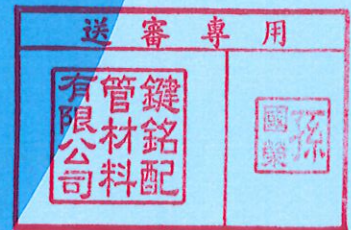




Kao Hsing Chang

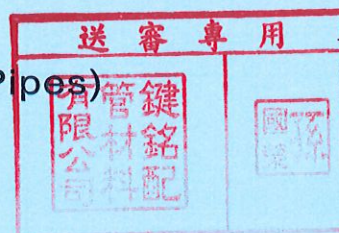
Iron & Steel Corp.



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管理系統認可證書

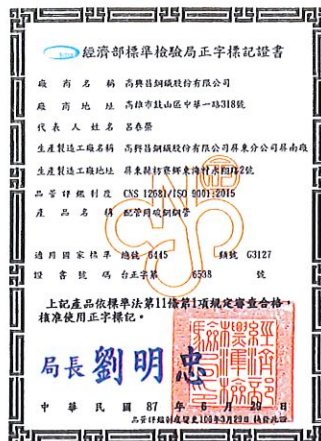
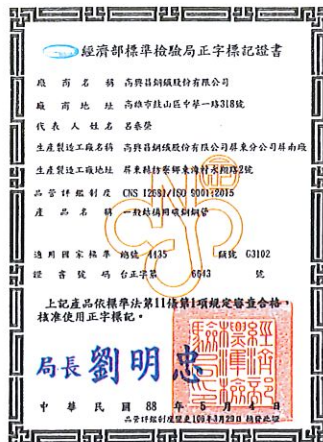
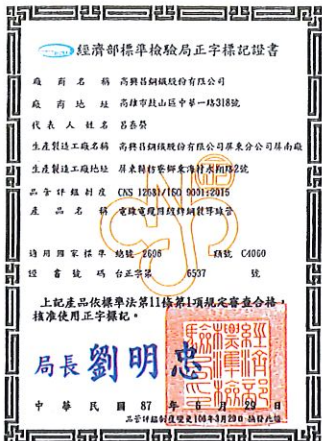
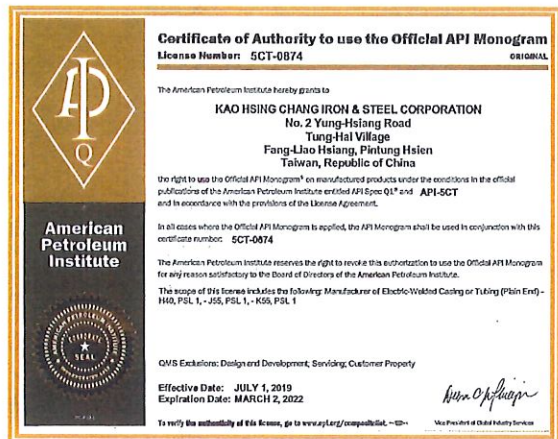
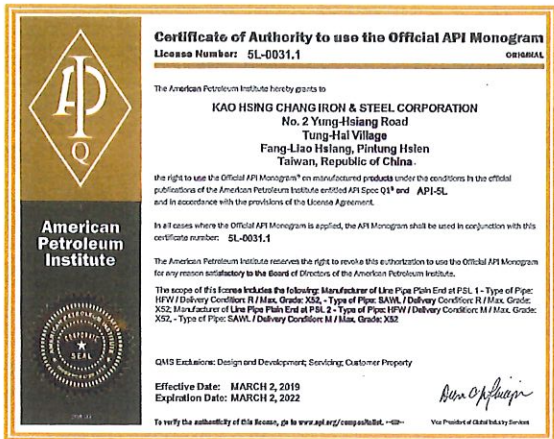


管理系統認可證書一覽表

項目	名稱	證書號碼
1	鋼管ISO-9001證書	7M8Y042-11
2	ISO14001	717E001-01
3	職業安全衛生管理系統 ISO45001	717S001-00



鋼管產品認可證書 PRODUCTS CERTIFICATE



鋼管產品認可證書一覽表

項目	名稱	總號	類號	證書號碼
1	API5L/API5CT授權書			
2	電線電纜用鍍鋅鋼製導線管	CNS 2606	C4060	台正字第 6537號
3	配管用碳鋼鋼管	CNS 6445	G3127	台正字第 6538號
4	一般結構用碳鋼鋼管	CNS 4435	G3102	送台正字第 6643號
5	壓力配管用碳鋼鋼管	CNS 4626	G3111	台正字第 6644號

一、API 5L LINE PIPE

Electric Resistance Welded (E.R.W) (電阻銲接)

OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量) PLAIN ENDS 平端		TEST PRESSURES(試驗壓力)							
						psi(磅/平方吋)							
in	mm	in	mm	kg/ft	kg/m	A	B	X42	X46	X52	X56	X60	X65
2-3/8	60.3	0.154	3.9	1.66	5.42	2370	2470	2970	2970	2970	2970	2970	2970
		0.218	5.5	2.28	7.43	2470	2470	2970	2970	2970	2970	2970	2970
2-7/8	73.0	0.203	5.2	2.63	8.69	2470	2470	2970	2970	2970	2970	2970	2970
		0.276	7.0	3.48	11.39	2470	2470	2970	2970	2970	2970	2970	2970
3-1/2	88.9	0.216	5.5	3.44	11.31	2270	2470	2970	2970	2970	2970	2970	2970
		0.300	7.6	4.65	15.24	2470	2470	2970	2970	2970	2970	2970	2970
4	101.6	0.226	5.7	4.13	13.48	2060	2390	2840	2970	2970	2970	2970	2970
		0.318	8.1	5.67	18.68	2760	2760	2970	2970	2970	2970	2970	2970
4-1/2	114.3	0.237	6.0	4.90	16.02	1930	2240	2660	2930	2970	2970	2970	2970
		0.337	8.6	6.80	22.42	2760	2760	2970	2970	2970	2970	2970	2970
5-9/16	141.3	0.258	6.6	6.63	21.92	1710	1990	2360	2600	2930	2970	2970	2970
		0.375	9.5	9.43	30.88	2460	2760	2970	2970	2970	2970	2970	2970
6-5/8	168.3	0.188	4.8	5.86	19.35	1050	1220	1810	1990	2240	2430	2580	2800
		0.250	6.4	7.72	25.55	1400	1620	2410	2650	2970	2970	2970	2970
		0.280	7.1	8.61	28.22	1550	1800	2670	2940	2970	2970	2970	2970
8-5/8	219.1	0.188	4.8	7.69	25.37	810	940	1390	1530	1720	1860	1980	2150
		0.219	5.6	8.93	29.48	940	1090	1620	1780	2010	2170	2310	2510
		0.250	6.4	10.15	33.57	1070	1250	1850	2040	2290	2480	2640	2870
		0.277	7.0	11.21	33.61	1170	1370	2020	2230	2510	2720	2890	2970
		0.312	7.9	12.58	41.14	1320	1540	2280	2510	2830	2970	2970	2970
10-3/4	273.1	0.322	8.2	12.95	42.65	1370	1600	2370	2610	2930	2970	2970	2970
		0.250	6.4	12.72	42.09	860	1000	1680	1850	2080	2260	2400	2610
		0.307	7.8	15.54	51.03	1050	1220	2050	2260	2540	2750	2930	2970
12-3/4	323.9	0.365	9.3	18.37	60.5	1250	1450	2440	2690	2970	2970	2970	2970
		0.250	6.4	15.15	50.11	730	850	1420	1560	1760	1910	2030	2200
		0.330	8.4	19.86	65.35	950	1110	1860	2050	2310	2500	2660	2880
		0.375	9.5	22.49	73.65	1080	1250	2100	2320	2610	2830	2970	2970
14	355.6	0.406	10.3	24.28	79.65	1170	1360	2280	2510	2830	2970	2970	2970
		0.250	6.4	16.66	55.11	660	770	1290	1420	1600	1740	1850	2000
		0.312	7.9	20.69	67.74	820	950	1590	1760	1980	2140	2280	2470
		0.375	9.5	24.76	81.08	980	1140	1920	2110	2370	2570	2740	2970
16	406.4	0.438	11.1	28.78	94.30	1150	1330	2240	2470	2770	2970	2970	2970
		0.250	6.4	19.08	63.13	580	670	1130	1250	1400	1520	1620	1750
		0.312	7.9	23.72	77.63	720	830	1400	1540	1730	1870	1990	2160
		0.375	9.5	28.39	92.98	860	1000	1680	1850	2080	2250	2400	2600
		0.438	11.1	33.05	108.2	1000	1170	1960	2160	2430	2630	2800	2970
		0.500	12.7	37.55	123.3	1150	1340	2240	2470	2780	2970	2970	2970

註：鋼管外徑及壁厚可在表列範圍外協議訂購

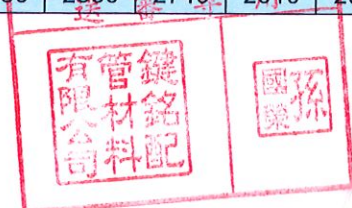


一、API 5L LINE PIPE

Submerged-Arc Welded (S.A.W) (潛弧銲接)

OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量) PLAIN ENDS 平端		TEST PRESSURES(試驗壓力)							
						psi(磅/平方吋)							
in	mm	in	mm	kg/ft	kg/m	A	B	X42	X46	X52	X56	X60	X65
18	457.0	0.250	6.4	21.68	71.12	520	600	1010	1110	1250	1350	1440	1560
		0.312	7.9	26.67	87.49	640	740	1240	1370	1540	1670	1770	1920
		0.375	9.5	31.96	104.84	760	890	1490	1640	1850	2000	2130	2310
		0.500	12.7	42.41	139.15	1020	1190	1990	2200	2470	2680	2850	2970
		0.625	15.9	52.72	172.95	1280	1490	2490	2750	2970	2970	2970	2970
		0.750	19.1	62.86	206.25	1530	1780	2970	2970	2970	2970	2970	2970
20	508.0	0.250	6.4	24.13	79.16	470	540	960	1060	1190	1290	1370	1480
		0.312	7.9	29.7	97.43	570	670	1180	1300	1470	1590	1690	1830
		0.375	9.5	35.59	116.78	690	800	1420	1570	1760	1910	2030	2200
		0.500	12.7	47.28	155.12	920	1070	1900	2090	2350	2550	2710	2940
		0.625	15.9	58.81	192.95	1150	1340	2380	2620	2940	2970	2970	2970
		0.750	19.1	70.19	230.27	1380	1610	2850	2970	2970	2970	2970	2970
22	559.0	0.312	7.9	32.72	107.36	520	610	1080	1180	1330	1440	2540	1670
		0.375	9.5	39.24	128.73	630	730	1290	1420	1600	1740	1850	2000
		0.500	12.7	52.15	171.09	840	970	1730	1900	2140	2320	2470	2670
		0.625	15.9	64.91	212.95	1050	1220	2160	2380	2680	2900	2970	2970
		0.688	17.5	71.23	233.68	1150	1340	2380	2620	2950	2970	2970	2970
		0.750	19.1	77.51	254.30	1250	1460	2590	2860	2970	2970	2970	2970
24	610.0	0.312	7.9	35.75	117.30	480	560	990	1090	1220	1320	1410	1530
		0.375	9.5	42.88	140.68	570	670	1180	1300	1470	1590	1690	1830
		0.500	12.7	57.04	187.06	770	890	1580	1740	1960	2130	2260	2450
		0.625	15.9	71.00	232.94	960	1110	1980	2180	2450	2660	2830	2970
		0.688	17.5	77.93	255.69	1050	1230	2180	2400	2700	2930	2970	2970
		0.750	19.1	84.83	278.32	1150	1340	2380	2620	2950	2970	2970	2970
26	660.0	0.312	7.9	38.72	127.04	440	510	910	1000	1130	1220	1300	1410
		0.375	9.5	46.45	152.39	530	620	1090	1210	1360	1470	1560	1700
		0.500	12.7	61.79	202.72	710	820	1460	1610	1810	1960	2090	2270
		0.625	15.9	76.98	252.55	890	1030	1830	2020	2270	2460	2610	2840
		0.688	17.5	84.51	277.27	970	1130	2010	2220	2500	2710	2880	2970
		0.750	19.1	92.01	301.87	1060	1240	2200	2420	2720	2950	2970	2970
28	711.0	0.312	7.9	41.75	136.97	410	480	850	930	1050	1140	1210	1310
		0.375	9.5	50.09	164.34	490	570	1020	1120	1260	1370	1450	1570
		0.500	12.7	66.66	218.69	660	760	1360	1500	1680	1820	1940	2100
		0.625	15.9	83.07	272.54	820	960	1700	1870	2110	2280	2430	2630
		0.688	17.5	91.22	299.28	910	1050	1870	2060	2320	2510	2670	2900
		0.750	19.1	99.33	325.89	990	1150	2040	2250	2530	2740	2910	2970

註：鋼管外徑及壁厚可在表列範圍外協議訂購

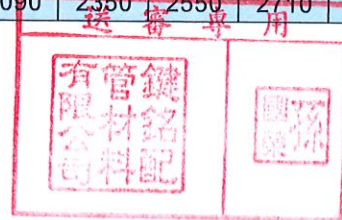


一、API 5L LINE PIPE

Submerged-Arc Welded (S.A.W) (潛弧銲接)

OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量) PLAIN ENDS 平端		TEST PRESSURES(試驗壓力)							
						psi(磅/平方吋)							
in	mm	in	mm	kg/ft	kg/m	A	B	X42	X46	X52	X56	X60	X65
30	762.0	0.375	9.5	53.73	176.29	460	540	950	1050	1180	1270	1350	1470
		0.500	12.7	71.53	234.67	610	710	1270	1400	1570	1700	1810	1960
		0.625	15.9	89.17	292.54	770	890	1590	1750	1960	2130	2270	2460
		0.688	17.5	97.93	321.29	840	980	1740	1920	2160	2340	2490	2700
		0.750	19.1	106.65	349.91	920	1070	1900	2100	2360	2560	2720	2950
		0.812	20.6	114.8	376.63	990	1160	2050	2260	2540	2760	2930	2970
32	813.0	0.375	9.5	57.38	188.24	430	500	890	980	1100	1190	1270	1380
		0.500	12.7	76.4	250.64	580	670	1190	1310	1470	1600	1700	1840
		0.625	15.9	95.26	312.54	720	840	1490	1640	1840	2000	2120	2300
		0.688	17.5	104.64	343.30	790	920	1640	1800	2030	2200	2340	2530
		0.750	19.1	113.97	373.93	860	1000	1780	1970	2210	2400	2550	2770
		1.000	25.4	150.36	493.32	1150	1330	2370	2610	2940	2970	2970	2970
34	864.0	0.375	9.5	61.01	200.18	410	470	840	920	1040	1120	1200	1300
		0.500	12.7	81.26	266.61	540	630	1120	1230	1390	1500	1600	1730
		0.625	15.9	101.36	332.53	680	790	1400	1540	1730	1880	2000	2170
		0.688	17.5	111.35	365.31	750	870	1540	1700	1910	2070	2200	2380
		0.750	19.1	121.30	397.95	810	950	1680	1850	2080	2260	2400	2600
		1.000	25.4	160.10	525.27	1080	1260	2230	2460	2770	2970	2970	2970
36	914.0	0.375	9.5	34.59	211.90	380	450	790	870	980	1060	1130	1230
		0.500	12.7	86.04	282.27	510	600	1060	1160	1310	1420	1510	1640
		0.625	15.9	107.33	352.14	640	750	1320	1460	1640	1780	1890	2050
		0.688	17.5	117.92	386.88	700	820	1450	1600	1800	1950	2080	2250
		0.750	19.1	128.47	421.50	770	890	1590	1750	1970	2130	2270	2460
		0.875	22.2	148.81	488.22	890	1040	1840	2030	2290	2480	2640	2860
38	965.0	0.375	9.5	68.23	223.84	360	420	750	830	930	1010	1070	1160
		0.500	12.7	90.90	298.24	490	560	1000	1100	1240	1340	1430	1550
		0.625	15.9	113.43	372.14	610	710	1250	1380	1550	1680	1790	1940
		0.688	17.5	124.63	408.89	670	780	1380	1520	1710	1850	1970	2140
		0.750	19.1	135.79	445.52	730	850	1500	1660	1860	2020	2150	2330
		1.000	25.4	179.38	588.53	970	1130	2000	2200	2480	2690	2860	2970
40	1016.0	0.375	9.5	71.87	235.79	350	400	710	780	880	960	1020	1100
		0.500	12.7	95.77	314.22	460	540	950	1050	1180	1280	1360	1470
		0.625	15.9	119.52	392.13	850	670	1190	1310	1470	1600	1700	1840
		0.688	17.5	131.34	430.90	630	740	1310	1440	1620	1760	1870	2030
		0.750	19.1	143.12	469.55	690	800	1430	1570	1770	1920	2040	2210
		1.000	25.4	189.12	620.48	920	1070	1900	2090	2350	2550	2710	2940

註：鋼管外徑及壁厚可在表列範圍外協議訂購

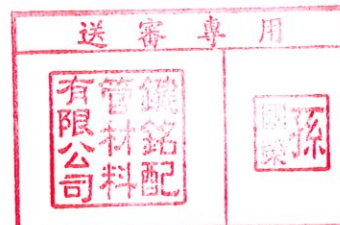


一、API 5L LINE PIPE

Submerged-Arc Welded (S.A.W) (潛弧銲接)

OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量) PLAIN ENDS 平端		TEST PRESSURES(試驗壓力)							
						psi(磅/平方吋)							
in	mm	in	mm	kg/ft	kg/m	A	B	X42	X46	X52	X56	X60	X65
42	1067.0	0.375	9.5	75.51	247.74	330	380	680	750	840	910	970	1050
		0.500	12.7	100.64	330.19	440	510	910	1000	1120	1220	1290	1400
		0.625	15.9	125.62	412.13	550	640	1130	1250	1400	1520	1620	1760
		0.750	19.1	150.44	493.57	660	770	1360	1500	1690	1830	1940	2110
		0.875	22.2	174.34	571.98	770	890	1580	1740	1960	2120	2260	2450
		1.000	25.4	198.86	652.42	880	1020	1810	1990	2240	2430	2580	2800
44	1118.0	0.375	9.5	79.15	259.69	320	370	650	710	800	870	920	1000
		0.500	12.7	105.51	346.16	420	490	860	950	1070	1160	1230	1340
		0.625	15.9	131.71	432.13	520	610	1080	1190	1340	1450	1550	1680
		0.750	19.1	157.76	517.59	630	730	1300	1430	1610	1740	1860	2010
		0.875	22.2	182.85	599.90	730	850	1510	1660	1870	2030	2160	2340
		1.000	25.4	208.60	684.37	840	970	1730	1900	2140	2320	2470	2670
46	1168.0	0.375	9.5	82.72	271.4	300	350	620	680	770	830	890	960
		0.500	12.7	110.28	361.82	400	470	830	910	1030	1110	1180	1280
		0.625	15.9	137.69	451.73	500	580	1040	1140	1280	1390	1480	1600
		0.750	19.1	164.94	541.14	600	700	1240	1370	1540	1670	1780	1930
		0.875	22.2	191.19	627.27	700	810	1440	1590	1790	1940	2060	2240
		1.000	25.4	218.14	715.68	800	930	1650	1820	2050	2220	2360	2560
48	1219.0	0.375	9.5	86.37	283.35	290	340	590	650	740	800	850	920
		0.500	12.7	115.15	377.79	390	450	790	870	980	1070	1130	1230
		0.625	15.9	143.78	471.73	480	560	990	1090	1230	1330	1420	1640
		0.750	19.1	172.26	565.16	580	670	1190	1310	1480	1600	1700	1850
		0.875	22.2	199.7	655.19	670	780	1380	1530	1720	1860	1980	2140
		1.000	25.4	227.88	747.63	770	890	1580	1740	1960	2130	2260	2450

