417	579
	36.00			35.17	52.35	J-55	0.400	10.16	7.825	7.700	4 100	3 450	568	4 460	434	486	654
	24.00	8.625	219.08	23.60	35.14	K-55	0.264	6.71	8.097	7.972	2 700	1 370	381	2 950	263	-	-
	32.00			31.13	46.33	K-55	0.352	8.94	7.921	7.796	3 600	2 530	503	3 930	402	452	690
	36.00			35.17	52.35	K-55	0.400	10.16	7.825	7.700	4 100	3 450	568	4 460	468	526	780
9 5/8	32.30	9.625	244.48	31.06	46.20	H-40	0.312	7.92	9.001	8.845	2 100	1 370	365	2 270	254	-	-
	36.00			34.89	51.93	H-40	0.352	8.94	8.921	8.765	2 300	1 720	410	2 560	294	-	-
	36.00	9.625	244.48	34.89	51.93	J-55	0.352	8.94	8.921	8.765	3 200	2 020	564	3 520	394	453	639
	40.00			38.97	57.99	J-55	0.395	10.03	8.835	8.679	3 600	2 570	630	3 950	452	520	714
	36.00	9.625	244.48	34.89	51.93	K-55	0.352	8.94	8.921	8.765	3 200	2 020	564	3 520	423	489	755
	40.00			38.97	57.99	K-55	0.395	10.03	8.835	8.679	3 600	2 570	630	3 950	486	561	843
10 3/4	32.75	10.750	273.05	31.23	46.50	H-40	0.279	7.09	10.192	10.036	1 200	840	367	1 820	205	-	-
	40.50			38.91	57.91	H-40	0.350	8.89	10.050	9.894	1 600	1 390	457	2 280	314	-	-
	40.50	10.750	273.05	38.91	57.91	J-55	0.350	8.89	10.050	9.894	2 100	1 580	629	3 130	420	-	700
	45.50			44.26	65.87	J-55	0.400	10.16	9.950	9.794	2 500	2 090	715	3 580	493	-	796
	51.00			49.55	73.75	J-55	0.450	11.43	9.850	9.694	2 800	2 700	801	4 030	565	-	891
	40.50	10.750	273.05	38.91	57.91	K-55	0.350	8.89	10.050	9.894	2 100	1 580	629	3 130	450	-	819
	45.50			44.26	65.87	K-55	0.400	10.16	9.950	9.794	2 500	2 090	715	3 580	528	-	931
	51.00			49.55	73.75	K-55	0.450	11.43	9.850	9.694	2 800	2 700	801	4 030	606	-	1043
13 3/8	48.00	13.375	339.72	46.02	68.48	H-40	0.330	8.38	12.715	12.559	1 200	740	541	1 730	322	-	-
	54.50			52.79	78.55	J-55	0.380	9.65	12.615	12.459	1 900	1 130	853	2 730	514	-	909
	61.00	13.375	339.72	59.50	88.55	J-55	0.430	10.92	12.515	12.359	2 100	1 540	962	3 090	595	-	1025
	68.00			66.17	98.46	J-55	0.480	12.19	12.415	12.259	2 400	1 950	1069	3 450	675	-	1140
	54.50	13.375	339.72	52.79	78.55	K-55	0.380	9.65	12.615	12.459	1 900	1 130	853	2 730	547	-	1038
	61.00			59.50	88.55	K-55	0.430	10.92	12.515	12.359	2 100	1 540	962	3 090	633	-	1169
	68.00			66.17	98.46	K-55	0.480	12.19	12.415	12.259	2 400	1 950	1069	3 450	718	-	1300
16	65.00	16.000	406.40	62.64	96.73	H-40	0.375	9.53	15.250	15.062	1 100	630	736	1 640	439	-	-
	75.00			72.86	108.49	J-55	0.438	11.13	15.124	14.936	1 800	1 020	1178	2 630	710	-	1200
	84.00	16.000	406.40	82.05	122.09	J-55	0.495	12.57	15.010	14.822	2 000	1 410	1326	2 980	817	-	1351
	75.00			72.86	108.49	K-55	0.438	11.13	15.124	14.936	1 800	1 020	1178	2 630	752	-	1331
	84.00	16.000	406.40	82.05	122.09	K-55	0.495	12.57	15.010	14.822	2 000	1 410	1326	2 980	865	-	1499
20	94.00	20.000	508.00	91.59	136.38	H-40	0.438	11.13	19.124	19.936	1 100	520	1077	1 530	581	-	-
	94.00			91.59	136.38	J-55	0.438	11.13	19.124	18.936	1 400	520	1480	2 110	784	907	1402
	106.50	20.000	508.00	104.23	155.13	J-55	0.500	12.70	19.000	18.812	1 600	770	1685	2 410	913	1057	1596
	133.00			131.45	195.66	J-55	0.635	16.13	18.730	18.542	2 100	1 600	2125	3 060	1191	1380	2012
	94.00	20.000	508.00	91.59	136.38	K-55	0.438	11.13	19.124	18.936	1 400	520	1480	2 110	824	955	1479
	106.50			104.23	155.13	K-55	0.500	12.70	19.000	18.812	1 600	770	1685	2 410	960	1113	1683
	133.00			131.45	195.66	K-55	0.635	16.13	18.730	18.542	2 100	1 600	2125	3 060	1252	1452	2122

Marking Example :

bpi API Spec 5CT-X Y AB PE 20 94.00 K E P 1 400 D
.....FT PIPE NO : HEAT NO : Bakrie Pipe Industries

Note:
X = BPI's License Number
Y = API Monogram
A = Last digit of the year
B = The calendar quarter

Bakrie Pipe Industries



**Bakrie Pipe
Industries**

ASTM A53

Steel pipe commonly used for mechanical and pressure applications as ordinary uses in steam, gas and air lines

Pipa baja yang umumnya digunakan untuk aplikasi mekanik dan bertekanan seperti untuk saluran uap, gas dan udara

ASTM A53

Steel pipe commonly used for mechanical and pressure applications as ordinary uses in steam, gas and air lines

Pipa baja yang umumnya digunakan untuk aplikasi mekanik dan bertekanan seperti untuk saluran uap, gas dan udara

