



The ultimate in-line hot-dip galvanised tube
- High strength, superior quality & longer-lasting!

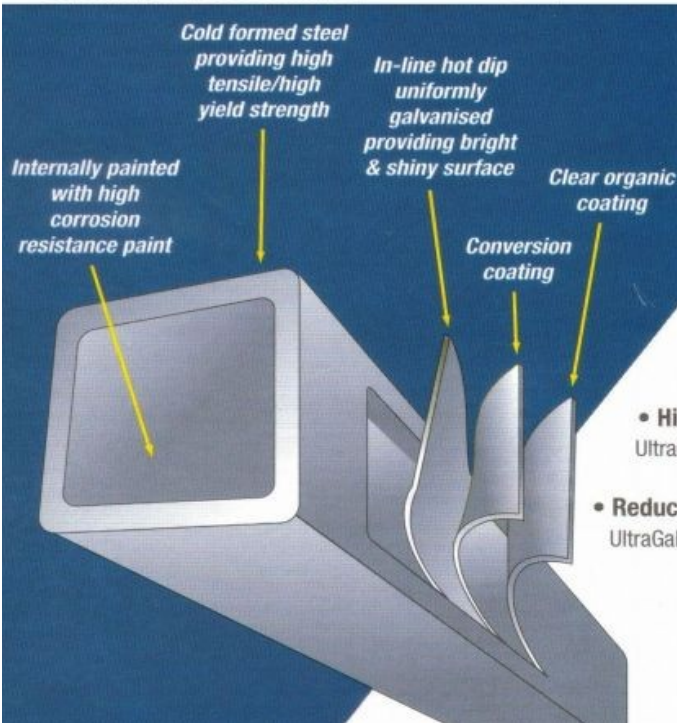
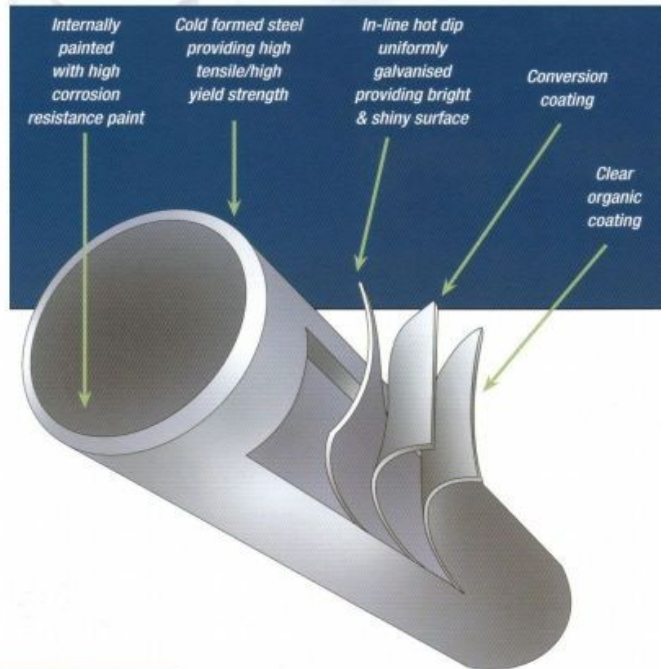
SAVE AS MUCH AS 25% WITH ULTRAGAL

The UltraGal Advantage

- High strength
- Smooth & glossy galvanised finishing
- No painting required
- More lasting than GI pipe
- Flexible enough for bending and forming
- Competitively priced
- Available in circular, square and rectangular hollow sections
- Wall thickness varies from 1mm and above
- Save as much as 25% on material

Applications

- Handrail
- Fencing
- Rope guard
- Signboard
- Automotive components
- Bus and coach frames
- Outdoor furniture
- Playground
- Shaded walkway
- Awning
- Roof truss
- Automatic gate
- Door and window grills
- Storage racks
- Conveyor system



• High strength and durability

UltraGal is specially designed for strength and lightness enabling buses to support greater loads while also ensuring passenger safety.

• Corrosion resistance

UltraGal's galvanised triple coat system gives it a long lasting corrosion protection ensuring a longer working life for the coach.