註：鋼管外徑及壁厚可在表列範圍外協議訂購



二、API 5CT CASING&TUBING

API 5CT Casing (套管)

Labels		Outside Diameter D(外徑) mm	Wall Thickness T(壁厚) mm	Drift diameter (通管直徑) mm	Plain end Wpe(重量) kg/m	Hydrostatic test pressure (水壓試驗壓力) psi	
1	2	3	4	5	6	7	
Grade						H40	J55
4.1/2	9.50	114.30	5.21	100.70	14.02	2900	4000
4.1/2	10.50	114.30	5.69	99.74	15.24	---	4400
4.1/2	11.60	114.30	6.35	98.42	16.91	---	4900
5-1/2	14.00	139.70	6.20	124.12	20.41	2800	3900
5-1/2	15.50	139.70	6.98	122.56	22.85	---	4400
5-1/2	17.00	139.70	7.72	121.08	25.13	---	4900
6-5/8	20.00	168.28	7.32	150.46	29.06	2800	3800
6-5/8	24.00	168.28	8.94	147.22	35.13	---	4700
8-5/8	24.00	219.08	6.71	202.48	35.14	---	2700
8-5/8	28.00	219.08	7.72	200.46	40.24	2300	---
8-5/8	32.00	219.08	8.94	200.02 ^e	46.33	2600	3600
8-5/8	32.00	219.08	8.94	198.02	46.33	2600	3600
9-5/8	32.30	244.48	7.92	224.66	46.20	2100	---
9-5/8	36.00	244.48	8.94	222.63	51.93	2300	3200
9-5/8	40.00	244.48	10.03	222.25 ^e	57.99	---	3600
9-5/8	40.00	244.48	10.03	220.45	57.99	---	3600
10-3/4	32.75	273.05	7.09	254.91	46.50	1200	---
10-3/4	40.50	273.05	8.89	251.31	57.91	1600	2100
10-3/4	45.50	273.05	10.16	250.82 ^e	65.87	---	2500
10-3/4	45.50	273.05	10.16	248.77	65.87	---	2500
16	65.00	406.40	9.53	382.57	93.27	1100	---
16	75.00	406.40	11.13	379.37	108.49	---	1800

註：e 表示特殊通管直徑

API 5CT Tubing (油管)

Labels		Outside Diameter D(外徑) mm	Wall Thickness T(壁厚) mm	Drift diameter (通管直徑) mm	Plain end Wpe(重量) kg/m	Hydrostatic test pressure (水壓試驗壓力) psi	
1	2	3	4	5	6	7	
Grade						H40	J55
2-3/8	4.00	60.32	4.24	49.46	5.86	4500	6200
2-3/8	4.60	60.32	4.83	48.28	6.61	5100	7000
2-7/8	6.40	73.02	5.51	59.62	9.17	4800	6600
3-1/2	7.70	88.90	5.49	74.74	11.29	3900	5400
3-1/2	9.20	88.90	6.45	72.82	13.12	4600	6400
4	9.50	101.60	5.74	86.94	13.57	3600	5000
4	10.70	101.60	6.65	85.12	15.57	4200	5800
4-1/2	12.60	114.30	6.88	97.36	18.23	3900	5300



三、ASTM A-53

DIMENSIONS, WEIGHTS AND TEST PRESSURES (尺寸，重量與試驗壓力)

NPS DESIGNATOR (標稱尺寸)	OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量)				SCHEDULE NO.	TEST PRESSURES (試驗壓力)				NO. OF THREADS PER INCH
					PLAIN ENDS (平端)					Grade A		Grade B		
					kg/m		kg/ft			psi	kg/cm ²	psi	kg/cm ²	
in	mm	in	mm	blk	gal	blk	gal							
1/2	0.840	21.3	0.109	2.77	1.27	1.32	0.39	0.40	40	700	50	700	50	14
			0.147	3.73	1.62	1.68	0.49	0.51	80	850	60	850	60	
3/4	1.050	26.7	0.113	2.87	1.69	1.76	0.52	0.54	40	700	50	700	50	14
			0.154	3.91	2.20	2.29	0.67	0.70	80	850	60	850	60	
1	1.315	33.4	0.133	3.38	2.50	2.60	0.76	0.79	40	700	50	700	50	11-1/2
			0.179	4.55	3.24	3.37	0.99	1.03	80	850	60	850	60	
1-1/4	1.660	42.2	0.140	3.56	3.39	3.53	1.03	1.07	40	1200	84	1300	91	11-1/2
			0.191	4.85	4.47	4.65	1.36	1.42	80	1800	127	1900	137	
1-1/2	1.900	48.3	0.145	3.68	4.05	4.21	1.23	1.28	40	1200	84	1300	91	11-1/2
			0.200	5.08	5.41	5.63	1.65	1.71	80	1800	127	1900	134	
2	2.375	60.3	0.154	3.91	5.44	5.66	1.66	1.72	40	2300	162	2500	176	11-1/2
			0.218	5.54	7.48	7.78	2.28	2.37	80	2500	176	2500	176	
2-1/2	2.875	73.0	0.203	5.16	8.63	8.98	2.63	2.74	40	2500	176	2500	176	8
			0.276	7.01	11.41	11.97	3.48	3.62	80	2500	176	2500	176	
3	3.500	88.9	0.125	3.18	6.72	6.99	2.05	2.13	---	1290	91	1500	105	8
			0.156	3.96	8.29	8.62	2.53	2.63	---	1600	112	1870	131	
			0.188	4.78	9.92	10.32	3.02	3.14	---	1930	136	2260	159	
			0.216	5.49	11.29	11.74	3.44	3.58	40	2220	156	2500	176	
			0.250	6.35	12.93	3.45	3.94	4.10	---	2500	176	2500	176	
			0.281	7.14	14.40	14.98	4.39	4.56	---	2500	176	2500	176	
3-1/2	4.000	101.6	0.300	7.62	15.27	15.88	4.65	4.84	80	2500	176	2500	176	8
			0.125	3.18	7.72	8.03	2.35	2.45	---	1120	79	1310	92	
			0.156	3.96	9.53	9.91	2.90	3.02	---	1400	98	1640	115	
			0.188	4.78	11.41	11.87	3.48	3.62	---	1690	119	1970	139	
			0.226	5.74	13.57	14.11	4.14	4.30	40	2030	143	2370	167	
			0.250	6.35	14.92	15.52	4.55	4.73	---	2250	158	2500	176	
4	4.500	114.3	0.281	7.14	16.63	17.30	5.07	5.72	---	2500	176	2500	176	8
			0.318	8.08	18.63	19.38	5.68	5.91	80	2800	197	2800	197	
			0.125	3.18	8.71	9.06	2.65	2.76	---	1000	70	1170	82	
			0.156	3.96	10.78	11.21	3.29	3.42	---	1250	88	1460	103	
			0.188	4.78	12.91	13.43	3.93	4.09	---	1500	105	1750	123	
			0.219	5.56	14.91	15.51	4.54	4.73	---	1750	123	2040	143	
			0.237	6.02	16.07	16.71	4.90	5.09	40	1900	134	2210	155	
			0.250	6.35	16.90	17.58	5.15	5.36	---	2000	141	2330	164	
5	5.563	141.3	0.281	7.14	18.87	19.62	5.75	5.98	---	2250	158	2620	184	8
			0.312	7.92	20.78	21.61	6.33	6.59	---	2500	176	2800	197	
			0.337	8.56	22.32	23.21	6.80	7.08	80	2700	190	2800	197	
			0.156	3.96	13.41	13.95	4.09	4.25	---	1010	71	1180	83	
			0.188	4.78	16.09	16.73	4.90	5.10	---	1220	86	1420	100	
			0.219	5.56	18.61	19.35	5.67	5.90	---	1420	100	1650	116	
			0.258	6.55	21.77	22.64	6.64	6.90	40	1670	117	1950	137	
			0.281	7.14	23.62	24.56	7.20	7.49	---	1820	128	2120	149	
6	6.625	168.3	0.312	7.92	26.05	27.09	7.94	8.26	---	2020	142	2360	166	8
			0.344	8.74	28.57	29.71	8.71	9.06	---	2230	157	2600	183	
			0.375	9.52	30.94	32.18	9.43	9.81	80	2430	171	2800	197	
			0.188	4.78	19.27	20.04	5.87	6.11	---	1020	72	1190	84	
			0.219	5.56	22.31	23.20	6.80	7.07	---	1190	84	1390	98	
			0.250	6.35	25.36	26.37	7.73	8.04	---	1360	96	1580	111	
			0.280	7.11	28.26	29.39	8.61	8.96	40	1520	107	1780	125	
			0.312	7.92	31.32	32.57	9.55	9.93	---	1700	120	1980	139	

註：鋼管外徑及壁厚可在表列範圍外協議訂購



三、ASTM A-53

DIMENSIONS, WEIGHTS AND TEST PRESSURES (尺寸，重量與試驗壓力)

