ZIGA INNOVATION

Steel for Better Life.

PRODUCT CATALOG



HIGH MICRON

ASTM A123 Coating Thickness Compliant

RoHS COMPLIANT

Green Industry

ISO 9001:2015

Made in Thailand

ZIGA Innovation Public Company Limited

8 Moo 10, Nai Khlong Bang Pla Kot, Phra Samut Chedi, Samut Prakan 10290, Thailand

02-096-5977 www.ziga.co.th ZIGA Innovation Public Co., Ltd.

Pre-Zinc Steel Pipe (Structural Application)

RoHS COMPLIANT

TIS 107-2566







- Red Band – CLASS R
  For light structures, handrails, fencing.
- Yellow Band – CLASS S
  For general structures, tents, furniture.
- Blue Band – CLASS M
  For high load-bearing structures, livestock pens, greenhouses.

High strength, durable, corrosion-resistant

Manufactured from high-quality raw materials

90° Can be bent up to 90 degrees









Steel Grade: STK290 (Tensile Strength ≥ 290 MPa)

Coating Mass: Z080 (80 g/m²)



Red Band – CLASS R				
SIZE	O.D. (mm.)	Nominal Thickness (mm.)		Weight per length (kg)
		Pipe Marking	Actual Measurement	
1/2"	20.5 +/- 0.2	1.40	1.30 - 1.35	3.60
3/4"	25.8 +/- 0.2	1.40	1.30 - 1.35	4.70
1"	31.7 +/- 0.2	1.40	1.30 - 1.35	5.80
1-1/4"	40.5 +/- 0.2	1.40	1.30 - 1.35	7.50
1-1/2"	46.5 +/- 0.2	1.50	1.35 - 1.40	9.00
2"	57.8 +/- 0.2	1.50	1.35 - 1.40	11.40

Yellow Band – CLASS S				
SIZE	O.D. (mm.)	Nominal Thickness (mm.)		Weight per length (kg)
		Pipe Marking	Actual Measurement	
1/2"	20.5 +/- 0.2	1.40	1.30 - 1.35	3.60
3/4"	25.8 +/- 0.2	1.40	1.30 - 1.35	4.70
1"	31.7 +/- 0.2	1.80	1.60 - 1.70	7.10
1-1/4"	40.5 +/- 0.2	1.80	1.60 - 1.70	9.20
1-1/2"	46.5 +/- 0.2	1.90	1.70 - 1.80	11.30
2"	57.8 +/- 0.2	1.90	1.70 - 1.80	14.30
2-1/2"	72.5 +/- 0.2	2.00	1.90 - 1.95	20.00
3"	86.5 +/- 0.2	2.10	1.90 - 1.95	24.60
4"	112.0 +/- 0.2	2.50	2.50 - 2.60	40.50



Blue Band – CLASS M				
SIZE	O.D. (mm.)	Nominal Thickness (mm.)		Weight per length (kg)
		Pipe Marking	Actual Measurement	
1/2"	20.7 +/- 0.2	2.00	1.90 - 1.95	5.30
3/4"	26.2 +/- 0.2	2.00	1.90 - 1.95	6.90
1"	33.0 +/- 0.1	2.10	1.95 - 2.00	9.00
1-1/4"	41.2 +/- 0.2	2.10	1.95 - 2.00	11.40
1-1/2"	47.1 +/- 0.2	2.10	1.95 - 2.00	13.20
2"	59.1 +/- 0.2	2.10	1.95 - 2.00	16.50
2-1/2"	72.5 +/- 0.2	2.10	1.95 - 2.00	20.50
3"	88.3 +/-0.2	3.00	2.80 - 3.00	35.50
4"	113.0 +/- 0.2	3.00	2.80 - 3.00	46.00

ZUPER ZIGA
HIGH MICRON STEEL

HIGH MICRON Structural Steel Pipe

ASTM A123 Coating Thickness Compliant
HIGH MICRON
RoHS COMPLIANT
TIS 107-2566



- High Tensile (400MPa)
- Designed to effectively replace conventional Hot-Dip Galvanized pipes
- Ideal for high-durability structural applications.