• Saves time, labour and costs

UltraGal's triple coated system can be used immediately without any further painting, giving great savings in time, labour and costs.

• High Yield Strength

UltraGal is 20 % to 60 % higher in yield strength

• Reduced Weight

UltraGal structures are about 20% lighter.



In-Line Galvanized Tube



Pipe Standard **ASTM F1043**
 Tensile Strength (min) 55,000 psi
 Yield Strength (min) 50,000 psi
 OD Tolerance +/-0.40 mm
 Length Tolerance -0, +5 mm
 Thickness Tolerance +/- 10%
 Internal Coating High corrosion resistance paint
 External Coating 0.9 oz/ft2 zinc coating with a chromate passivation coating and a clear polymer film



ROUND

No	Size (OD)	Thickness	Weight	
			kg/ft	Lbs/ft
1	1.315" (1 3/8")	0.055"	0.3361	0.7409
2		0.063"	0.3825	0.8432
3		0.065"	0.3940	0.8686
4		0.069"	0.4169	0.9191
5		0.072"	0.4340	0.9568
6		0.076"	0.4566	1.0067
7		0.080"	0.4791	1.0562
8		0.083"	0.4959	1.0932
9		0.085"	0.5070	1.1177
10		0.090"	0.5346	1.1787
11		0.095"	0.5620	1.2391
12		0.104"	0.6107	1.3464
13		0.111"	0.6481	1.4288
14		0.120"	0.6954	1.5331
15	1.660" (1 5/8")	0.055"	0.4281	0.9437
16		0.063"	0.4879	1.0756
17		0.065"	0.5027	1.1084
18		0.069"	0.5323	1.1736
19		0.072"	0.5544	1.2223
20		0.076"	0.5838	1.2870
21		0.080"	0.6129	1.3513
22		0.083"	0.6347	1.3993
23		0.085"	0.6492	1.4312
24		0.090"	0.6852	1.5106
25		0.095"	0.7210	1.5895
26		0.104"	0.7847	1.7300
27		0.111"	0.8338	1.8382
28		0.120"	0.8961	1.9757
29	0.130"	0.9645	2.1264	
30	1.900" (1 7/8")	0.055"	0.4921	1.0848
31		0.063"	0.5612	1.2373
32		0.065"	0.5784	1.2751
33		0.069"	0.6127	1.3507
34		0.072"	0.6382	1.4071
35		0.076"	0.6722	1.4820
36		0.080"	0.7061	1.5566
37		0.083"	0.7313	1.6123
38		0.085"	0.7481	1.6493
39		0.090"	0.7899	1.7415
40		0.095"	0.8315	1.8332
41		0.104"	0.9058	1.9969
42		0.111"	0.9630	2.1230
43		0.120"	1.0358	2.2836
44	0.130"	1.1158	2.4600	

No	Size (OD)	Thickness	Weight	
			kg/ft	Lbs/ft
45	2.375" (2 3/8")	0.055"	0.6188	1.3641
46		0.063"	0.7063	1.5572
47		0.065"	0.7281	1.6052
48		0.069"	0.7716	1.7011
49		0.072"	0.8041	1.7727
50		0.076"	0.8473	1.8679
51		0.080"	0.8903	1.9628
52		0.083"	0.9225	2.0338
53		0.085"	0.9439	2.0810
54		0.090"	0.9973	2.1986
55		0.095"	1.0503	2.3156
56		0.104"	1.1453	2.5250
57		0.111"	1.2186	2.6866
58		0.120"	1.3122	2.8929
59	2.875" (2 7/8")	0.130"	1.4153	3.1201
60		0.065"	0.8857	1.9527
61		0.072"	0.9787	2.1576
62		0.080"	1.0843	2.3905
63		0.083"	1.1237	2.4774
64		0.085"	1.1500	2.5353
65		0.090"	1.2155	2.6796
66		0.095"	1.2807	2.8234
67		0.111"	1.4878	3.2800
68		0.120"	1.6032	3.5344
69	0.130"	1.7305	3.8150	



Address:
 Southern Steel Pipe Sdn Bhd
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In Line Galvanized Tube