ISO 9001:2008
CERTIFIED

Nominal Size	Outside Diameter		Thickness		Weight Class	Schedule No	Weight		Pressure Test (Min)					
									Grade A				Grade B	
inch	inch	mm	inch	mm			lb/ft	kg/m	psi	kgf/cm²	bar	psi	kgf/cm²	bar
1/2	0.840	21.3	0.109	2.77	STD	40	0.85	1.27	700	49	48	700	49	48
3/4	1.050	26.7	0.113	2.87	STD	40	1.13	1.69	700	49	48	700	49	48
1	1.315	33.4	0.133	3.38	STD	40	1.68	2.50	700	49	48	700	49	48
1 1/4	1.660	42.2	0.140	3.56	STD	40	2.27	3.39	1200	84	83	1300	91	90
1 1/2	1.900	48.3	0.145	3.68	STD	40	2.72	4.05	1200	84	83	1300	91	90
2	2.375	60.3	0.154	3.91	STD	40	3.66	5.44	2300	162	159	2500	176	172
2 1/2	2.875	73.0	0.203	5.16	STD	40	5.80	8.63	2500	176	172	2500	176	172
3	3.500	88.9	0.125	3.18	-	-	4.51	6.72	1290	91	89	1500	105	103
			0.156	3.96	-	-	5.58	8.29	1600	112	110	1870	131	129
			0.188	4.78	-	-	6.66	9.92	1930	136	133	2260	159	156
			0.216	5.49	STD	40	7.58	11.29	2220	156	153	2500	176	172
4	4.500	114.3	0.125	3.18	-	-	5.85	8.71	1000	70	69	1170	82	81
			0.156	3.96	-	-	7.24	10.78	1250	88	86	1460	103	101
			0.188	4.78	-	-	8.67	12.91	1500	105	103	1750	123	121
			0.219	5.56	-	-	10.02	14.91	1750	123	121	2040	143	141
			0.237	6.02	STD	40	10.80	16.07	1900	134	131	2210	155	152
			0.250	6.35	-	-	11.36	16.90	2000	141	138	2330	164	161
5	5.563	141.3	0.281	7.14	-	-	12.67	18.87	2250	158	155	2620	184	181
			0.156	3.96	-	-	9.02	13.41	1010	71	70	1180	83	81
			0.188	4.78	-	-	10.80	16.09	1220	86	84	1420	100	98
			0.219	5.56	-	-	12.51	18.61	1420	100	98	1650	116	114
6	6.625	168.3	0.258	6.55	STD	40	14.63	21.77	1670	117	115	1950	137	134
			0.188	4.78	-	-	12.94	19.27	1020	72	70	1190	84	82
			0.219	5.56	-	-	15.00	22.31	1190	84	82	1390	98	96
			0.250	6.35	-	-	17.04	25.36	1360	96	94	1580	111	109
			0.280	7.11	STD	40	18.99	28.26	1520	107	105	1780	125	123
			0.312	7.92	-	-	21.06	31.32	1700	120	117	1980	139	137
8	8.625	219.1	0.344	8.74	-	-	23.10	34.39	1870	131	129	2180	153	150
			0.375	9.52	-	-	25.05	37.28	2040	143	141	2380	167	164
			0.188	4.78	-	-	16.96	25.26	780	55	54	920	65	63
			0.203	5.16	-	-	18.28	27.22	850	60	59	1000	70	69
			0.219	5.56	-	-	19.68	29.28	910	64	63	1070	75	74
			0.250	6.35	-	20	22.38	33.31	1040	73	72	1220	86	84
			0.277	7.04	-	30	24.72	36.31	1160	82	80	1350	95	93
			0.312	7.92	-	-	27.73	41.24	1300	91	90	1520	107	105
			0.322	8.18	STD	40	28.58	42.55	1340	94	92	1570	110	108
			0.344	8.74	-	-	30.45	45.34	1440	101	99	1680	118	116
			0.375	9.52	-	-	33.07	49.20	1570	110	108	1830	129	126
			0.406	10.31	-	60	35.67	53.08	1700	120	117	2000	141	138
10	10.750	273.0	0.438	11.13	-	-	38.33	57.08	1830	129	126	2130	150	147
			0.500	12.70	XS	80	43.43	64.64	2090	147	144	2430	171	168
			0.188	4.78	-	-	21.23	31.62	630	44	43	730	51	50
			0.203	5.16	-	-	22.89	34.08	680	48	47	800	56	55
			0.219	5.56	-	-	24.65	36.67	730	51	50	860	60	59
			0.250	6.35	-	20	28.06	41.75	840	59	58	980	69	68
			0.279	7.09	-	-	31.23	46.49	930	65	64	1090	77	75
			0.307	7.80	-	30	34.27	51.01	1030	72	71	1200	84	83
			0.344	8.74	-	-	38.27	56.96	1150	81	79	1340	94	92
			0.365	9.27	STD	40	40.52	60.29	1220	86	84	1430	101	99
			0.438	11.13	-	-	48.28	71.87	1470	103	101	1710	120	118
			0.500	12.70	XS	60	54.79	81.52	1670	117	115	1950	137	134



Bakrie Pipe Industries

ASTM A53

Steel pipe commonly used for mechanical and pressure applications as ordinary uses in steam, water, gas and air lines

Pipa baja yang umumnya digunakan untuk aplikasi mekanik dan bertekanan seperti untuk saluran uap, gas dan udara

ISO 9001:2008
CERTIFIED

Nominal Size	Outside Diameter		Thickness		Weight Class	Schedule No	Weight		Pressure Test (Min)					
	inch	mm	inch	mm			lb/ft	kg/m	Grade A			Grade B		
	inch	mm	inch	mm					psi	kgf/cm ²	bar	psi	kgf/cm ²	bar
12	12.750	323.8	0.203	5.16	-	-	27.23	40.55	570	40	39	670	47	46
			0.219	5.56	-	-	29.34	43.63	620	44	43	720	51	50
			0.250	6.35	-	20	33.41	49.71	710	50	49	820	58	57
			0.281	7.14	-	-	37.46	55.75	790	56	54	930	65	64
			0.312	7.92	-	-	41.48	61.69	880	62	61	1030	72	71
			0.330	8.38	-	30	43.81	65.18	930	65	64	1090	77	75
			0.344	8.74	-	-	45.62	67.90	970	68	67	1130	79	78
			0.375	9.52	STD	-	49.61	73.78	1060	75	73	1240	87	85
			0.406	10.31	-	40	53.57	79.70	1150	81	79	1340	94	92
			0.438	11.13	-	-	57.65	85.82	1240	87	85	1440	101	99
			0.500	12.70	XS	-	65.48	97.43	1410	99	97	1650	116	114
			0.562	14.27	-	60	73.22	108.92	1590	112	110	1850	130	128
			0.625	15.88	-	-	81.01	120.59	1880	132	130	2190	154	151
14	14.000	355.6	0.210	5.33	-	-	30.96	46.04	540	38	37	630	44	43
			0.219	5.56	-	-	32.26	47.99	560	39	39	660	46	45
			0.250	6.35	-	10	36.75	54.69	640	45	44	750	53	52
			0.281	7.14	-	-	41.21	61.35	720	51	50	840	59	58
			0.312	7.92	-	20	45.65	67.90	800	56	55	940	66	65
			0.344	8.74	-	-	50.22	74.76	880	62	61	1030	72	71
			0.375	9.52	STD	30	54.62	81.25	960	67	66	1120	79	77
			0.406	10.31	-	-	58.82	87.79	1040	73	72	1220	86	84
			0.438	11.13	-	40	63.50	94.55	1130	79	78	1310	92	90
			0.469	11.91	-	-	67.84	100.94	1210	85	83	1410	99	97
			0.500	12.70	XS	-	72.16	107.39	1290	91	89	1500	105	103
			0.562	14.27	-	-	80.73	120.12	1450	102	100	1690	119	117
			0.594	15.09	-	60	85.13	126.71	1530	108	105	1790	126	123
			0.625	15.88	-	-	89.36	133.04	1610	113	111	1880	132	130
16	16.000	406.4	0.219	5.56	-	-	36.95	54.96	490	34	34	570	40	39
			0.250	6.35	-	10	42.09	62.64	560	39	39	660	46	45
			0.281	7.14	-	-	47.22	70.30	630	44	43	740	52	51
			0.312	7.92	-	20	52.32	77.83	700	49	48	820	58	57
			0.344	8.74	-	-	57.57	85.71	770	54	53	900	63	62
			0.375	9.52	STD	30	62.64	93.17	840	59	58	980	69	68
			0.406	10.31	-	-	67.48	100.71	910	64	63	1070	75	74
			0.438	11.13	-	-	72.86	108.49	990	70	68	1150	81	79
			0.469	11.91	-	-	77.87	115.86	1060	75	73	1230	86	85
			0.500	12.70	XS	40	82.85	123.30	1120	79	77	1310	92	90
			0.562	14.27	-	-	92.75	138.00	1270	89	88	1480	104	102
			0.625	15.88	-	-	102.72	152.94	1410	99	97	1640	115	113
18	18.000	457.2	0.250	6.35	-	10	47.44	70.60	500	35	34	580	41	40
			0.281	7.14	-	-	53.23	79.24	560	39	39	660	46	45
			0.312	7.92	-	20	58.99	87.75	620	44	43	730	51	50
			0.344	8.74	-	-	64.93	96.66	690	49	48	800	56	55
			0.375	9.52	STD	-	70.65	105.10	750	53	52	880	62	61
			0.406	10.31	-	-	76.36	113.58	810	57	56	950	67	66
			0.438	11.13	-	-	82.23	122.43	880	62	61	1020	72	70
			0.469	11.91	-	-	87.89	130.78	940	66	65	1090	77	75
			0.500	12.70	XS	30	93.54	139.20	1000	70	69	1170	82	81
			0.562	14.27	-	40	104.76	155.87	1120	79	77	1310	92	90
			0.625	15.88	-	-	116.09	172.75	1250	88	86	1460	103	101
20	20.000	508.0	0.250	6.35	-	10	52.78	78.55	450	32	31	520	37	36
			0.281	7.14	-	-	59.23	88.19	510	36	35	590	41	41
			0.312	7.92	-	-	65.66	97.67	560	39	39	660	46	45
			0.344	8.74	-	-	72.28	107.60	620	44	43	720	51	50
			0.375	9.52	STD	20	78.67	117.02	680	48	47	790	56	54
			0.406	10.31	-	-	84.04	126.53	730	51	50	850	60	59
			0.438	11.13	-	-	91.59	136.37	790	56	54	920	65	63
			0.469	11.91	-	-	97.92	145.70	850	60	59	950	67	66
			0.500	12.70	XS	30	104.23	155.12	900	63	62	1050	74	72
			0.562	14.27	-	-	116.78	173.75	1010	71	70	1180	83	81
			0.594	15.09	-	40	123.23	183.42	1170	82	81	1250	88	86
			0.625	15.88	-	-	129.45	192.73	1130	79	78	1310	92	90