Corrosion protection 3–5 times greater than standard Hot-Dip pipes

Corrosion Resistance

Coating Thickness 45–75 microns





STK290 (Tensile ≥ 290 MPa), STK400 (Tensile ≥ 400 MPa – High Tensile Steel)

Coating Mass: Z450 (450 g/m²)



Zea Dragon



STK 290 / STK 400					
SIZE	O.D. (mm.)	Nominal Thickness (mm.)		Weight per length (kg)	Tensile : Mpa
		Pipe Marking	Actual Measurement		
1/2"	21.3 +/- 0.5	2.00	1.90	5.40	STK 290
3/4"	26.9 +/- 0.5	2.00	1.90	7.00	
		2.50	2.30	8.50	
		2.80	2.50	9.25	
1"	33.7 +/- 0.5	2.00	1.90	8.70	
		2.50	2.30	10.75	
		2.80	2.50	11.80	STK 400
		3.00	2.80	12.50	
1 - 1/4"	42.4 +/- 0.5"	2.00	1.90	11.40	STK 290
		2.50	2.30	13.50	
		3.00	2.80	16.50	STK 400
1 - 1/2"	48.3 +/- 0.5"	2.00	1.90	13.10	STK 290
		2.50	2.30	15.80	
		3.00	2.80	18.90	STK 400
2"	60.3 +/- 1%"	2.00	1.90	16.00	STK 290
		2.50	2.30	19.70	
		3.20	3.20	27.50	STK 400
2 - 1/2"	76.1 +/- 1%	2.50	2.30	25.10	STK 290
		3.00	2.80	30.10	STK 400
		3.20	3.20	34.60	
3"	88.9 +/- 1%	2.80	2.50	32.00	
		3.00	2.80	35.50	
		3.20	3.20	41.00	
		4.00	4.00	50.50	
4"	114.3 +/- 1%	2.80	2.50	41.00	
		3.00	2.80	46.00	
		3.20	3.20	52.50	
		4.00	4.00	66.00	
5"	139.7 +/- 1%	5.00	4.80	99.00	

Carbon Steel Pressure Pipe

ASTM A123 | HIGH MICRON | RoHS COMPLIANT | TIS 276-2562



- Salt Spray Test: 4,000 hours
- Service life exceeding 10 years
- Suitable for waterworks and agricultural systems

Special zinc coating provides superior corrosion resistance compared to conventional pipes.

5 Mpa

Maximum pressure capacity 50 bar

Reduces long-term maintenance cost.





Steel Grade: S195T (Tensile Strength 320–520 MPa)

Coating Mass: Z450–600 (450–600 g/m²)