NPS DESIGNATOR (標稱尺寸)	OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量)				SCHEDULE NO.	TEST PRESSURES (試驗壓力)				NO. OF THREADS PER INCH
					PLAIN ENDS (平端)					Grade A		Grade B		
					kg/m		kg/ft							
in	in	mm	in	mm	blk	gal	blk	gal		psi	kg/cm ²	psi	kg/cm ²	
6	6.625	168.3	0.344	8.74	34.39	35.77	10.48	10.98	---	1870	131	2180	153	
			0.375	9.52	37.28	38.77	11.36	11.82	---	2040	143	2380	167	
			0.432	10.97	42.56	44.26	12.97	13.49	80	2350	165	2740	193	
8	8.625	219.1	0.188	4.78	25.26	26.27	7.70	8.01	---	780	55	920	65	
			0.203	5.16	27.22	28.31	8.30	8.63	---	850	60	1000	70	
			0.219	5.56	29.28	30.45	8.92	9.28	---	910	64	1070	75	
			0.250	6.35	33.31	34.64	10.12	10.56	20	1040	73	1220	86	
			0.277	7.04	36.31	37.76	11.07	11.51	30	1160	82	1350	95	
			0.312	7.92	41.24	42.89	12.57	13.07	---	1300	91	1520	107	
			0.322	8.18	42.55	44.25	12.97	13.49	40	1340	94	1570	110	
			0.344	8.74	47.15	48.75	13.82	14.37	---	1440	101	1680	118	
			0.375	9.52	51.17	52.77	15.00	15.60	---	1570	110	1830	129	
			0.406	10.31	55.20	56.80	16.18	16.83	60	1700	120	2000	141	
0.438	11.13	59.36	60.96	17.40	18.09	---	1830	129	2130	150				
0.500	12.70	67.23	68.83	19.70	20.49	80	2090	147	2430	171				
10	10.750	273.0	0.188	4.78	31.62	32.88	10.02	9.64	---	630	44	730	51	
			0.203	5.16	34.08	35.44	10.80	10.39	---	680	48	800	56	
			0.219	5.56	36.67	38.14	11.62	11.18	---	730	51	860	60	
			0.250	6.35	41.75	43.42	13.23	12.73	20	840	59	980	69	
			0.279	7.09	46.49	48.35	14.74	14.17	---	930	65	1090	77	
			0.307	7.80	51.01	53.05	16.17	15.55	30	1030	72	1200	84	
			0.344	8.74	56.96	59.24	18.06	17.36	---	1150	81	1340	94	
			0.365	9.27	60.27	62.70	19.11	18.38	40	1220	86	1430	101	
			0.438	11.13	71.87	74.74	22.78	21.91	---	1470	103	1710	120	
			0.500	12.70	81.52	84.78	25.84	24.85	60	1670	117	1950	137	
12	12.750	323.8	0.203	5.16	40.55	42.17	12.36	12.85	---	570	40	670	47	
			0.219	5.56	43.63	45.38	13.30	13.83	---	620	44	720	51	
			0.250	6.35	49.71	51.70	15.15	15.76	20	710	50	820	58	
			0.281	7.14	55.75	57.98	16.99	17.67	---	790	56	930	65	
			0.312	7.92	61.69	64.16	18.80	19.56	---	880	62	1030	72	
			0.330	8.38	65.18	67.79	19.87	20.66	30	930	65	1090	77	
			0.344	8.74	67.90	70.62	20.70	21.52	---	970	68	1130	79	
			0.375	9.52	73.78	76.73	22.49	23.39	---	1060	75	1240	87	
			0.406	10.31	79.70	82.89	24.29	25.26	40	1150	81	1340	94	
			0.438	11.13	85.82	89.25	26.16	27.20	---	1240	87	1440	101	
0.500	12.70	97.43	101.33	29.70	30.88	---	1410	99	1650	116				
14	14.000	355.6	0.210	5.33	46.04	47.88	14.03	14.59	---	540	38	630	44	
			0.219	5.56	47.99	49.97	14.63	15.21	---	560	39	660	46	
			0.250	6.35	54.69	56.88	16.67	17.34	10	640	45	750	53	
			0.281	7.14	61.35	63.80	18.70	19.45	---	720	51	840	59	
			0.312	7.92	67.90	70.62	20.70	21.52	20	800	56	940	66	
			0.344	8.74	74.76	77.75	22.79	23.70	---	880	62	1030	72	
			0.375	9.52	81.25	84.50	24.77	25.76	30	960	67	1120	79	
			0.438	11.13	94.55	98.33	28.82	29.97	40	1130	79	1310	92	
			0.469	11.91	100.94	104.98	30.77	32.00	---	1210	85	1410	99	
			0.500	12.70	107.39	111.69	32.73	34.04	---	1290	91	1500	105	
16	16.000	406.4	0.219	5.56	54.96	57.16	16.75	17.42	---	490	34	570	40	
			0.250	6.35	62.64	65.15	19.09	19.86	10	560	39	660	46	
			0.281	7.14	70.30	73.11	21.43	22.28	---	630	44	740	52	
			0.312	7.92	77.83	80.94	23.72	24.67	20	700	49	820	58	

註：鋼管外徑及壁厚可在表列範圍外協議訂購

1. 厚度許可差(TOLERANCE ON THICKNESS):+無規定/-12.5% (+NOT SPECIFIED/-12.5%)
2. 重量許可差(TOLERANCE ON WEIGHT):+無規定/-10%



三、ASTM A-53

DIMENSIONS, WEIGHTS AND TEST PRESSURES (尺寸，重量與試驗壓力)

NPS DESIGNATOR (標稱尺寸)	OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量)				SCHEDULE NO.	TEST PRESSURES (試驗壓力)				NO. OF THREADS PER INCH
					PLAIN ENDS (平端)					Grade A		Grade B		
					kg/m		kg/ft			psi	kg/cm ²	psi	kg/cm ²	
in	mm	in	mm	blk	gal	blk	gal							
16	16.000	406.4	0.344	8.74	85.71	89.14	26.12	27.17	---	770	54	900	63	---
			0.375	9.52	93.17	96.90	28.40	29.53	30	840	59	980	69	
			0.438	11.13	108.49	112.83	33.07	34.39	---	990	70	1150	81	
			0.469	11.91	115.86	120.49	35.31	36.73	---	1060	75	1230	86	
			0.500	12.70	123.30	128.23	37.58	39.09	40	1120	79	1340	92	
18	18.000	457.2	0.250	6.35	70.60	73.42	21.52	22.38	10	500	35	580	41	---
			0.281	7.14	79.24	82.41	24.15	25.12	---	560	39	660	46	
			0.312	7.92	87.75	91.26	26.75	27.82	20	620	44	730	51	
			0.344	8.74	96.66	100.53	29.46	30.64	---	690	49	800	56	
			0.375	9.52	105.10	109.30	32.03	33.32	---	750	53	880	62	
			0.406	10.31	113.62	118.16	34.63	36.02	---	810	57	950	67	
			0.438	11.13	122.43	127.33	37.32	38.81	30	880	62	1020	72	
			0.469	11.91	130.78	136.01	39.86	41.46	---	940	66	1090	77	
			0.500	12.70	139.20	144.77	42.43	44.13	---	1000	70	1170	82	
20	20.000	508.0	0.250	6.35	78.55	81.69	23.94	24.90	10	450	32	520	37	---
			0.281	7.14	88.19	91.72	26.88	27.96	---	510	36	590	41	
			0.312	7.92	97.67	101.58	29.77	30.96	---	560	39	660	46	
			0.344	8.74	107.60	111.90	32.80	34.11	---	620	44	720	51	
			0.375	9.52	117.02	121.70	35.67	37.09	20	680	48	790	56	
			0.406	10.31	126.53	131.59	38.57	40.11	---	730	51	850	60	
			0.438	11.13	136.37	141.82	41.57	43.23	---	790	56	920	65	
			0.469	11.91	145.70	151.53	44.41	46.19	---	850	60	950	67	
			0.500	12.70	155.12	161.32	47.28	49.17	30	900	63	1050	74	
			0.594	15.09	183.42	190.76	55.91	58.14	40	1170	82	1250	88	
24	24.000	609.6	0.250	6.35	94.46	98.24	28.79	29.94	10	380	27	440	31	---
			0.281	7.14	106.08	110.32	32.33	33.63	---	420	30	490	34	
			0.312	7.92	117.51	122.21	35.82	37.25	---	470	33	550	39	
			0.344	8.74	129.50	137.68	39.47	41.05	---	520	37	600	42	
			0.375	9.52	140.88	146.52	42.94	44.66	20	560	39	660	46	
			0.406	10.31	152.37	158.46	46.44	48.30	---	610	43	710	50	
			0.438	11.13	164.26	170.83	50.07	52.07	---	660	46	770	54	
			0.469	11.91	175.54	182.56	53.50	55.63	---	700	49	820	58	
			0.500	12.70	186.94	194.42	56.98	59.26	---	750	53	880	62	
			0.562	14.27	209.50	217.88	63.86	66.41	30	840	59	980	69	
			0.688	17.48	255.24	265.45	77.80	80.91	40	1030	72	1200	84	
26	26.000	660.4	0.250	6.35	102.42	106.52	31.22	32.47	---	350	25	400	28	---
			0.281	7.14	115.02	119.62	35.06	36.46	---	390	27	450	32	
			0.312	7.92	127.43	132.53	38.84	40.39	10	430	30	500	35	
			0.344	8.74	140.45	146.07	42.81	44.52	---	480	34	560	39	
			0.375	9.52	152.80	158.91	46.57	48.44	---	520	37	610	43	
			0.406	10.31	165.28	171.89	50.38	52.39	---	560	39	660	46	
			0.438	11.13	178.20	185.33	54.32	56.49	---	610	43	710	50	
			0.469	11.91	190.46	198.08	58.05	60.37	---	650	46	760	53	
			0.500	12.70	202.85	210.96	61.83	64.30	20	690	49	810	57	
			0.562	14.27	227.37	236.46	69.30	72.07	---	780	55	910	64	

註：鋼管外徑及壁厚可在表列範圍外協議訂購

1. 厚度許可差(TOLERANCE ON THICKNESS):+無規定/-12.5%。(+NOT SPECIFIED/-12.5%)

2. 重量許可差(TOLERANCE ON WEIGHT):+無規定/-10%



四、BS1387

1.輕級鋼管 (LIGHT TUBES)