Bakrie Pipe Industries

ASTM A53

Steel pipe commonly used for mechanical and pressure applications as ordinary uses in steam gas and air lines

Pipa baja yang umumnya digunakan untuk aplikasi mekanik dan bertekanan seperti untuk saluran uap, gas dan udara

ISO 9001:2008
CERTIFIED

Nominal Size	Outside Diameter		Thickness		Weight Class	Schedule No	Weight		Pressure Test (Min)					
	inch	mm	inch	mm			lb/ft	kg/m	Grade A			Grade B		
	inch	mm	inch	mm			lb/ft	kg/m	psi	kgf/cm ²	bar	psi	kgf/cm ²	bar
24	24.000	610.0	0.250	6.35	-	10	63.47	94.46	380	27	26	440	31	30
			0.281	7.14	-	-	71.25	106.08	420	30	29	490	34	34
			0.312	7.92	-	-	79.01	117.51	470	33	32	550	39	38
			0.344	8.74	-	-	86.99	129.50	520	37	36	600	42	41
			0.375	9.52	STD	20	94.71	140.88	560	39	39	660	46	46
			0.406	10.31	-	-	102.40	152.37	610	43	42	710	50	49
			0.438	11.13	-	-	110.32	164.26	660	46	46	770	54	53
			0.469	11.91	-	-	117.98	175.54	700	49	48	820	58	57
			0.500	12.70	XS	-	125.61	186.94	750	53	52	880	62	61
			0.562	14.27	-	30	140.81	209.50	840	59	58	980	69	68
			0.625	15.88	-	-	156.17	232.67	940	66	65	1090	77	75

Chemical Composition (% max.) :

ASTM A-53	Carbon	Manganese	Phosphorus	Sulfur	Copper	Nickel	Chromium	Molybdenum	Vanadium	Cu+Ni+Cr+Mo+V
Grade A	0.25	0.95	0.05	0.045	0.40	0.40	0.40	0.15	0.08	1.00
Grade B	0.30	1.20	0.05	0.045	0.40	0.40	0.40	0.15	0.08	1.00

Mechanical Properties :

	Yield Strength (min.)	Tensile Strength (min.)
Grade A	30,000 psi (205 MPa)	48,000 psi (330 MPa)
Grade B	35,000 psi (240 MPa)	60,000 psi (415 MPa)

Galvanized :

Zinc Coating Weight : 550 gr/m² (77 µm) minimum

Marking Example for OD < 4 inch:

With Schedule Number (SCH.40) and Weight Class (STD)

bpi ASTM A53-A E 2" STD SCH.40 x 6,00 m *Bakrie Pipe Industries*

Without Schedule Number (replaced by specified wall thickness in unit mm) and without Weight Class

bpi ASTM A53-A E 3" x 3,18 mm x 6,00 m *Bakrie Pipe Industries*

Marking Example for OD 4 - 24 inch:

With Schedule Number (SCH.30) and Weight Class (STD)

bpi ASTM A53-A E 14" STD SCH.30 x 6,00 m *Bakrie Pipe Industries*
PIPE NO: HEAT NO:

With Schedule Number (SCH.40) and without Weight Class

bpi ASTM A53-A E 14" SCH.40 x 6,00 m *Bakrie Pipe Industries*
PIPE NO: HEAT NO:

Without Schedule Number (replaced by specified wall thickness in unit mm) and without Weight Class

bpi ASTM A53-A E 14" x 5,33 mm x 6,00 m *Bakrie Pipe Industries*
PIPE NO: HEAT NO:

With Weight Class (XS) and without Schedule Number (replaced by specified wall thickness in unit mm)

bpi ASTM A53-A E 14" XS 12,70 mm x 6,00 m *Bakrie Pipe Industries*
PIPE NO: HEAT NO:



ASTM A252

Steel pipe
which is used for
construction and
piling

Pipa baja
untuk
konstruksi
dan pancang

D4/06

ASTM A252

Steel pipe which is used
for construction and piling

Pipa baja untuk konstruksi
dan pancang

ISO 9001:2008
CERTIFIED

SPECIFICATION *)

Nominal Size		Outside Diameter		Wall Thickness		Mass	
NPS		OD		t		M	
	inch	mm	inch	mm	lb/ft	kg/m	
4	4.500	114.3	0.156	3.96	7.24	10.78	
			0.164	4.16	7.59	11.30	
			0.172	4.37	7.96	11.85	
			0.188	4.78	8.68	12.91	
			0.203	5.16	9.33	13.89	
			0.219	5.56	10.02	14.91	
			0.237	6.02	10.80	16.07	
			0.250	6.35	11.36	16.91	
5	5.563	141.3	0.156	3.96	11.49	17.10	
			0.188	4.78	13.78	20.50	
			0.219	5.56	12.51	18.61	
			0.258	6.55	14.63	21.77	
6	6.625	168.3	0.156	3.96	10.75	16.00	
			0.157	4.00	10.89	16.20	
			0.164	4.16	11.29	16.80	
			0.172	4.37	11.89	17.70	
			0.188	4.78	12.96	19.28	
			0.203	5.16	13.95	20.76	
			0.219	5.56	14.99	22.31	
			0.250	6.35	17.04	25.36	
8	8.625	219.1	0.280	7.11	18.99	28.26	
			0.157	4.00	14.25	21.20	
			0.172	4.37	15.52	23.10	
			0.188	4.78	16.97	25.26	
			0.197	5.00	17.74	26.40	
			0.203	5.16	18.29	27.22	
			0.219	5.56	19.68	29.28	
			0.230	5.84	20.64	30.71	
			0.236	6.00	21.19	31.53	
			0.250	6.35	22.39	33.32	
			0.277	7.04	24.74	36.82	
			0.280	7.11	24.98	37.17	
10	10.750	273.1	0.312	7.92	27.72	41.25	
			0.322	8.18	28.59	42.55	
			0.344	8.74	30.47	45.34	
			0.354	9.00	31.33	46.63	
			0.188	4.78	21.23	31.60	
			0.197	5.00	22.22	33.06	
			0.203	5.16	22.90	34.08	
			0.219	5.56	24.64	36.67	
			0.230	5.84	25.86	38.49	
			0.250	6.35	28.06	41.76	
			0.279	7.09	31.25	46.51	
			0.280	7.11	31.33	46.62	
			0.307	7.80	34.29	51.03	
			0.344	8.74	38.29	56.98	
			0.354	9.00	39.37	58.59	
			0.365	9.27	40.51	60.29	
			0.438	11.13	48.30	71.88	
			0.472	12.00	51.92	77.26	
			0.500	12.70	54.79	81.53	



**Bakrie Pipe
Industries**

ASTM A252

Steel pipe which is used
for construction and piling

Pipa baja untuk konstruksi
dan pancang

ISO 9001:2008
CERTIFIED

SPECIFICATION ^{*)}

Nominal Size	Outside Diameter		Wall Thickness		Mass	
	inch	mm	inch	mm	lb/ft	kg/m
12	12.750	323.9	0.188	4.78	25.27	37.60
			0.203	5.16	27.25	40.55
			0.219	5.56	29.32	43.64
			0.230	5.84	30.78	45.81
			0.236	6.00	31.60	47.02
			0.250	6.35	33.40	49.71
			0.281	7.14	37.47	55.76
			0.312	7.92	41.46	61.70
			0.330	8.38	43.80	65.18
			0.344	8.74	45.63	67.91
			0.354	9.00	46.95	69.87
			0.375	9.52	49.63	73.86
			0.406	10.31	53.56	79.71
			0.438	11.13	57.67	85.82
			0.472	12.00	62.00	92.27
14	14.000	355.6	0.188	4.78	27.79	41.35
			0.203	5.16	29.96	44.59
			0.210	5.33	30.94	46.04
			0.219	5.56	32.25	48.00
			0.236	6.00	34.74	51.70
			0.250	6.35	36.75	54.69
			0.280	7.11	41.06	61.10
			0.281	7.14	41.23	61.36
			0.312	7.92	45.63	67.91
			0.344	8.74	50.24	74.76
			0.354	9.00	51.69	76.92
			0.375	9.52	54.65	81.33
			0.406	10.31	58.99	87.79
			0.438	11.13	63.53	94.55
			0.472	12.00	68.33	101.68
16	16.000	406.4	0.203	5.16	34.31	51.06
			0.219	5.56	36.93	54.96
			0.236	5.99	39.75	59.15
			0.250	6.35	42.10	62.65
			0.281	7.14	47.24	70.30
			0.312	7.92	52.30	77.83
			0.344	8.74	57.59	85.71
			0.354	9.00	59.27	88.20
			0.375	9.52	62.67	93.27
			0.406	10.31	67.67	100.71
			0.438	11.13	72.90	108.49
			0.472	12.00	78.43	116.71
			0.500	12.70	82.86	123.31