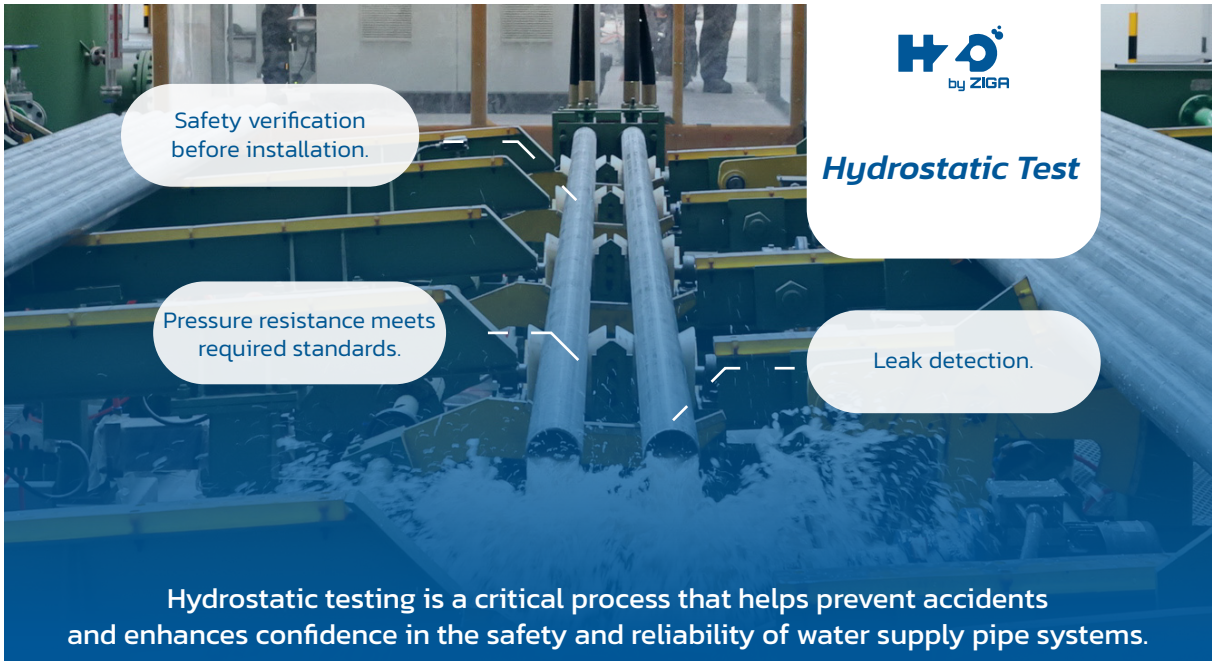


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S195T				
SIZE	O.D. (mm.)	Nominal Thickness (mm.)		Weight per length (kg)
		Pipe Marking	Actual Measurement	
1/2"	21.3 +/- 0.5	2.60	2.30 - 2.50	6.50
3/4"	26.9 +/- 0.5	2.60	2.30 - 2.50	8.50
1"	33.7 +/- 0.5	3.20	2.80 - 3.00	12.50
1-1/4"	42.4 +/- 0.5	3.20	2.80 - 3.00	16.50
1-1/2"	48.3 +/- 0.5	3.20	2.80 - 3.00	18.90
		3.20 H	3.20 - 3.30	21.00
2"	60.3 +/- 1%	3.60	3.20 - 3.30	27.50
2-1/2"	76.1 +/- 1%	3.60	3.20 - 3.30	34.60
3"	88.9 +/- 1%	4.00	4.00 - 4.10	50.50
4"	114.3 +/- 1%	4.50	4.00 - 4.10	66.00
5"	139.7 +/- 1%	5.00	5.00 - 5.10	99.00
6"	165.1 +/- 1%	5.00	5.00 - 5.10	121.00