Standard **AS 1163** Structural Steel Hollow Sections

1. Chemical Composition

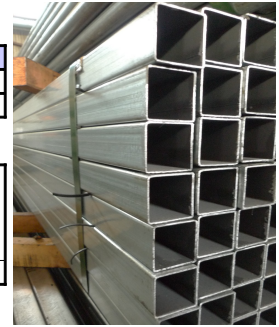
Grade	C (%)	Si (%)	Mn (%)	P (%)	S (%)	Al (%)	Ti (%)	CE (%)
C250	0.12	0.05	0.50	0.04	0.03	0.10	0.04	0.25
C350	0.20	0.05	1.60	0.04	0.03	0.10	-	0.39

2. Mechanical Properties

Grade	Mechanical properties (Min, Mpa)		
	Yield Strength	Tensile Strength	Elongation
C250	250	320	18%
C350	350	430	16%

3. Coating

a. External	Triple coat with :- i. In-line Galvanized zinc coating ii. Chromate Passivation coating iii. Clear polymer coating
b. Internal	High corrosion resistance paint



4. Thickness Tolerance : +/- 10 %

5. Size

Shape	Nominal Size		Nominal Thickness (mm)	Weight Kg / m
	B (mm)	D (mm)		
Square	19	19	1.6	0.859
			2.0	0.987
	20	20	1.6	0.873
			2.0	1.050
	25	25	1.5	1.061
			1.6	1.124
			2.0	1.364
			2.3	1.540
			2.5	1.640
	32	32	3.0	1.891
			1.6	1.500
			2.0	1.803
			2.3	2.020
			2.5	2.189
	38	38	3.0	2.680
			1.6	1.777
			2.3	2.471
	40	40	3.0	3.115
			1.5	1.768
			1.6	1.877
			2.0	2.306
			2.3	2.620
			2.5	2.817
			2.8	3.110
50	50	3.0	3.304	
		4.0	4.198	
		1.5	2.239	
		1.6	2.380	
		1.9	2.873	
		2.0	2.934	
		2.3	3.338	
		2.5	3.602	
		2.8	3.991	
57	57	3.0	4.246	
		4.0	5.454	
		1.6	2.732	
		1.9	3.214	
		2.0	3.373	
		2.3	3.844	
		2.5	4.152	
		2.8	4.607	
Rectangular	25	50	3.0	4.905
			4.0	6.334
			1.6	1.752
			2.0	2.149
			2.3	2.480
			2.5	2.621
			2.8	2.892
			3.0	3.068

Shape	Nominal Size (mm)	Outside Diameter (mm)	Nominal Thickness (mm)		Weight Kg / m
			(mm)	(mm)	
Round	19	19.1	1.6	0.690	
			2.0	0.740	
	20	20.0	1.6	0.740	
			2.0	1.169	
	25	25.0	1.6	0.951	
			2.0	1.169	
			1.6	1.028	
			2.0	1.280	
			2.3	1.440	
	25	33.7	2.6	1.600	
			1.6	1.305	
			2.0	1.620	
			2.6	2.050	
			2.9	2.269	
	32	42.4	3.2	2.460	
			1.6	1.658	
			2.0	2.070	
			2.6	2.630	
			2.9	2.910	
	40	48.3	3.2	3.170	
			4.0	3.860	
			1.5	1.731	
			1.6	1.898	
			2.0	2.352	
2.3			2.700		
50	60.3	2.9	3.330		
		3.2	3.640		
		4.0	4.450		
		1.5	2.175		
		1.6	2.386		
		2.0	3.020		
		2.3	3.400		
		2.6	3.811		
		2.9	4.210		
65	76.1	3.2	4.641		
		4.0	5.720		
		1.8	3.298		
		2.0	3.750		
		2.3	4.320		
		2.6	4.854		
		2.9	5.392		
		3.2	5.890		
73.0	73.0	4.0	7.326		
		2.0	3.607		
		2.3	4.131		
		2.6	4.650		
		2.9	5.164		

Contact :

Address:

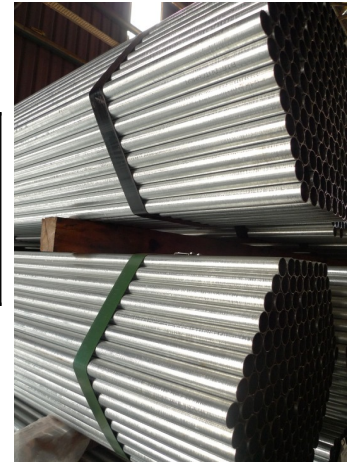
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In-Line Galvanized Tube



Pipe Standard	ASTM A53 Grade A -Sch40
Tensile Strength (min)	330N/mm2
Yield Strength (min)	205N/mm2
External Coating	0.9 oz/ft2 zinc coating with a chromate passivation coating and a clear polymer film
Internal Coating	High corrosion resistance paint
Plain End & without hydro test	

Nominal Size Inch	Outside Diameter Inch	Wall Thickness Inch	Weight	
			Kg/ft	lb/ft
1"	1.315	0.133	0.76	1.68
1-1/4"	1.660	0.140	1.03	2.27
1-1/2"	1.900	0.145	1.23	2.72
2"	2.375	0.154	1.66	3.65



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IN-LINE GALVANIZED PIPE



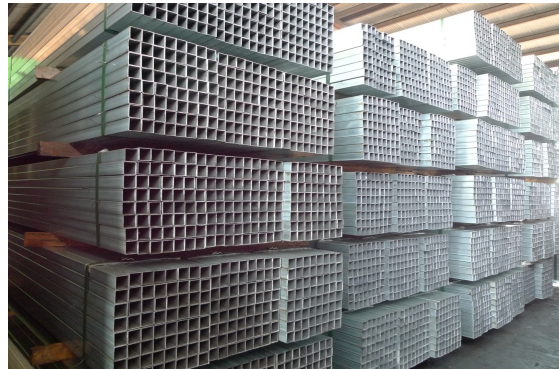
Pipe Standard : **ASTM A500 Grade A & B**
 External Coating Zinc coating with a chromate passivation coating and a clear polymer film
 Internal Coating High corrosion resistance paint
 Thickness Tolerance +/- 10%

SQUARE

No	Size (OD)	Thickness	Weight	
			kg/ft	Lbs/ft
1	1.000" x 1.000"	0.055"	0.3089	0.6810
2		0.063"	0.3487	0.7688
3		0.065"	0.3752	0.8272
4		0.069"	0.3777	0.8328
5		0.072"	0.4125	0.9094
6		0.076"	0.4268	0.9409
7		0.080"	0.4290	0.9458
8		0.083"	0.4699	1.0360
9		0.085"	0.4774	1.0525
10		0.090"	0.5055	1.1144
11	1.250" x 1.250"	0.055"	0.3938	0.8682
12		0.063"	0.4460	0.9832
13		0.065"	0.4755	1.0483
14		0.069"	0.4842	1.0676
15		0.072"	0.5236	1.1543
16		0.076"	0.5280	1.1640
17		0.080"	0.5525	1.2181
18		0.083"	0.5980	1.3184
19		0.085"	0.6086	1.3417
20		0.090"	0.6124	1.3502
21		0.095"	0.6774	1.4934
22		0.104"	0.6929	1.5277
23		0.111"	0.7317	1.6131
24	1.500" x 1.500"	0.055"	0.4787	1.0554
25		0.063"	0.5432	1.1976
26		0.065"	0.5758	1.2694
27		0.069"	0.5908	1.3024
28		0.072"	0.6347	1.3993
29		0.076"	0.6453	1.4226
30		0.080"	0.6760	1.4903
31		0.083"	0.7261	1.6008
32		0.085"	0.7398	1.6310
33		0.090"	0.7514	1.6565
34		0.095"	0.8240	1.8166
35		0.104"	0.8535	1.8816
36		0.111"	0.9030	1.9909
37		0.120"	1.0223	2.2538
38	0.130"	1.0326	2.2764	
39	2.000" x 2.000"	0.055"	0.6485	1.4297
40		0.063"	0.7377	1.6264
41		0.065"	0.7766	1.7121
42		0.069"	0.8038	1.7720
43		0.072"	0.8570	1.8894
44		0.076"	0.8799	1.9399
45		0.080"	0.9230	2.0349
46		0.083"	0.9823	2.1656
47		0.085"	1.0022	2.2095
48		0.090"	1.0292	2.2691
49		0.095"	1.1172	2.4630
50		0.104"	1.1746	2.5895
51		0.111"	1.2457	2.7464
52		0.120"	1.3927	3.0704
53		0.130"	1.4339	3.1612
54	2.250" x 2.250"	0.065"	0.8602	1.8963
55		0.069"	0.9103	2.0069
56		0.072"	0.9681	2.1343
57		0.076"	0.9972	2.1986
58		0.080"	1.0465	2.3071
59		0.083"	1.1104	2.4480
60		0.085"	1.1249	2.4800
61		0.090"	1.1682	2.5754
62		0.095"	1.2638	2.7862
63		0.104"	1.3351	2.9434
64		0.111"	1.4171	3.1241
65		0.120"	1.5779	3.4787
66		0.130"	1.6346	3.6036