**Bakrie Pipe
Industries**

ASTM A252

Steel pipe which is used
for construction and piling

Pipa baja untuk konstruksi
dan pancang

SPECIFICATION ^{*)}

ISO 9001:2008
CERTIFIED

Nominal Size	Outside Diameter		Wall Thickness		Mass	
	inch	mm	inch	mm	lb/ft	kg/m
18	18.000	457.2	0.250	6.35	47.42	70.57
			0.281	7.14	53.23	79.21
			0.312	7.92	58.94	87.71
			0.344	8.74	64.93	96.62
			0.354	9.00	66.81	99.43
			0.375	9.52	70.67	105.17
			0.406	10.31	76.32	113.58
			0.438	11.13	82.24	122.38
			0.472	12.00	88.48	131.68
			0.500	12.70	93.51	139.16
			0.562	14.27	104.70	155.81
20	20.000	508.0	0.250	6.35	52.79	78.56
			0.281	7.14	59.26	88.19
			0.312	7.92	65.63	97.67
			0.344	8.74	72.31	107.61
			0.354	9.00	74.42	110.75
			0.375	9.52	78.72	117.15
			0.406	10.31	85.02	126.53
			0.438	11.13	91.64	136.38
			0.472	12.00	98.63	146.78
			0.500	12.70	104.24	155.13
			0.594	15.09	123.25	183.42
24	24.000	610.0	0.250	6.35	63.52	94.53
			0.281	7.14	71.33	106.15
			0.312	7.92	79.02	117.60
			0.344	8.74	87.08	129.59
			0.354	9.00	89.63	133.39
			0.375	9.52	94.83	141.12
			0.406	10.31	102.46	152.48
			0.438	11.13	110.46	164.38
			0.472	12.00	118.91	176.96
			0.500	12.70	125.71	187.07
			0.562	14.27	140.87	209.64

Chemical Composition : Phosphorous (P) : 0.050 % max.

Mechanical Properties :

Grade	Yield Strength (min.)	Tensile Strength (min.)
Grade 1	30.000 psi (205 MPa)	50.000 psi (345 MPa)
Grade 2	35.000 psi (240 MPa)	60.000 psi (415 MPa)
Grade 3	45.000 psi (310 MPa)	66.000 psi (455 MPa)

Pipe Length : 6 meters per joint / 12 meters per joint

Wall Thickness Tolerance : Plus (+) = not specified
Minus (-) = 12.5 % max.

Outside Diameter Tolerance : $\pm 1\%$

Example of Marking :



ASTM A252-2 E 16" x 8,74 mm x 6,00 m 85,70 kg/m
PIPE NO: HEAT NO:

Bakrie Pipe
Industries



**Bakrie Pipe
Industries**

*) Note : Subject to agreement between the manufacturer and the purchaser,
size and weight per length unit other than those listed shall be permitted,
above tables are for common sizes and weight per unit length



**Bakrie Pipe
Industries**



SNI 0039:2013

Steel pipe with or without zinc coating used for clean water lines, raw water, water in plumbing system, water in hydrant system and other water except for drinking water lines

Pipa baja dengan atau tanpa lapisan seng untuk saluran air bersih, air baku, air pada sistem plambing, air pada sistem hidran dan air lainnya kecuali untuk air minum



SNI 0039:2013
LIGHT (TIPIS)

ISO 9001:2008
SNI 0039:2013
CERTIFIED

Nominal Diameter		Diameter luar (mm)			Thickness (mm)	Weight (kg/m)
(inci)	(mm)	Nom.	Min.	Maks.		
1/2	15	21,4	21,0	21,8	2,0	0,947
3/4	20	26,8	26,4	27,2	2,3	1,38
1	25	33,6	33,2	34,0	2,6	1,98
1 1/4	32	42,3	41,9	42,7	2,6	2,54
1 1/2	40	48,2	47,8	48,6	2,9	3,23
2	50	60,2	59,6	60,8	2,9	4,08
2 1/2	65	76,0	75,2	76,7	3,2	5,71
3	80	88,8	87,9	89,7	3,2	6,72
4	100	114,1	113,0	115,3	3,6	9,75
5	125	139,7	137,7	140,5	3,6	12,08
6	150	165,1	163,4	166,8	3,6	14,34
8	200	219,1	216,9	221,3	5,0	26,40
10	250	273,0	270,3	275,7	5,0	33,04
12	300	323,8	320,6	327,0	5,0	39,31
14	350	355,6	352,0	359,2	5,6	48,33
16	400	406,4	402,3	410,5	5,6	55,35
18	450	457,0	452,4	461,6	6,4	71,12
20	500	508,0	502,9	513,1	6,4	79,16
24	600	610,0	603,9	616,1	6,4	95,26

For all grades :

Chemical Composition (% max.)

C	Mn	P	S
0,20	1,40	0,035	0,030

For all grades :

Mechanical Properties

Yield strength min.		Tensile strength		Elongation (%min.)
Kgf/mm ²	MPa (N/mm ²)	Kgf/mm ²	MPa (N/mm ²)	
20	195	33 – 47	320 – 460	20



SNI 0039:2013
MEDIUM

ISO9001:2008
SNI0039:2013
CERTIFIED

Nominal Diameter		Outside diameter (mm)			Thickness (mm)	Weight (kg/m)
(inch)	(mm)	Nom.	Min.	Max.		
1/2	15	21,3	21,0	21,8	2,6	1,21
3/4	20	26,9	26,5	27,3	2,6	1,56
1	25	33,7	33,3	34,2	3,2	2,41
1 1/4	32	42,4	42,0	42,9	3,2	3,10
1 1/2	40	48,3	47,9	48,8	3,2	3,56
2	50	60,3	59,7	60,8	3,6	5,03
2 1/2	65	76,1	75,3	76,6	3,6	6,42
3	80	88,9	88,0	89,5	4,0	8,36
4	100	114,3	113,1	115,0	4,5	12,20
5	125	139,7	138,5	140,8	5,0	16,60
6	150	165,1	163,9	166,5	5,0	19,80
8	200	219,1	216,9	221,3	6,4	33,32
10	250	273,0	270,3	275,7	6,4	41,75
12	300	323,8	320,6	327,0	6,4	49,71
14	350	355,6	352,0	359,2	6,4	54,69
16	400	406,4	402,3	410,5	6,4	62,64
18	450	457,0	452,4	461,6	9,5	105,10
20	500	508,0	502,9	513,1	9,5	117,02
24	600	610,0	603,9	616,1	9,5	140,88

For all grades:

Pipe Length : 6 meters or 12 meters per joint

Length Tolerance : +100mm, - 0 mm

Hydrostatic Test : pressure 50 kgf/cm²

Hydrostatic test can be replaced with Eddy Current test

Zinc coating weight : 300 gr/m²min. (42µm min)

Wall Thickness Tolerances:

- For Grade Light (Tipis) : +10%, -8%
- For Grade Medium : +15%, -10%
- For Grade Heavy (Tebal) : +15%, -12.5%



SNI 0039:2013

HEAVY (Tebal)

**ISO9001:2008
SNI0039:2013
CERTIFIED**

Nominal Diameter		Outside diameter (mm)			Thickness (mm)	Weight (kg/m)
(inch)	(mm)	Nom.	Min.	Max.		
1/2	15	21,3	21,1	21,8	3,2	1,44
3/4	20	26,8	26,6	27,2	3,2	1,87
1	25	33,8	33,4	34,2	4,0	2,94
1 1/4	32	42,5	42,1	42,9	4,0	3,80
1 1/2	40	48,4	48,0	48,8	4,0	4,38
2	50	60,3	59,8	60,8	4,5	6,19
2 1/2	65	76,0	75,4	76,6	4,5	7,93
3	80	88,8	88,1	89,5	5,0	10,30
4	100	114,1	113,3	114,9	6,0	15,99
5	125	139,7	138,7	142,7	6,6	21,92
6	150	168,3	164,1	170,0	7,1	28,22
8	200	219,1	216,9	221,3	8,2	42,65
10	250	273,0	270,3	275,7	9,3	60,48
12	300	323,8	320,6	327,0	10,3	79,63
14	350	355,6	352,0	359,2	11,1	94,30
16	400	406,4	402,3	410,5	12,7	123,30
18	450	457,0	452,4	461,6	12,7	139,15
20	500	508,0	502,9	513,1	12,7	155,12
24	600	610,0	603,9	616,1	12,7	187,06