標稱尺寸		鋼管外徑			鋼管厚度	鋼管重量	
mm	in	標準	最大	最小		無螺紋及接頭	有螺紋及接頭
		mm	mm	mm	mm	kg/m	kg/m
15	1/2	21.2	21.4	21.0	2.0	0.947	0.956
20	3/4	26.7	26.9	26.4	2.3	1.38	1.39
25	1	33.5	33.8	33.2	2.6	1.98	2.00
32	1-1/4	42.2	42.5	41.9	2.6	2.54	2.57
40	1-1/2	48.1	48.4	47.8	2.9	3.23	3.27
50	2	59.9	60.2	59.6	2.9	4.08	4.15
65	2-1/2	75.6	76.0	75.2	3.2	5.71	5.83
80	3	88.3	88.7	87.9	3.2	6.72	6.89
100	4	113.5	113.9	113.0	3.6	9.75	10.0

2.中級鋼管 (MEDIUM TUBES)

標稱尺寸		鋼管外徑			鋼管厚度	鋼管重量	
mm	in	標準	最大	最小		無螺紋及接頭	有螺紋及接頭
		mm	mm	mm	mm	kg/m	kg/m
15	1/2	21.4	21.7	21.1	2.6	1.21	1.22
20	3/4	26.9	27.2	26.6	2.6	1.56	1.57
25	1	33.8	34.2	33.4	3.2	2.41	2.43
32	1-1/4	42.5	42.9	42.1	3.2	3.10	3.13
40	1-1/2	48.4	48.8	48.0	3.2	3.57	3.61
50	2	60.3	60.8	59.8	3.6	5.03	5.10
65	2-1/2	76.0	76.6	75.4	3.6	6.43	6.55
80	3	88.8	89.5	88.1	4.0	8.37	8.54
100	4	114.1	114.9	113.3	4.5	12.2	12.5
125	5	139.7	140.6	138.7	5.0	16.6	17.1
150	6	165.1	166.1	164.1	5.0	19.7	20.3



四、BS1387

3.重級鋼管 (HEAVY TUBES)

標稱尺寸		鋼管外徑			鋼管厚度	鋼管重量	
mm	in	標準	最大	最小		無螺紋及接頭	有螺紋及接頭
		mm	mm	mm	mm	kg/m	kg/m
15	1/2	21.4	21.7	21.1	3.2	1.44	1.45
20	3/4	26.9	27.2	26.6	3.2	1.87	1.88
25	1	33.8	34.2	33.4	4.0	2.94	2.96
32	1-1/4	42.5	42.9	42.1	4.0	3.80	3.83
40	1-1/2	48.4	48.8	48.0	4.0	4.38	4.42
50	2	60.3	60.8	59.8	4.5	6.19	6.26
65	2-1/2	76.0	76.6	75.4	4.5	7.93	8.05
80	3	88.8	89.5	88.1	5.0	10.3	10.5
100	4	114.1	114.9	113.3	5.4	14.5	14.8
125	5	139.7	140.6	138.7	5.4	17.9	18.4
150	6	165.1	166.1	164.1	5.4	21.3	21.9

註：

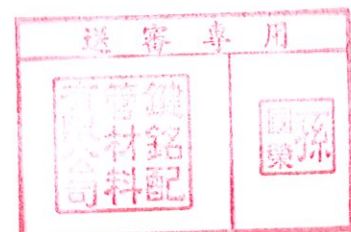
1.厚度許可差 (TOLERANCE ON THICKNESS) :

輕級+不限制/-8%，中、重級+不限制/-10%

(+NOT SPECIFIED/-8%FOR LIGHT TUBES,+NOT SPECIFIED/-10%FOR MEDIUM&HEAVY TUBES)

2.重量許可差 (TOLERANCE ON WEIGHT) :

+10%/-8%



五、電線電纜用鍍鋅鋼製導線管

(Galvanized Steel Conduits for Electrical Wires and Cables)

CNS 2606 C4060 中華民國國家標準

厚鋼電線管尺度、重量及有效螺紋長度

管之稱呼 DESIGNATOR	外徑 O.D. mm	外徑之容許差 TOLERANCE ON O.D. mm	厚度 THICKNESS mm	重量 WEIGHT kg/m	有效螺紋長度 EFFECTIVE LENGTH OF THREADED PART mm	
					最長 MAX.	最短 MIN.
G16	21.0	±0.3	2.3	1.06	19	16
G22	26.5	±0.3	2.3	1.37	22	19
G28	33.3	±0.3	2.5	1.90	25	22
G36	41.9	±0.3	2.5	2.43	28	25
G42	47.8	±0.3	2.5	2.79	28	25
G54	59.6	±0.3	2.8	3.92	32	28
G70	75.2	±0.3	2.8	5.00	36	32
G82	87.9	±0.3	2.8	5.88	40	36
G92	100.7	±0.4	3.5	8.39	42	36
G104	113.4	±0.4	3.5	9.48	45	39

無螺紋電線管之尺度、重量

管之稱呼 DESIGNATOR	外徑 O.D. mm	外徑之容許差 TOLERANCE ON O.D. mm	厚度 THICKNESS mm	重量 WEIGHT kg/m
E19	19.1	±0.15	1.2	0.530
E25	25.4	±0.15	1.2	0.716
E31	31.8	±0.15	1.4	1.05
E39	38.1	±0.15	1.4	1.27
E51	50.8	±0.15	1.4	1.71
E63	63.5	±0.25	1.6	2.44
E75	76.2	±0.25	1.8	3.30

註：

1. JIS C8305 日本工業規格鋼製電線管與本規格近似。(EQUIVALENT TO JIS C8305)

2. 重量許可差(TOLERANCE ON WEIGHT): +不限制/-7%。(+NOT SPECIFIED/-7%)



六、配管用碳鋼鋼管 (Carbon Steel Pipes for Ordinary Piping) CNS 6445 G3127 中華民國國家標準

CNS 6445 配管用碳鋼鋼管之尺度、重量及尺度許可差

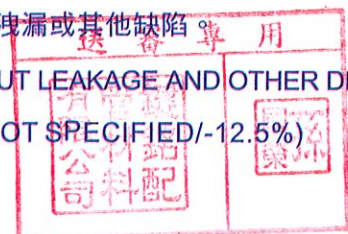
標稱管徑 DESIGNATOR		外徑 O.D. mm	外徑許可差 TOLERANCE ON O.D.		厚度 THICKNESS mm	不包括接頭之單位重量 UNIT WEIGHT EXCLUSIVE COUPLING kg/m
A	B		螺紋鋼管 THREADED	其他鋼管 OTHERS		
15	1/2	21.7	±0.5mm	±0.5mm	2.8	1.31
20	3/4	27.2	±0.5mm	±0.5mm	2.8	1.68
25	1	34.0	±0.5mm	±0.5mm	3.2	2.43
32	1-1/4	42.7	±0.5mm	±0.5mm	3.5	3.38
40	1-1/2	48.6	±0.5mm	±0.5mm	3.5	3.89
50	2	60.5	±0.5mm	±1%	3.8	5.31
65	2-1/2	76.3	±0.7mm	±1%	4.2	7.47
80	3	89.1	±0.8mm	±1%	4.2	8.79
90	3-1/2	101.6	±0.8mm	±1%	4.2	10.1
100	4	114.3	±0.8mm	±1%	4.5	12.2
125	5	139.8	±0.8mm	±1%	4.5	15.0
150	6	165.2	±0.8mm	±1.6mm	5.0	19.8
200	8	216.3	±1.0mm	±0.8%	5.8	30.1
250	10	267.4	±1.3mm	±0.8%	6.6	42.4
300	12	318.5	±1.5mm	±0.8%	6.9	53.0
350	14	355.6	±0.5%	±0.8%	7.9	67.7
400	16	406.4	±0.5%	±0.8%	7.9	77.6
450	18	457.2	±0.5%	±0.8%	7.9	87.5
500	20	508.0	±0.5%	±0.8%	7.9	97.4

註：

1.適用種類SGP。(EQUIVALENT TO JIS G3452 SGP)

2.水壓試驗(HYDROSTATIC TEST):鋼管經26kg/cm²之水壓試驗，無洩漏或其他缺陷。
(ITS STRENGTH TO WITHSTAND THE PRESSURE 26kg/cm² WITHOUT LEAKAGE AND OTHER DEFECTS.)

3.厚度許可差(TOLERANCE ON THICKNESS):+無規定/-12.5%。(+NOT SPECIFIED/-12.5%)

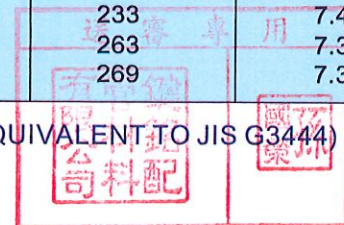


七、一般結構用碳鋼鋼管 (Carbon Steel Pipes for General Structures)