RECTANGULAR

No	Size (OD)	Thickness	Weight	
			kg/ft	Lbs/ft
67	2.000" x 1.000"	0.055"	0.4787	1.0554
68		0.063"	0.5432	1.1976
69		0.065"	0.5758	1.2694
70		0.069"	0.5908	1.3024
71		0.072"	0.6347	1.3993
72		0.076"	0.6453	1.4226
73		0.080"	0.6760	1.4903
74		0.083"	0.7261	1.6008
75		0.085"	0.7398	1.6310
76		0.090"	0.7514	1.6565
77		0.095"	0.7883	1.7379
78		0.104"	0.8535	1.8816
79		0.111"	0.9030	1.9909
80		0.120"	0.9653	2.1281
81	0.130"	1.0326	2.2764	



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In-Line Galvanized Tube



Galvanized Scaffolding Pipe

Pipe Standard	BS1139
Tensile Strength	340 to 480 N/mm ²
Yield Strength (min)	235 N/mm ²
OD Tolerance	+/-0.50 mm
Length Tolerance	-0, +5 mm
Thickness Tolerance	- 10%, + not specified
Weight Tolerance	-8.0%, +12.0%
External Coating	40 micron zinc coating
Internal Coating	high corrosion resistance paint



Nominal Size mm	Outside Diameter		Wall Thickness mm	Pipe End	Length meter	Weight			Packing piece/bundle
	maximum mm	minimum mm				kg/m	kg/ft	lb/ft	
48.3	48.8	47.8	3.2	plain	6	3.58	1.09	2.39	61
			4.0	plain	6	4.37	1.33	2.94	61



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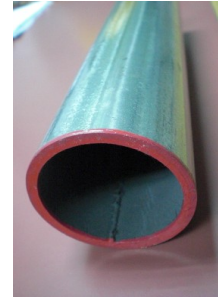
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In-Line Galvanized Tube



Galvanized Scaffolding Pipe

Pipe Standard	JIS G3444:1988
Tensile Strength	290 to 540 N/mm ²
Yield Strength (min)	235 to 390 N/mm ²
Length Tolerance	-0, +5 mm
Thickness Tolerance	+/- 0.3mm (wall thickness < 3mm) +/- 10% (3mm < wall thickness < 12mm)
Designation of grade	STK 290, STK 400, STK 490, STK 500 & STK 540
Surface option	Galvanized finish



Nominal Size mm	Outside Diameter		Wall Thickness mm	Pipe End	Length meter	Weight kg/m	Reference				Packing piece/bundle
	maximum	minimum					cross section area cm ²	geometric moment of inertia, cm ⁴	modulus of section cm ³	radius of gyration of area, cm	
	mm	mm									
21.7	21.95	21.45	1.2	plain	6	0.607	0.773	0.407	0.375	0.726	217
			1.5	plain	6	0.747	0.952	0.488	0.450	0.716	217
			1.6	plain	6	0.793	1.010	0.513	0.473	0.713	217
			2.0	plain	6	0.972	1.238	0.607	0.560	0.700	217
48.6	48.85	48.35	2.3	plain	6	2.630	3.345	8.990	3.700	1.640	91
			2.5	plain	6	2.840	3.621	9.650	3.970	1.630	91
			2.8	plain	6	3.160	4.029	10.600	4.360	1.620	91
			3.2	plain	6	3.580	4.564	11.800	4.860	1.610	91