Sample of Marking Dia. ≤ 6 inch:



4" LGH 6.0 m

 SNI 0039 : 2013 *Bakrie Pipe Industries*
 LSPR-004-IDN



4" MEDIUM 6.0 m

 SNI 0039 : 2013 *Bakrie Pipe Industries*
 LSPR-004-IDN



4" HVY 6.0 m

 SNI 0039 : 2013 *Bakrie Pipe Industries*
 LSPR-004-IDN

Sample of Marking Dia. > 6 inch :



8" 5.0 mm LGH 6.0 m

 SNI 0039 : 2013 *Bakrie Pipe Industries*
 LSPR-004-IDN



8" 6.4 mm MEDIUM 6.0 m

 SNI 0039 : 2013 *Bakrie Pipe Industries*
 LSPR-004-IDN



8" 8.2 mm HVY 6.0 m

 SNI 0039 : 2013 *Bakrie Pipe Industries*
 LSPR-004-IDN



**Bakrie Pipe
Industries**



**Bakrie Pipe
Industries**

2MMX4,5MMX6,0ML-D

**Bakrie Pipe
Industries**

MMX4,5MMX6,0ML-D

**Bakrie Pipe
Industries**

2MMX4,5MMX6,0ML-D

**Bakrie Pipe
Industries**

65,2MMX4,5

SNI 0068:2013 CLASS 2 PKB (STK) - 400

Carbon steel tubes used
for civil engineering,
architecture, steel
towers, scaffoldings,
struts, piles for
suppression of landslide
and other structures,
except pipe for piling

Pipa baja untuk
konstruksi umum,
seperti konstruksi
sipil dan arsitektural,
menara/tiang baja,
scaffolding, menara
dan struktur lainnya,
kecuali tiang pancang

SNI 0068:2013
CLASS 2
PKB (STK) - 400

Carbon steel tubes used for civil engineering, architecture, steel towers, scaffoldings, struts, piles for suppression of landslide and other structures, except pipe for piling

ISO 9001:2008
SNI 0068:2013
CERTIFIED

Pipa baja untuk konstruksi umum, seperti konstruksi sipil dan arsitektural, menara/tiang baja, scaffolding, menara dan struktur lainnya, kecuali tiang pancang

Outside Diameter		Wall Thickness	Weight
mm	inch	mm	kg/m
21,7	½	2,0	0,972
27,2	¾	2,0	1,24
		2,3	1,41
34,0	1	2,3	1,80
42,7	1 ¼	2,3	2,29
		2,5	2,48
48,6	1 ½	2,3	2,63
		2,8	3,16
		3,2	3,58
60,5	2	2,3	3,30
		3,2	4,52
		4,0	5,57
76,3	2 ½	2,8	5,08
		3,2	5,77
		4,0	7,13
89,1	3	2,8	5,96
		3,2	6,78
		4,0	8,39
101,6	3 ½	3,2	7,76
		4,0	9,63
		5,0	11,9
114,3	4	3,2	8,77
		3,6	9,83
		4,5	12,2
		5,6	15,0
139,8	5	3,6	12,1
		4,0	13,4
		4,5	15,0
		6,0	19,8
165,2	6	4,5	17,8
		5,0	19,8
		6,0	23,6
		7,0	27,3
190,7	7	4,5	20,7
		5,0	22,9
		6,0	27,3
		7,0	31,7
216,3	8	4,5	23,5
		6,0	31,1
		7,0	36,1
		8,0	41,1

SNI 0068:2013**CLASS 2****PKB (STK) - 400**

Carbon steel tubes used for civil engineering, architecture, steel towers, scaffoldings, struts, piles for suppression of landslide and other structures, except pipe for piling

ISO 9001:2008**SNI 0068:2013****CERTIFIED**

Pipa baja untuk konstruksi umum, seperti konstruksi sipil dan arsitektural, menara/tiang baja, scaffolding, menara dan struktur lainnya, kecuali tiang pancang

Outside Diameter		Wall Thickness	Weight
mm	inch	mm	kg/m
267,4	10	6,0	38,7
		7,0	45,0
		8,0	51,2
		9,0	57,3
318,5	12	6,0	46,2
		7,0	53,8
		8,0	61,3
		9,0	68,7
355,6	14	6,3	64,3
		8,0	68,6
		9,0	76,9
		12,0	102
406,4	16	9,0	88,2
		12,0	117
		16,0	154
457,2	18	9,0	99,5
		12,0	132
		16,0	174
508,0	20	9,0	111
		12,0	147
		14,0	171
		16,0	194
609,6	24	9,0	133
		12,0	177
		14,0	206
		16,0	234

Chemical Composition Carbon : 0,25 % max.
 Phosphorous : 0,040 % max.
 Sulfur : 0,040 % max.

Mechanical Properties Tensile Strength : 400 N/mm² (min.)
 Yield Strength : 235 N/mm² (min.)
 Elongation : 23 % (min.)

Pipe Length 6 Meters per joint

Wall Thickness Tolerance + 0,6 mm ; - 0,5 < 4 mm
 + 15 % ; 12, 5% 4 mm - 12 mm
 + 15 % ; - 1,5 mm > 12 mm

Length Tolerance + 100 mm
 - 0 mm

Diameter Tolerance ± 0,5 mm OD < 50 mm
 ± 1,0% OD ≥ 50 mm

Marking Example :

 114.3 mm x 3.6 mm x 6.0 m  SNI 0068 : 2013 LSPR-004-IDN PKB (STK) - 400 L-D  Bakrie Pipe Industries





**Bakrie Pipe
Industries**

JIS G 3444 STK - 400

Carbon steel tubes used
for civil engineering,
architecture, steel towers,
scaffoldings, struts, piles
for suppression of
landslide and other
structures

Pipa baja untuk
konstruksi umum, seperti
konstruksi sipil dan
arsitektural, menara/tiang
baja, scaffolding,
menara, pancang dan
struktur lainnya

JISJAPANESE
INDUSTRIAL
STANDARD**JIS G 3444 STK - 400**Carbon steel tubes used for civil engineering, architecture,
steel towers, scaffoldings, struts, piles for suppression
of landslide and other structuresPipa baja untuk konstruksi umum, seperti konstruksi
sipil dan arsitektural, menara/tiang baja, scaffolding,
menara, pancang dan struktur lainnya**ISO 9001:2008****CERTIFIED**

Nominal Size		Wall Thickness	Weight
inch	mm	mm	kg/m
1/2	21,7	2,0	0,972
3/4	27,2	2,0	1,24
		2,3	1,41
1	34,0	2,3	1,80
		3,2	2,43
1 1/4	42,7	2,3	2,29
		2,5	2,48
		3,2	3,12
1 1/2	48,6	2,3	2,63
		2,5	2,84
		2,8	3,16
		3,2	3,58
2	60,5	2,3	3,30
		3,2	4,52
		4,0	5,57
2 1/2	76,3	2,8	5,08
		3,2	5,77
		4,0	7,13
3	89,1	2,8	5,96
		3,2	6,78
		5,5	11,34
3 1/2	101,6	3,2	7,76
		4,0	9,63
		5,0	11,9
4	114,3	3,2	8,77
		3,5	9,56
		3,6	9,83
		4,5	12,2
		6,0	16,02
5	139,8	3,6	12,1
		4,0	13,4
		4,5	15,0
		6,0	19,8
		6,6	21,68
6	165,2	4,5	17,8
		5,0	19,8
		6,0	23,6
		7,1	27,7
		4,5	20,7
7	190,7	4,8	22,0
		5,3	24,2
		6,0	27,3
		7,0	31,7
		8,2	36,9
8	216,3	4,5	23,5
		4,8	25,4
		5,8	30,1
		6,0	31,1
		7,0	36,1
		8,0	41,1
		8,2	42,1
10	267,4	4,8	31,75
		6,0	38,7
		6,6	42,4
		7,0	45,0
		8,0	51,2
		9,0	57,3
		9,3	59,2
12	318,5	4,8	37,13
		6,0	46,2
		6,9	53,0
		8,0	61,3
		9,0	68,7
		10,3	78,3

**Bakrie Pipe
Industries**

JISJAPANESE
INDUSTRIAL
STANDARD**JIS G3444 STK 400**Carbon steel tubes used for civil engineering, architecture,
steel towers, scaffoldings, struts, piles for suppression
of landslide and other structuresPipa baja untuk konstruksi umum, seperti konstruksi
sipil dan arsitektural, menara/tiang baja, scaffolding,
menara, pancang dan struktur lainnya**ISO 9001:2008****CERTIFIED**

Nominal Size		Wall Thickness	Weight
inch	mm	mm	kg/m
14	355,6	6,4	55,1
		7,9	67,7
		9,0	76,9
		9,5	81,1
		12,0	102
16	406,4	12,7	107
		7,9	77,6
		9,0	88,2
		9,5	93,0
		12,0	117
18	457,2	12,7	123
		9,0	99,5
		9,5	105
		12,0	132
		12,7	139
20	508,0	7,9	97,4
		9,0	111
		9,5	117
		12,0	147
		12,7	155
24	609,6	14,0	171
		9,0	133
		9,5	141
		12,0	177
		12,7	187
		14,0	206

Chemical Composition

Carbon (C) : 0.25 % max.
Phosphorous (P) : 0.040 % max.
Sulphur (S) : 0.040 % max.