CNS 4435 G3102 中華民國國家標準

外徑 O.D.	厚度 WALL THICKNESS	參考值 INFORMATIVE REFERENCE				
		單位重量 WEIGHT	截面積 CROSS-SECTIONAL AREA	慣性矩 GEOMETRICAL MOMENT OF INERTIA	截面模數 MODULUS OF SECTION	迴轉半徑 RADIUS OF GYRATION OF AREA
mm	mm	kg/m	cm ²	cm ⁴	cm ³	cm
21.7	2.0	0.972	1.238	0.607	0.560	0.700
27.2	2.0	1.24	1.583	1.26	0.930	0.890
	2.3	1.41	1.799	1.41	1.03	0.880
34.0	2.3	1.80	2.291	2.89	1.70	1.12
42.7	2.3	2.29	2.919	5.97	2.80	1.43
	2.5	2.48	3.157	6.40	3.00	1.42
48.6	2.3	2.63	3.345	8.99	3.70	1.64
	2.5	2.84	3.621	9.65	3.97	1.63
	2.8	3.16	4.029	10.6	4.36	1.62
	3.2	3.58	4.564	11.8	4.86	1.61
60.5	2.3	3.30	4.205	17.8	5.90	2.06
	3.2	4.52	5.760	23.7	7.84	2.03
	4.0	5.57	7.100	28.5	9.41	2.00
76.3	2.8	5.08	6.465	43.7	11.5	2.60
	3.2	5.77	7.349	49.2	12.9	2.59
	4.0	7.13	9.085	59.5	15.6	2.58
89.1	2.8	5.96	7.591	70.7	15.9	3.05
	3.2	6.78	8.636	79.8	17.9	3.04
101.6	3.2	7.76	9.892	120	23.6	3.48
	4.0	9.63	12.26	146	28.8	3.45
	5.0	11.9	15.17	177	34.9	3.42
114.3	3.2	8.77	11.17	172	30.2	3.93
	3.5	9.56	12.18	187	32.7	3.92
	4.5	12.2	15.52	234	41.0	3.89
139.8	3.6	12.1	15.40	357	51.1	4.82
	4.0	13.4	17.07	394	56.3	4.80
	4.5	15.0	19.13	438	62.7	4.79
	6.0	19.8	25.22	566	80.9	4.74
165.2	4.5	17.8	22.72	734	88.9	5.68
	5.0	19.8	25.16	808	97.8	5.67
	6.0	23.6	30.01	952	115	5.63
	7.1	27.7	35.26	110x10	134	5.60
190.7	4.5	20.7	26.32	114x10	120	6.59
	5.3	24.2	30.87	133x10	139	6.56
	6.0	27.3	34.82	149x10	156	6.53
	7.0	31.7	40.40	171x10	179	6.50
	8.2	36.9	47.01	196x10	206	6.46
216.3	4.5	23.5	29.94	168x10	155	7.49
	5.8	30.0	38.36	213x10	197	7.45
	6.0	31.1	39.64	219x10	203	7.44
	7.0	36.1	46.03	252x10	233	7.40
	8.0	41.1	52.35	284x10	263	7.37
	8.2	42.1	53.61	291x10	269	7.36

註：1. 適用種類 STK 290/STK 400/STK 490/STK 500/STK 540 (EQUIVALENT TO JIS G3444)
2. 鋼管外徑及壁厚可在表列範圍外協議訂購



七、一般結構用碳鋼鋼管 (Carbon Steel Pipes for General Structures)
CN S4435 G3102 中華民國國家標準

外徑 O.D.	厚度 WALL THICKNESS	單位重量 WEIGHT	參考值 INFORMATIVE REFERENCE			
			截面積 CROSS-SECTIONAL AREA	慣性矩 GEOMETRICAL MOMENT OF INERTIA	截面模數 MODULUS OF SECTION	迴轉半徑 RADIUS OF GYRATION OF AREA
mm	mm	kg/m	cm ²	cm ⁴	cm ³	cm
267.4	6.0	38.7	49.27	421x10	315	9.24
	6.6	42.4	54.08	460x10	344	9.22
	7.0	45.0	57.26	486x10	363	9.21
	8.0	51.2	65.19	549x10	411	9.18
	9.0	57.3	73.06	611x10	457	9.14
	9.3	59.2	75.41	629x10	470	9.13
318.5	6.0	46.2	58.91	719x10	452	11.1
	6.9	53.0	67.55	820x10	515	11.0
	8.0	61.3	78.04	941x10	591	11.0
	9.0	68.7	87.51	105x10 ²	659	10.9
	10.3	78.3	99.73	119x10 ²	744	10.9
355.6	6.4	55.1	70.21	107x10 ²	602	12.3
	7.9	67.7	86.29	130x10 ²	734	12.3
	9.0	76.9	98.00	147x10 ²	828	12.3
	9.5	81.1	103.3	155x10 ²	871	12.2
	12.0	102	129.5	191x10 ²	108x10	12.2
	12.7	107	136.8	201x10 ²	113x10	12.1
406.4	7.9	77.6	98.90	196x10 ²	967	14.1
	9.0	88.2	112.4	222x10 ²	109x10	14.1
	9.5	93.0	118.5	233x10 ²	115x10	14.0
	12.0	117	148.7	289x10 ²	142x10	14.0
	12.7	123	157.1	305x10 ²	150x10	13.9
	16.0	154	196.2	374x10 ²	184x10	13.8
	19.0	182	231.2	435x10 ²	214x10	13.7
457.2	9.0	99.5	126.7	318x10 ²	140x10	15.8
	9.5	105	133.6	335x10 ²	147x10	15.8
	12.0	132	167.8	416x10 ²	182x10	15.7
	12.7	139	177.3	438x10 ²	192x10	15.7
	16.0	174	221.8	540x10 ²	236x10	15.6
	19.0	205	261.6	629x10 ²	275x10	15.5
500.0	9.0	109	138.8	418x10 ²	167x10	17.4
	12.0	144	184.0	548x10 ²	219x10	17.3
	14.0	168	213.8	632x10 ²	253x10	17.2
508.0	7.9	97.4	124.1	388x10 ²	153x10	17.7
	9.0	111	141.1	439x10 ²	173x10	17.6
	9.5	117	148.8	462x10 ²	182x10	17.6
	12.0	147	187.0	575x10 ²	227x10	17.5
	12.7	155	197.6	606x10 ²	239x10	17.5
	14.0	171	217.3	663x10 ²	261x10	17.5
	16.0	194	247.3	749x10 ²	295x10	17.4
	19.0	229	291.9	874x10 ²	344x10	17.3
	22.0	264	335.9	994x10 ²	391x10	17.2

註：1. 適用種類 STK 290/STK 400/STK 490/STK 500/STK 540 (EQUIVALENT TO JIS G3444)
2. 鋼管外徑及壁厚可在表列範圍外協議訂購



七、一般結構用碳鋼鋼管 (Carbon Steel Pipes for General Structures)

CN S4435 G3102 中華民國國家標準

外徑 O.D.	厚度 WALL THICKNESS	單位重量 WEIGHT	參考值 INFORMATIVE REFERENCE			
			截面積 CROSS-SECTIONAL AREA	慣性矩 GEOMETRICAL MOMENT OF INERTIA	截面模數 MODULUS OF SECTION	迴轉半徑 RADIUS OF GYRATION OF AREA
mm	mm	kg/m	cm ²	cm ⁴	cm ³	cm
558.8	9.0	122	155.5	588x10 ²	210x10	19.4
	12.0	162	206.1	771x10 ²	276x10	19.3
	16.0	214	272.8	101x10 ³	360x10	19.2
	19.0	253	322.2	118x10 ³	421x10	19.1
	22.0	291	371.0	134x10 ³	479x10	19.0
600	9.0	131	167.1	730x10 ³	243x10	20.9
	12.0	174	221.7	958x10 ³	320x10	20.8
	14.0	202	257.7	111x10 ³	369x10	20.7
	16.0	230	293.6	125x10 ³	418x10	20.7
609.6	9.0	133	169.8	766x10 ²	251x10	21.2
	9.5	141	179.1	806x10 ²	265x10	21.2
	12.0	177	225.3	101x10 ³	330x10	21.1
	12.7	187	238.2	106x10 ³	348x10	21.1
	14.0	206	262.0	116x10 ³	381x10	21.1
	16.0	234	298.4	132x10 ³	431x10	21.0
	19.0	277	352.5	154x10 ³	505x10	20.9
22.0	319	406.1	176x10 ³	576x10	20.8	
700	9.0	153	195.4	117x10 ³	333x10	24.4
	12.0	204	259.4	154x10 ³	439x10	24.3
	14.0	237	301.7	178x10 ³	507x10	24.3
	16.0	270	343.8	201x10 ³	575x10	24.2
711.2	9.0	156	198.5	122x10 ³	344x10	24.8
	12.0	207	263.6	161x10 ³	453x10	24.7
	14.0	241	306.6	186x10 ³	524x10	24.7
	16.0	274	349.4	211x10 ³	594x10	24.6
	19.0	324	413.2	248x10 ³	696x10	24.5
	22.0	374	476.3	283x10 ³	796x10	24.4
812.8	9.0	178	227.3	184x10 ³	452x10	28.4
	12.0	237	301.9	242x10 ³	596x10	28.3
	14.0	276	351.3	280x10 ³	690x10	28.2
	16.0	314	400.5	318x10 ³	782x10	28.2
	19.0	372	473.8	373x10 ³	919x10	28.1
	22.0	429	546.6	428x10 ³	105x10 ²	28.0
914.4	12.0	267	340.2	348x10 ³	758x10	31.9
	14.0	311	396.0	401x10 ³	878x10	31.8
	16.0	354	451.6	456x10 ³	997x10	31.8
	19.0	420	534.5	536x10 ³	117x10 ²	31.7
	22.0	484	616.5	614x10 ³	134x10 ²	31.5
1016.0	12.0	297	378.5	477x10 ³	939x10	35.5
	14.0	346	440.7	553x10 ³	109x10 ²	35.4
	16.0	395	502.7	628x10 ³	124x10 ²	35.4
	19.0	467	595.1	740x10 ³	146x10 ²	35.2
	22.0	539	687.0	849x10 ³	167x10 ²	35.2

註：1. 適用種類 STK 290/STK 400/STK 490/STK 500/STK 540 (EQUIVALENT TO JIS G3444)

2. 鋼管外徑及壁厚可在表列範圍外協議訂購



八、壓力配管用碳鋼鋼管 (Carbon Steel Pipes for Pressure Service)