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IN-LINE GALVANIZED PIPE



ASTM A500 Grade A (customise)

Thickness Tolerance +/- 10%
 OD tolerance +/- 0.40mm
 Length tolerance -6mm, + 13mm
 Tensile strength Min 45000 psi; 310 Mpa
 Yield strength Min 39000 psi; 269 Mpa
 External Coating 0.5 oz/ft2 zinc coating with a chromate passivation coating and a clear polymer film
 Internal Coating High corrosion resistance paint

ROUND

No	Size (OD)	Thickness	Weight	
			kg/ft	Lbs/ft
1	1.315" (1 3/8")	0.055"	0.3361	0.7409
2		0.063"	0.3825	0.8432
3		0.065"	0.3940	0.8686
4		0.069"	0.4169	0.9191
5		0.072"	0.4340	0.9568
6		0.076"	0.4566	1.0067
7		0.080"	0.4791	1.0562
8		0.083"	0.4959	1.0932
9		0.085"	0.5070	1.1177
10		0.090"	0.5346	1.1787
11		0.095"	0.5620	1.2391
12		0.104"	0.6107	1.3464
13		0.111"	0.6481	1.4288
14		0.120"	0.6954	1.5331
15	1.660" (1 5/8")	0.055"	0.4281	0.9437
16		0.063"	0.4879	1.0756
17		0.065"	0.5027	1.1084
18		0.069"	0.5323	1.1736
19		0.072"	0.5544	1.2223
20		0.076"	0.5838	1.2870
21		0.080"	0.6129	1.3513
22		0.083"	0.6347	1.3993
23		0.085"	0.6492	1.4312
24		0.090"	0.6852	1.5106
25		0.095"	0.7210	1.5895
26		0.104"	0.7847	1.7300
27		0.111"	0.8338	1.8382
28		0.120"	0.8961	1.9757
29	0.130"	0.9645	2.1264	
30	1.900" (1 7/8")	0.055"	0.4921	1.0848
31		0.063"	0.5612	1.2373
32		0.065"	0.5784	1.2751
33		0.069"	0.6127	1.3507
34		0.072"	0.6382	1.4071
35		0.076"	0.6722	1.4820
36		0.080"	0.7061	1.5566
37		0.083"	0.7313	1.6123
38		0.085"	0.7481	1.6493
39		0.090"	0.7899	1.7415
40		0.095"	0.8315	1.8332
41		0.104"	0.9058	1.9969
42		0.111"	0.9630	2.1230
43		0.120"	1.0358	2.2836
44	0.130"	1.1158	2.4600	

No	Size (OD)	Thickness	Weight	
			kg/ft	Lbs/ft
45	2.375" (2 3/8")	0.055"	0.6188	1.3641
46		0.063"	0.7063	1.5572
47		0.065"	0.7281	1.6052
48		0.069"	0.7716	1.7011
49		0.072"	0.8041	1.7727
50		0.076"	0.8473	1.8679
51		0.080"	0.8903	1.9628
52		0.083"	0.9225	2.0338
53		0.085"	0.9439	2.0810
54		0.090"	0.9973	2.1986
55		0.095"	1.0503	2.3156
56		0.104"	1.1453	2.5250
57		0.111"	1.2186	2.6866
58		0.120"	1.3122	2.8929
59	0.130"	1.4153	3.1201	
60	2.875" (2 7/8")	0.065"	0.8857	1.9527
61		0.072"	0.9787	2.1576
62		0.080"	1.0843	2.3905
63		0.083"	1.1237	2.4774
64		0.085"	1.1500	2.5353
65		0.090"	1.2155	2.6796
66		0.095"	1.2807	2.8234
67		0.111"	1.4878	3.2800
68		0.120"	1.6032	3.5344
69		0.130"	1.7305	3.8150



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