Mechanical Properties

Tensile Strength : 400 N/mm² (min.)
Yield Strength : 235 N/mm² (min.)
Elongation : 18% (min.)

Pipe length

6 meters (according to order)

Wall Thickness Tolerance

T < 4 mm = + 0,6 mm / - 0,5 mm
4 ≤ T < 12 mm = + 15.0% / - 12.5%
T ≥ 12 mm = 15% x T nominal / - 1,5 mm

Length Tolerance

Minus (-) 0 mm
Plus (+) not specified

Sample of Marking

:  STK - 400 E - C 7" x 3.6 mm x 6000 mm *Bakrie Pipe Industries*

Note : Dimensions other than given in above table shall be as agreed between the manufacturer and the purchaser



**Bakrie Pipe
Industries**

Steel pipe for
general purposes

Pipa Baja untuk
aplikasi umum





Steel pipe for | Pipa baja hitam untuk
General Purpose | Aplikasi Umum

SPECIFICATION

ISO 9001 : 2008
CERTIFIED

BLACK STEEL PIPE
HOT-DIP GALVANIZED STEEL PIPE

Nominal Size		Outside Diameter		Wall Thickness	Weight
inch	mm	max. (mm)	min. (mm)	mm	kg/m
1/2	21,3	21,7	21,1	2,00	0,96
3/4	26,8	27,2	26,4	2,00	1,23
1	33,8	34,2	33,4	2,00	1,55
1 1/4	42,5	42,9	42,1	2,00	2,00
1 1/2	48,4	48,8	48,0	2,00	2,28
2	60,3	60,8	59,8	2,00	2,86
2 1/2	76,0	76,6	75,4	2,00	3,65
3	88,8	89,5	88,1	2,90	6,14
4	114,1	114,9	113,3	2,90	7,94
5	140,3	140,6	138,7	2,90	9,85
6	165,4	166,1	164,1	2,90	11,67
8	219,1	221,3	216,9	5,00	26,40
10	273,0	275,7	270,3	5,00	33,04
12	323,8	327,0	320,6	6,35	49,71
14	355,6	359,2	352,0	6,35	54,69
16	406,4	410,5	402,3	6,35	62,64

Chemical Composition

P (% max.)	S (% max.)
0.060	0.060

Mechanical Properties

Yield Strength (min.)		Tensile Strength (min.)		Elongation
kgf/mm ²	MPa (N/mm ²)	kgf/mm ²	MPa (N/mm ²)	% (min.)
21,1	207	33,7	330	20

Pipe Length : 6 meters per joint
Length Tolerance : $\pm 2\%$

Hydrostatic Test Pressure : 50 kgf/cm²
Hydrostatic testing can be replaced with Ultrasonic Test or Eddy Current Testing

Wall Thickness : Plus (+) not specified
Tolerance : Minus (-) 10 % maximum

Marking Example :



4"

Bakrie Pipe
Industries



**Bakrie Pipe
Industries**



**Bakrie Pipe
Industries**

Steel pipe for
general purposes

Pipa untuk
aplikasi umum





**ISO 9001:2008
CERTIFIED**

**STEEL PIPE FOR
GENERAL PURPOSES**

**PIPA UNTUK
APLIKASI UMUM**

**BLACK STEEL PIPE
HOT-DIP GALVANIZED STEEL PIPE**

SPECIFICATION

Nominal Size		Outside Diameter		Thickness	Weight
inch	mm	max. (mm)	min. (mm)	mm	kg/m
1/2	21,3	21,7	21,1	1,80	0,87
3/4	26,8	27,2	26,4	1,80	1,11
1	33,8	34,2	33,4	1,80	1,42
1 1/4	42,5	42,9	42,1	1,80	1,80
1 1/2	48,4	48,8	48,0	1,80	2,06
2	60,3	60,8	59,8	1,80	2,59
2 1/2	76,0	76,6	75,4	2,30	4,15
3	88,8	89,5	88,1	2,30	4,87
4	114,1	114,9	113,3	2,30	6,30

Chemical Composition

P (% max.)	S (% max.)
0.060	0.060

Mechanical Properties

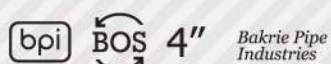
Yield Strength (min.)		Tensile Strength (min.)		Elongation
kgf/mm ²	MPa (N/mm ²)	kgf/mm ²	MPa (N/mm ²)	% (min.)
21,1	207	33,7	330	20

Pipe Length : 6 meters per joint
Length Tolerance : ± 2%

Hydrostatic Pressure Test : 50 kgf/cm²
Hydrostatic testing can be replaced with Ultrasonic Test or Eddy Current Testing

Thickness : Plus (+) not specified
Tolerance Minus (-) 8 % maximum

Marking Example



BRATA SENA

Rectangular and
square hollow
section for general
application

Pipa baja
kotak untuk
aplikasi konstruksi
umum

BRATA SENA

Rectangular and square hollow section for general application

Pipa baja kotak untuk aplikasi konstruksi umum

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RECTANGULAR HOLLOW SECTION (BRATA)
SQUARE HOLLOW SECTION (SENA)

Specification Rectangular Hollow Section (RHS-BRATA)