CNS 4626 3111 中華民國國家標準

壓力配管用碳鋼鋼管之尺度及重量

標稱管徑 DESIGNATOR		外徑 O.D.	標稱厚度號數											
			Sch10		Sch20		Sch30		Sch40		Sch60		Sch80	
			厚度 THICK	單位重量 WEIGHT	厚度 THICK	單位重量 WEIGHT	厚度 THICK	單位重量 WEIGHT	厚度 THICK	單位重量 WEIGHT	厚度 THICK	單位重量 WEIGHT	厚度 THICK	單位重量 WEIGHT
A	B	mm	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m
15	1/2	21.7	-	-	-	-	-	-	2.8	1.31	3.2	1.46	3.7	1.64
20	3/4	27.2	-	-	-	-	-	-	2.9	1.74	3.4	2.00	3.9	2.24
25	1	34.0	-	-	-	-	-	-	3.4	2.57	3.9	2.89	4.5	3.27
32	1-1/4	42.7	-	-	-	-	-	-	3.6	3.47	4.5	4.24	4.9	4.57
40	1-1/2	48.6	-	-	-	-	-	-	3.7	4.10	4.5	4.89	5.1	5.47
50	2	60.5	-	-	3.2	4.52	-	-	3.9	5.44	4.9	6.72	5.5	7.46
65	2-1/2	76.3	-	-	4.5	7.97	-	-	5.2	9.12	6.0	10.4	7.0	12.0
80	3	89.1	-	-	4.5	9.39	-	-	5.5	11.3	6.6	13.4	7.6	15.3
90	3-1/2	101.6	-	-	4.5	10.8	-	-	5.7	13.5	7.0	16.3	8.1	18.7
100	4	114.3	-	-	4.9	13.2	-	-	6.0	16.0	7.1	18.8	8.6	22.4
125	5	139.8	-	-	5.1	16.9	-	-	6.6	21.7	8.1	26.3	9.5	30.5
150	6	165.2	-	-	5.5	21.7	-	-	7.1	27.7	9.3	35.8	11.0	41.8
200	8	216.3	-	-	6.4	33.1	7.0	36.1	8.2	42.1	10.3	52.3	12.7	63.8
250	10	267.4	-	-	6.4	41.2	7.8	49.9	9.3	59.2	12.7	79.8	15.1	93.9
300	12	318.5	-	-	6.4	49.3	8.4	64.2	10.3	78.3	14.3	107	17.4	129
350	14	355.6	6.4	55.1	7.9	67.7	9.5	81.1	11.1	94.3	15.1	127	19.0	158
400	16	406.4	6.4	63.1	7.9	77.6	9.5	93.0	12.7	123	16.7	160	21.4	203
450	18	457.2	6.4	71.1	7.9	87.5	11.1	122	14.3	156	19.0	205	23.8	254
500	20	508.0	6.4	79.2	9.5	117	12.7	155	15.1	184	20.6	248	26.2	311
550	22	558.8	6.4	87.2	9.5	129	12.7	171	15.9	213	-	-	-	-
600	24	609.6	6.4	95.2	9.5	141	14.3	210	-	-	-	-	-	-
650	26	660.4	7.9	127	12.7	203	-	-	-	-	-	-	-	-

註：

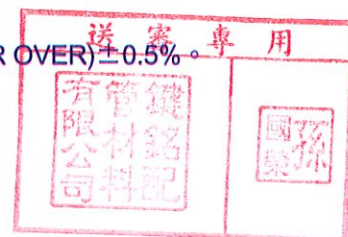
1.適用種類：STPG 370/STPG 410。(EQUIVALENT TO JIS G3454 STPG 370/STPG 410)

2.外徑公差(TOLERANCE ON O.D.)。

25A以下(OR UNDER)±0.3mm，32A至(TO)300A±0.8%，350A以上(OR OVER)±0.5%。

3.厚度公差(TOLERANCE ON THICKNESS):

未滿(UNDER)3mm±0.3mm，3mm以上(OR OVER)±10%。



九、鋼管樁 (Steel pipe piles)

CNS 7934 A2114 中華民國國家標準

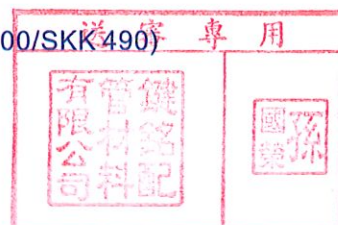
鋼管之尺度及質量

外徑 D	厚度 T	斷面積 A	單位質量 W	參考			
				慣性矩	斷面模數	迴轉半徑	外側表面積
mm	mm	cm ²	kg/m	I cm ⁴	Z cm ³	I cm	m ² /m
318.5	6.9	67.5	53.0	820X10	51.5X10	11.0	1.00
	10.3	99.7	78.3	119X10 ²	74.4X10	10.9	1.00
355.6	6.4	70.2	55.1	107X10 ²	60.2X10	12.4	1.12
	7.9	86.3	67.7	130X10 ²	73.4X10	12.3	1.12
	11.1	120.1	94.3	178X10 ²	100.3X10	12.2	1.12
400	9	110.6	86.8	211X10 ²	105.7X10	13.8	1.26
	12	146.3	115	276X10 ²	137.8X10	13.7	1.26
406.4	9	112.4	88.2	222X10 ²	109.2X10	14.1	1.28
	12	148.7	117	289X10 ²	142.4X10	14.0	1.28
500	9	138.8	109	418X10 ²	167X10	17.4	1.57
	12	184.0	144	548X10 ²	219X10	17.3	1.57
	14	213.8	168	632X10 ²	253X10	17.2	1.57
508.0	9	141.1	111	439X10 ²	173X10	17.6	1.60
	12	187.0	147	575X10 ²	227X10	17.5	1.60
	14	217.3	171	663X10 ²	261X10	17.5	1.60
600	9	167.1	131	730X10 ²	243X10	20.9	1.88
	12	221.7	174	958X10 ²	319X10	20.8	1.88
	14	257.7	202	111X10 ³	369X10	20.7	1.88
	16	293.6	230	125X10 ³	417X10	20.7	1.88
609.6	9	169.8	133	766X10 ³	251X10	21.2	1.92
	12	225.3	177	101X10 ³	330X10	21.1	1.92
	14	262.0	206	116X10 ³	381X10	21.1	1.92
	16	298.4	234	132X10 ³	431X10	21.0	1.92
700	9	195.4	153	117X10 ³	333X10	24.4	2.20
	12	259.4	204	154X10 ³	439X10	24.3	2.20
	14	301.7	237	178X10 ³	507X10	24.3	2.20
	16	343.8	270	201X10 ³	575X10	24.2	2.20
711.2	9	198.5	156	122X10 ³	344X10	24.8	2.23
	12	263.6	207	161X10 ³	453X10	24.7	2.23
	14	306.6	241	186X10 ³	524X10	24.7	2.23
	16	349.4	274	211X10 ³	594X10	24.6	2.23

註：

1.適用種類：SKK 400/SKK 490。(EQUIVALENT TO JIS A525 SKK 400/SKK 490)

2.鋼管樁部位別分為上段樁/中段樁/下段樁。



九、鋼管樁 (Steel pipe piles)

CNS 7934 A2114 中華民國國家標準

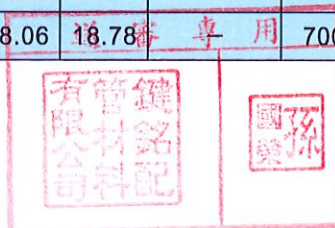
鋼管之尺度及質量

外徑 D	厚度 T	斷面積 A	單位質量 W	參考			
				慣性矩	斷面模數	迴轉半徑	外側表面積
mm	mm	cm ²	kg/m	I cm ⁴	Z cm ³	I cm	m ² /m
800	9	223.6	176	175X10 ³	437X10	28.0	2.51
	12	297.1	233	231X10 ³	577X10	27.9	2.51
	14	345.7	271	267X10 ³	688X10	27.8	2.51
	16	394.1	309	303X10 ³	757X10	27.7	2.51
812.8	9	227.3	178	184X10 ³	452X10	28.4	2.55
	12	301.9	237	242X10 ³	596X10	28.3	2.55
	14	351.3	276	280X10 ³	690X10	28.2	2.55
	16	400.5	314	318X10 ³	782X10	28.2	2.55
900	12	334.8	263	330X10 ³	733X10	31.4	2.83
	14	389.7	306	382X10 ³	850X10	31.3	2.83
	16	444.3	349	434X10 ³	965X10	31.3	2.83
	19	525.9	413	510X10 ³	113X10 ²	31.2	2.83
914.4	12	340.2	267	346X10 ³	758X10	31.9	2.87
	14	396.0	311	401X10 ³	878X10	31.8	2.87
	16	451.6	354	456X10 ³	997X10	31.8	2.87
	19	534.5	420	536X10 ³	117X10 ²	31.7	2.87
1000	12	372.5	292	455X10 ³	909X10	34.9	3.14
	14	433.7	340	527X10 ³	105X10 ²	34.9	3.14
	16	494.6	388	599X10 ³	120X10 ²	34.8	3.14
	19	585.6	460	705X10 ³	141X10 ²	34.7	3.14
1016.0	12	378.5	297	477X10 ³	939X10	35.5	3.19
	14	440.7	346	553X10 ³	109X10 ²	35.4	3.19
	16	502.7	395	628X10 ³	124X10 ²	35.4	3.19
	19	595.1	467	740X10 ³	146X10 ²	35.3	3.19
1100	12	410.2	322	607X10 ³	110X10 ²	38.5	3.46
	14	477.6	375	704X10 ³	128X10 ²	38.4	3.46
	16	544.9	428	800X10 ³	146X10 ²	38.3	3.46
	19	645.3	506	943X10 ³	171X10 ²	38.2	3.46
1117.6	12	416.8	327	637X10 ³	114X10 ²	39.1	3.51
	14	485.4	381	739X10 ³	132X10 ²	39.0	3.51
	16	553.7	435	840X10 ³	150X10 ²	39.0	3.51
	19	655.8	515	990X10 ³	177X10 ²	38.8	3.51
1200	12	521.6	409	917X10 ³	153X10 ²	41.9	3.77
	14	595.1	467	104X10 ⁴	174X10 ²	41.9	3.77
	16	704.9	553	123X10 ⁴	205X10 ²	41.8	3.77
	19	814.2	639	141X10 ⁴	235X10 ²	41.7	3.77