Side A x B (mm)	Thickness (mm)	Weight (kg/m)	Cross Section (cm ²)	Technical Information					
				Moment of Inertia (cm ⁴)		Section Modulus (cm ³)		Radius of Gyration (cm)	
				I _x	I _y	Z _x	Z _y	I _x	I _y
40 x 20	1,80	1,53	1,947	3,75	1,25	1,86	1,25	1,39	0,80
40 x 35	2,00	2,15	2,74	6,2	5,1	3,11	2,89	1,51	1,36
	2,30	2,47	3,15	7,0	5,7	3,50	3,24	1,49	1,34
45 x 30	2,00	2,31	2,94	9,5	4,3	3,81	2,86	1,80	1,21
45 x 35	1,85	2,15	2,735	7,77	5,26	3,45	3,01	1,68	1,39
50 x 20	2,30	2,25	2,872	8,00	1,83	3,20	1,83	1,67	0,80
50 x 30	2,00	2,31	2,94	9,5	4,3	3,81	2,86	1,80	1,21
	2,30	2,62	3,332	10,60	4,76	4,25	3,17	1,79	1,20
50 x 40	2,30	2,98	3,79	13,2	9,4	5,30	4,68	1,87	1,57
50 x 45	2,30	3,16	4,02	14,5	12,4	5,82	5,49	1,90	1,75
60 x 30	2,30	2,98	3,792	16,80	5,65	5,61	3,76	2,10	1,22
	3,20	3,99	5,087	21,40	7,08	7,15	4,72	2,05	1,18
60 x 40	1,80	2,66	3,387	16,85	9,01	5,62	4,51	2,23	1,63
	2,00	2,93	3,737	18,41	9,83	6,14	4,92	2,22	1,62
	2,30	3,34	4,252	20,65	11,00	6,88	5,50	2,20	1,61
	2,50	3,60	4,589	22,07	11,74	7,36	5,87	2,19	1,60
	2,80	3,99	5,084	24,10	12,78	8,03	6,39	2,18	1,59
65 x 30	3,00	4,01	5,11	25,2	7,3	7,76	4,90	2,22	1,20
65 x 55	2,30	4,06	5,17	31,9	24,7	9,82	8,98	2,48	2,18
66 x 33	1,85	2,70	3,438	19,08	6,48	5,78	3,93	2,35	1,37
70 x 50	2,00	3,56	4,54	31,5	18,8	8,99	7,50	2,63	2,03
75 x 20	2,30	3,16	4,022	23,70	2,73	6,31	2,73	2,43	0,82
	2,30	4,06	5,172	38,90	17,60	10,40	7,82	2,74	1,84
75 x 45	2,80	4,87	6,20	45,7	20,6	12,18	9,16	2,71	1,82
	3,20	5,50	7,007	50,80	22,80	13,50	10,10	2,69	1,80
75 x 65	2,30	4,86	6,19	51,8	41,6	13,61	12,79	2,89	2,59
80 x 40	2,30	4,06	5,172	42,10	14,30	10,50	7,14	2,85	1,66
	3,20	5,50	7,006	54,90	18,40	13,70	9,21	2,80	1,62
80 x 60	2,30	4,86	6,19	56,8	36,5	14,20	12,17	3,03	2,43
	2,00	4,50	5,74	55,6	45,3	13,90	12,96	3,11	2,81
80 x 70	2,30	5,14	6,55	62,9	51,3	15,73	14,65	3,10	2,80
	3,00	6,60	8,41	78,9	64,3	19,73	18,36	3,06	2,76
82 x 42	3,10	5,54	7,056	59,00	20,61	14,39	9,81	2,89	1,71
85 x 35	3,20	5,50	7,01	58,8	14,3	13,82	8,17	2,90	1,43
85 x 55	3,00	6,13	7,81	76,1	38,7	17,90	14,08	3,12	2,30
85 x 65	3,00	6,60	8,41	86,2	57,0	20,27	17,52	3,20	2,60
90 x 45	2,30	4,60	5,862	61,00	20,80	13,60	9,22	3,23	1,88
	3,20	6,25	7,967	80,20	27,00	17,80	12,00	3,17	1,84
95 x 45	3,20	6,50	8,29	92,0	28,4	19,37	12,63	3,33	1,85
95 x 50	2,30	4,96	6,32	74,7	27,6	15,75	11,06	3,44	2,09
	2,30	6,23	7,93	109,3	92,2	23,01	21,71	3,71	3,41
95 x 85	2,80	7,51	9,56	130,1	107,7	27,38	25,81	3,69	3,39
	3,20	8,51	10,85	145,9	123,0	30,73	28,95	3,67	3,37
100 x 20	2,30	4,06	5,172	51,90	3,64	10,40	3,64	3,17	0,84
	2,30	4,78	6,092	73,90	17,50	14,80	8,75	3,48	1,69
100 x 40	2,80	5,75	7,32	87,2	20,5	17,45	10,27	3,45	1,67
	4,00	7,97	10,15	115,7	26,7	23,14	13,34	3,38	1,62
	4,20	8,32	10,600	120,00	27,60	24,00	13,80	3,36	1,61
	2,30	5,14	6,552	84,80	29,00	17,00	11,60	3,60	2,10
100 x 50	3,20	7,01	8,926	112,00	38,00	22,50	15,20	3,55	2,06
	4,00	8,59	10,95	134,1	44,9	26,82	17,98	3,50	2,03
	4,50	9,55	12,170	147,00	48,90	29,30	19,50	3,47	2,00
100 x 80	2,80	7,51	9,56	140,2	99,5	28,03	24,89	3,83	3,23
120 x 60	2,80	7,51	9,56	178,1	60,8	29,69	20,26	4,32	2,52
120 x 80	2,30	6,95	8,85	181,5	9,76	30,26	24,41	4,53	3,32
	4,00	11,73	14,95	294,6	157,6	49,09	39,32	4,44	3,42
125 x 40	2,30	5,69	7,242	131,00	21,60	20,90	10,80	4,25	1,73
125 x 55	3,20	8,51	10,85	209,4	57,9	33,51	21,07	4,39	2,31
	2,30	6,95	8,852	192,00	87,50	30,60	23,30	4,65	3,14
	2,80	8,39	10,68	228,5	104,1	36,56	27,76	4,62	3,12
125 x 75	3,20	9,52	12,130	257,00	117,00	41,10	31,20	4,60	3,10
	4,00	11,70	14,950	311,00	141,00	49,70	37,50	4,56	3,07
	4,50	13,10	16,670	342,00	155,00	54,80	41,20	4,53	3,04
	6,00	17,00	21,630	428,00	192,00	68,50	51,10	4,45	2,98
140 x 60	4,00	11,73	14,95	355,6	93,8	50,80	31,27	4,88	2,51

BRATA SENA

Rectangular and square hollow section for general application

Pipa baja kotak untuk aplikasi konstruksi umum

ISO 9001 : 2008
CERTIFIED

RECTANGULAR HOLLOW SECTION (BRATA)
SQUARE HOLLOW SECTION (SENA)

Specification Square Hollow Section (SHS-SENA)

Side A x B (mm)	Thickness (mm)	Weight (kg/m)	Cross Section (cm ²)	Technical Information		
				Moment of Inertia (cm ⁴) Ix = Iy	Section Modulus (cm ³) Zx = Zy	Radius of Gyration (cm) ix = iy
16 x 16	1,8	0,74	0,939	0,31	0,38	0,57
20 x 20	1,8	0,96	1,227	0,66	0,66	0,73
25 x 25	1,8	1,25	1,587	1,39	1,11	0,94
30 x 30	1,8	1,53	1,947	2,53	1,69	1,14
36 x 36	1,8	1,87	2,379	4,56	2,53	1,38
37 x 37	1,8	1,92	2,451	5,03	2,71	1,42
38 x 38	1,8	1,98	2,523	5,42	2,86	1,47
	2,3	2,51	3,20	6,6	3,48	1,44
	3,0	3,11	3,97	7,9	4,13	1,41
40 x 40	1,8	2,09	2,667	6,39	3,19	1,55
	2,3	2,62	3,332	7,73	3,86	1,52
	3,0	3,30	4,21	9,3	4,66	1,49
45 x 45	2,0	2,62	3,34	10,1	4,49	1,74
	2,8	3,55	4,52	13,1	5,83	1,70
	3,2	3,99	5,09	14,4	6,40	1,68
48 x 48	2,0	2,81	3,58	12,4	5,18	1,86
	3,0	4,06	5,17	17,0	7,09	1,82
	3,2	4,29	5,47	17,8	7,43	1,81
50 x 50	2,0	2,93	3,74	14,0	15,66	1,95
	2,3	3,34	4,252	15,90	6,34	1,93
	3,0	4,25	5,41	19,5	7,79	1,89
	3,2	4,50	5,727	20,40	8,16	1,89
60 x 60	2,0	3,56	4,54	25,1	8,38	2,35
	2,3	4,06	5,172	28,30	9,44	2,34
	3,0	5,19	6,61	35,1	11,71	2,31
	3,2	5,50	7,007	36,90	12,30	2,30
70 x 70	2,0	4,19	5,34	40,7	11,64	2,76
	3,0	6,13	7,81	57,5	16,44	2,71
	4,5	8,85	11,27	78,6	22,46	2,64
75 x 75	2,0	4,50	5,74	50,5	13,46	2,97
	2,3	5,14	6,552	57,10	15,20	2,95
	3,2	7,01	8,927	75,50	20,10	2,91
	4,5	9,55	12,170	98,60	26,30	2,85
80 x 80	2,3	5,50	7,012	69,90	17,50	3,16
	3,2	7,51	9,567	72,70	23,20	3,11
	4,5	10,30	13,070	122	30,40	3,05
90 x 90	2,3	6,23	7,932	101	22,40	3,56
	3,2	8,51	10,850	135	29,90	3,52
	4,5	11,67	14,87	177,9	39,52	3,46
100 x 100	2,3	6,95	8,852	140	27,90	3,97
	3,2	9,52	12,130	187	37,50	3,93
	4,0	11,70	14,950	226	45,30	3,89
	4,5	13,10	16,670	249	49,90	3,97
	6,0	17,00	21,630	311	62,30	3,79

Chemical Composition Requirement

Class	Chemical Composition (% max.)					
	C	Si	Mn	P	S	
BRATA SENA I	-	-	-	-	-	-
BRATA SENA II	Grade A	-	-	0,05	0,05	
	Grade B	-	-	0,05	0,05	

Mechanical Properties

Class	Mechanical Properties (min.)		
	Yield Strength (MPa)	Tension Strength (MPa)	Elongation (%)
BRATA SENA I	-	270	-
BRATA SENA II	Grade A	207	340
	Grade B	241	413

Dimension Tolerance

Description	BRATA SENA I	BRATA SENA II	
		Grade A	Grade B
Weight Tolerance	± 10%	± 10%	± 10%
Length Of Side Tolerance	-	± 1 mm	± 1 mm
Thickness Tolerance	± 0,3 mm	± 0,3 mm	± 0,3 mm
		± 10%	± 10%
Length Tolerance	± 10%	± 10%	± 10%
Radius Corner	t < 3 mm = 2t	t < 2,5 mm = 1,5t	t < 2,5 mm = 1,5t
		t ≥ 2,5 - 4 mm = 2t	t ≥ 2,5 - 4 mm = 2t
	t ≥ 3 mm = 2,5t	t > 4 mm = 2,5t	t > 4 mm = 2,5t
Flatness Maximum	Side Length ≤ 100 mm	-	0,5 mm from maximum side length
	Side Length > 100 mm	-	0,5% from maximum side length
Squareness (90°)	-	± 1,5°	± 1,5°
Straightness Tolerance	-	0,2%	0,2%

Sample Marking for RHS (BRATA) :

bpi BS RHS 75 mm x 45 mm x 2,30 mm x 6,00 m L-D

Bakrie Pipe Industries

Sample Marking for SHS (SENA) :

bpi BS SHS 40 mm x 40 mm x 1,80 mm x 6,00 m L-D

Bakrie Pipe Industries

Note : For other thickness can be produced according to customer request



Bakrie Pipe Industries

Steel pipe for
general purposes

Pipa baja hitam
dan galvanis untuk
aplikasi umum





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STEEL PIPE FOR GENERAL PURPOSES | PIPA BAJA HITAM DAN GALVANIS SPECIFICATION | UNTUK APLIKASI UMUM

SPEC.	TYPE	Outside Diameter		Thickness	Weight
		(inch)	(mm)	(mm)	kg/m
XL	Round Pipe	1/2	21.3	1.30	0.64
				1.50	0.73
		3/4	26.8	1.30	0.82
				1.50	0.94
		1	33.8	1.30	1.04
				1.50	1.19
		1 1/4	42.5	1.30	1.32
				1.50	1.52
		1 1/2	48.4	1.30	1.51
				1.50	1.73
		2	60.3	1.30	1.89
				1.50	2.18

SPEC.	TYPE	Side A	Side B	Thickness	Weight
		(mm)	(mm)	(mm)	kg/m
XL	SHS / RHS Pipe	20	20	1.30	0.73
				1.50	0.83
		25	25	1.30	0.93
				1.50	1.06
		20	40	1.30	1.14
				1.50	1.30
		30	40	1.30	1.34
				1.50	1.53
		30	50	1.30	1.55
				1.50	1.77
		40	40	1.30	1.55
				1.50	1.77

Chemical Composition

P (% max.)	S (% max.)
0.060	0.060

Mechanical Properties

Yield Strength (min.)		Tensile Strength (min.)		Elongation
kgf/mm ²	MPa (N/mm ²)	kgf/mm ²	MPa (N/mm ²)	% (min.)
21,1	207	33,7	330	20

Pipe Length : 6 meters per joint

Length Tolerance : ± 2%

Thickness Tolerance : Plus (+) not specified
Minus (-) 8 % maximum

Marking Example : - Round Pipe

 XL 4" 6,000 mm *Bakrie Pipe Industries*

- SHS/RHS Pipe

 XL 20 mm x 20 mm 6,000 mm *Bakrie Pipe Industries*



**Bakrie Pipe
Industries**



**Bakrie Pipe
Industries**

ELECTRIC POLES AND TELEPHONE POLES

Steel pipe
which is used
for electric
poles and
telephone
poles

Tiang besi
digunakan untuk
aplikasi
tiang listrik
dan tiang
telepon

ELECTRIC POLES AND TELEPHONE POLES

ISO 9001 : 2008
SNI 0068 : 2013
SPLN D3.019-1:2012
STEL L-003-2004 Ver.2
CERTIFIED

STEEL PIPE WHICH IS USED FOR ELECTRIC POLES AND TELEPHONE POLES

Tiang besi digunakan untuk aplikasi tiang listrik dan tiang telepon

SPECIFICATION OF ELECTRIC POLE

TYPE	POLE HEIGHT (m)	WORKLOAD (daN)	DIMENSION													POLE WEIGHT (Kg)	MAX BENDING (mm)		
			TOP					CENTRE				BOTTOM						SLEEVE	
			D1		THICKNESS (mm)	L1	D2		THICKNESS (mm)	L2	D3		THICKNESS (mm)	L3	THICKNESS (mm)			LENGTH (m)	
			(Inch)	(mm)			(Inch)	(mm)			(mm)	(Inch)							(mm)
8/200	8	200	4	114.3	4.5	2	6	165.2	4.5	2	7	190.7	5.0	4	5.0	0.6	180	108	
9/100	9	100	3	89.1	3.2	2	4	114.3	3.6	2	5	139.8	6.0	5	6.0	0.6	152	180	
9/200	9	200	4	114.3	4.5	2	5	139.8	6.0	2	7	190.7	6.0	5	6.0	0.6	233	131	
11/100	11	100	3	89.1	4.0	2.5	4	114.3	5.6	2.5	5	139.8	6.0	6	6.0	0.6	201	304	
11/200	11	200	4	114.3	4.5	2.5	6	165.2	4.5	2.5	7	190.7	6.0	6	6.0	0.6	270	233	
11/350	11	350	6	165.2	4.5	2.5	8	216.3	4.5	2.5	10	267.4	6.0	6	6.0	0.6	379	151	
12/200	12	200	5	139.8	4.0	2	7	190.7	5.0	4	8	216.3	6.0	6	6.0	0.6	342	202	
12/350	12	350	6	165.2	4.5	2	8	216.3	6.0	4	10	267.4	6.0	6	6.0	0.6	440	189	
13/200	13	200	5	139.8	4.0	2	7	190.7	6.0	5	8	216.3	6.0	6	6.0	0.6	389	260	
13/350	13	350	6	165.2	4.5	2	8	216.3	7.0	5	10	267.4	8.0	6	8.0	0.6	581	207	
14/350	14	350	8	216.3	4.5	3	10	267.4	6.0	5	12	318.5	6.0	6	6.0	0.6	600	197	

SPECIFICATION OF TELEPHONE POLE

Size	Length of Segment (mm)			Diameter (mm)			Thickness (mm)			Weight (kg)	
	Top (L1)	Middle (L2)	Bottom (L3)	Top (D1)	Middle (D2)	Bottom (D3)	Top(T1)	Middle (T2)	Bottom (T3)	Max	Min
7 meter	1370 ± 40	1370 ± 40	4260 ± 8,2	76,3 ± 2	114,3 ± 2,9	139,8 ± 3,5	2,9 ± 0,22	2,9 ± 0,22	3,6 ± 0,24	77	71,4
9 meter	2000 ± 40	2000 ± 40	5000 ± 7,4	76,3 ± 2	114,3 ± 2,9	139,8 ± 3,5	4,5 ± 0,25	4,5 ± 0,25	4,7 ± 0,25	127,3	120

Standard Testing Mechanical of Electric Pole

Standard Testing	Testing Result (min.)
Tensile Strength	42 kgf/mm ²
Yield Strength	24 kgf/mm ²
Elongation (longitudinal)	23%

Standard Testing Mechanical of Telephone Pole

Standard Testing	Testing Result (min.)	
	T-7	T-9
Tensile Strength	41 kgf/mm ²	41 kgf/mm ²
Yield Strength	24 kgf/mm ²	24 kgf/mm ²
Elongation (longitudinal)	22%	22%

Dimensional Tolerance Electric Pole

Segment Length	± 40 mm
Base Length	± 15 mm
Segment Diameter	± 0,5 %
Segment Thickness	± 10 % - 1,2 %

Example Marking of Electric Pole :

PP/BK
CC-yy-xxxx-zz

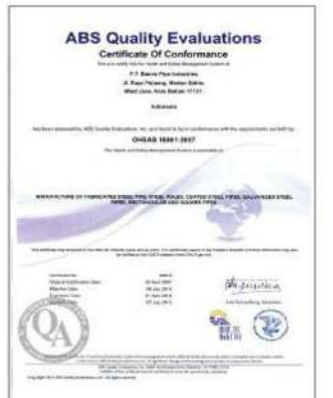
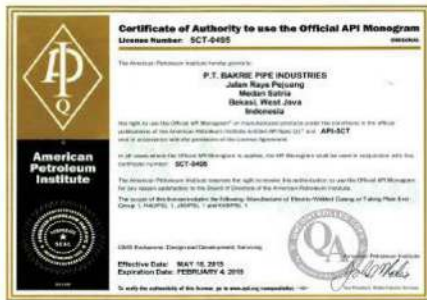
Note :

PP : pole length (meter)
BK : workload (daN)
CC : logo/manufacturer name
yy : year of production (two last digit)
xxxx : SPK No.
zz : serial number of pipe

Example Marking Electric Pole :

9/200
(bpi) -15-15159-01

CERTIFICATION



CERTIFICATION