十、BS M&B

DIMENSIONS, WEIGHTS AND TEST PRESSURES (尺寸，重量與試驗壓力)

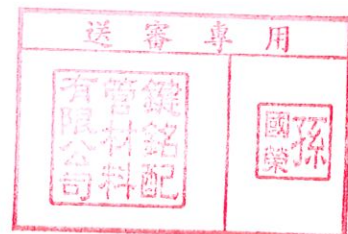
N.B. (標稱尺寸)	OUTSIDE DIAMETER (外徑)		GRADE (等級)	WALL THICKNESS (壁厚)		WEIGHT (重量)				NO.OF THREADS PER INCH (牙/吋)	TEST PRESSURES (試驗壓力)	
						PLAIN ENDS (平端)						
						kg/m		kg/ft				
in	in	mm		in	mm	blk	gal	blk	gal		psi	kg/cm ²
1/2	0.843	21.4	M	0.091	2.3	1.08	1.13	0.33	0.34	14	700	50
			B	0.102	2.6	1.21	1.25	0.37	0.38			
3/4	1.059	26.9	M	0.102	2.6	1.56	1.62	0.48	0.49	14	700	50
			B	0.110	2.8	1.66	1.73	0.51	0.53			
1	1.331	33.8	M	0.110	2.8	2.14	2.23	0.65	0.68	11	700	50
			B	0.126	3.2	2.41	2.51	0.74	0.77			
1-1/4	1.673	42.5	M	0.126	3.2	3.10	3.23	0.95	0.98	11	700	50
			B	0.142	3.6	3.45	3.59	1.05	1.09			
1-1/2	1.906	48.4	M	0.142	3.6	3.98	4.14	1.21	1.26	11	700	50
			B	0.161	4.1	4.48	4.66	1.37	1.42			
2	2.374	60.3	M	0.142	3.6	5.03	5.23	1.53	1.60	11	700	50
			B	0.161	4.1	5.68	5.91	1.73	1.80			
2-1/2	2.992	76.0	M	0.157	4.0	7.10	7.39	2.17	2.25	11	700	50
			B	0.177	4.5	7.93	8.25	2.42	2.52			
3	3.496	88.8	M	0.157	4.0	8.36	8.70	2.55	2.65	11	700	50
			B	0.177	4.5	9.35	9.73	2.85	2.97			
3-1/2	4.000	101.6	M	0.157	4.0	9.63	10.01	2.93	3.05	11	700	50
			B	0.177	4.5	10.78	11.21	3.29	3.42			
4	4.492	114.1	M	0.157	4.0	10.86	11.29	3.31	3.44	11	700	50
			B	0.177	4.5	12.16	12.65	3.71	3.86			
5	5.496	139.6	M	0.157	4.0	13.38	13.91	4.08	4.24	11	700	50
			B	0.177	4.5	14.99	15.59	4.57	4.75			
6	6.500	165.1	M	0.157	4.0	15.89	16.53	4.84	5.04	11	700	50
			B	0.177	4.5	17.82	18.53	5.43	5.65			
8	8.516	216.3	B	0.236	5.7	29.60	30.78	9.02	9.38	—	700	50
10	10.528	267.4	B	0.236	5.7	36.78	38.25	11.21	11.65	—	700	50
12	12.539	318.5	B	0.236	6.0	46.24	48.09	14.09	14.66	—	700	50
14	14.000	355.6	B	0.236	6.0	51.73	53.80	15.77	16.40	—	700	50
16	16.000	406.4	B	0.236	6.0	59.24	61.61	18.06	18.78	專用	700	50



十一、BS A-1

DIMENSIONS, WEIGHTS AND TEST PRESSURES (尺寸，重量與試驗壓力)

N.B. (標稱尺寸)	OUTSIDE DIAMETER (外徑)		WALL THICKNESS (壁厚)		WEIGHT (重量)				NO.OF THREADS PER INCH (牙/吋)	TEST PRESSURES (試驗壓力)	
					PLAIN ENDS (平端)						
					kg/m		kg/ft				
in	in	mm	in	mm	blk	gal	blk	gal	psi	kg/cm ²	
1/2	0.835	21.2	0.075	1.90	0.90	0.94	0.28	0.29	14	700	50
3/4	1.047	26.6	0.083	2.10	1.27	1.32	0.39	0.40	14	700	50
1	1.319	33.5	0.096	2.45	1.88	1.95	0.57	0.59	11	700	50
1-1/4	1.661	42.2	0.096	2.45	2.40	2.50	0.73	0.76	11	700	50
1-1/2	1.894	48.1	0.102	2.60	2.92	3.03	0.89	0.92	11	700	50
2	2.358	59.9	0.102	2.60	3.67	3.82	1.12	1.16	11	700	50
2-1/2	2.976	75.6	0.118	3.00	5.37	5.59	1.64	1.70	11	700	50
3	3.476	88.3	0.118	3.00	6.31	6.56	1.92	2.00	11	700	50
3-1/2	3.969	100.8	0.128	3.25	7.82	8.13	2.38	2.48	11	700	50
4	4.465	113.4	0.128	3.25	8.83	9.18	2.69	2.80	11	700	50
5	5.504	139.8	0.142	3.60	12.09	12.57	3.69	3.83	11	700	50
6	6.496	165.0	0.142	3.60	14.33	14.90	4.37	4.54	11	700	50



十二、ANSI C 80.1 RIGID STEEL CONDUITS

DIMENSIONS, AND WEIGHTS OF RIGID STEEL CONDUITS (電線用鋼管之尺寸與重量)

Nominal or Trade Size of Conduit (標稱尺寸)	Nominal Inside Diameter (標稱內徑)		Outside Diameter (外徑)		Nominal Wall Thickness (標稱壁厚)		Length without Coupling (不包括接頭之長度)		Minimum weight of ten unit lengths with Couplings Attached (包括接頭每十支之最小重量)	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft and in)	(meter)	(lb)	(kg)
1/2	0.632	16.1	0.840	21.3	0.104	2.64	9'11-1/4"	3.03	79.0	35.83
3/4	0.836	21.2	1.050	26.7	0.107	2.72	9'11-1/4"	3.03	105.0	47.63
1	1.063	27.0	1.315	33.4	0.126	3.20	9'11"	3.02	153.0	69.40
1-1/4	1.394	35.4	1.660	42.2	0.133	3.38	9'11"	3.02	210.0	91.17
1-1/2	1.624	41.2	1.900	48.3	0.138	3.51	9'11"	3.02	249.0	112.95
2	2.083	52.9	2.375	60.3	0.146	3.71	9'11"	3.02	332.0	150.60
2-1/2	2.489	63.2	2.875	73.0	0.193	4.90	9'10-1/2"	3.01	527.0	239.05
3	3.090	78.5	3.500	88.9	0.205	5.21	9'10-1/2"	3.01	682.6	309.63
3-1/2	3.570	90.7	4.000	101.6	0.215	5.46	9'10-1/4"	3.00	831.0	376.94
4	4.050	102.9	4.500	114.3	0.225	5.72	9'10-1/4"	3.00	972.3	441.04
5	5.073	128.9	5.563	141.3	0.245	6.22	9'10"	3.00	1313.6	595.85
6	6.093	154.8	6.625	168.3	0.266	6.76	9'10"	3.00	1745.3	791.67

NOTE註—Applicable tolerances : 容許誤差

Length(長度) : $\pm 1/4$ in (± 6.35 mm)(Without coupling)不包括接頭

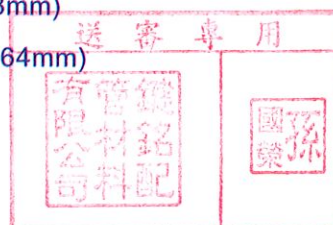
Outside diameter(外徑)

for trade sizes 3/8 in through 2 in : ± 0.015 in (± 0.38 mm)

for trade sizes 2-1/2 in through 4 in : ± 0.025 in (± 0.64 mm)

for trade sizes 5 and 6 in $\pm 1\%$

Wall thickness(壁厚) : -12.5%



十三、聚乙烯包覆鋼管 (Polyethylene Coated Steel Pipes)

CNS 13638、G3260 中華民國國家標準

1.鋼管 (PIPES)

種類：電阻焊接鋼管(E.R.W)、潛弧焊接鋼管(S.A.W)。

Classification：Electric Resistance Welding, Submerged-arc Welding.

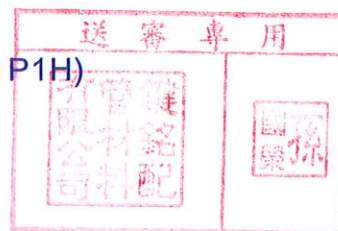
規格：API5L、ASTM A53、BS1387、CNS6445、CNS4626.....等。

Specification：API5L、ASTM A53、BS1387、CNS6445、CNS4626.....etc.

2.包覆層厚度標準 (Coating Thickness Standard)

鋼管(Pipe)			聚乙烯(Polyethylene)	
標準管徑 Nominal Diameter	製造方法 Method	長度 Length	包覆厚度 Coating Thickness	容許公差 Permissible Tolerance
2"~3-1/2"	E.R.W.	6~12M	1.5mm	+不規定 Not Specified/ -0.3mm
4"~6"	E.R.W.	6~12M	2.0mm	+不規定 Not Specified/ -0.4mm
8"~16"	E.R.W.	6~12M	2.5mm	+不規定 Not Specified/ -0.4mm
18"~40"	S.A.W.	6~12M	2.5mm	+不規定 Not Specified/ -0.4mm
42"~48"	S.A.W.	6~12M	3.0mm	+不規定 Not Specified/ -0.4mm

3.適用種類：P1H (EQUIVALENT TO JIS G3469 P1H)





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