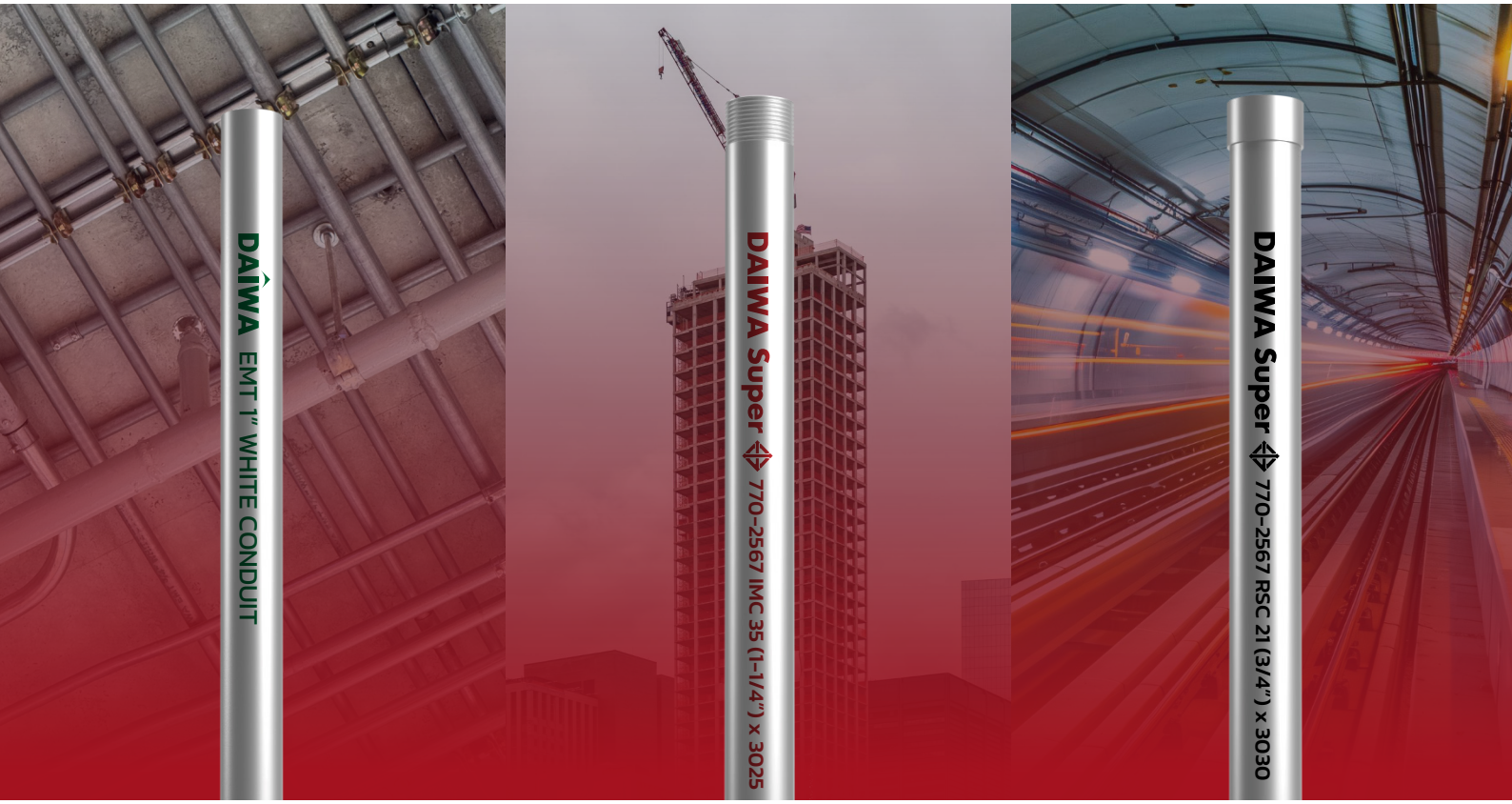
Also compliant with BS EN 10255 Type 2 (Equivalent to BS 1387/1985)



Carbon steel pressure pipe manufactured under TIS 276-2562

DAIWA • DAIWA Super | White Conduit

ASTM A123 | HIGH MICRON | RoHS COMPLIANT | TIS 770-2567



Kriao-Krat



Long-term corrosion resistance

Fire-resistant, non-flammable

Bendable up to 90 degrees

Electrical Metallic Tubing

STANDARD: ANSI C80.3 and UL797

EMT : Electrical Metallic Tubing							Coating thickness (Micron)
SIZE	INCH.	O.D. (mm.)		Thickness (mm.)	Length (mm.)	Minimum mass per pipe (kg.) (per bundle of 10 pipes)	TIS 770-2567
		Specified	Criteria	Min			DAIWA
16	1/2"	17.93	+/- 0.13	1.067	3 050 +/- 6 mm.	12.93	>= 20 micron
21	3/4"	23.42		1.245		19.73	
27	1"	29.54		1.448		29.03	
35	1-1/4"	38.35		1.651		43.09	
41	1-1/2"	44.2		1.651		49.90	
53	2"	55.8		1.651		63.50	



Intermediate Metal Conduit

STANDARD: ANSI C80.6 , UL1242 , ASTM A123 (DAIWA SUPER)

IMC : Intermediate Metal Conduit									Coating thickness (Micron)		
SIZE	INCH.	O.D. (mm.)		Thickness (mm.)		Length excluding coupling (mm.)		Minimum weight per pipe (Per set of 10 pieces, including threaded ends) (kg.)	TIS 770-2567	ASTM A123 (Minimum Avg)	
		Lowest	Highest	Lowest	Highest	Specified	Criteria		DAIWA	DAIWA SUPER	
16	1/2"	20.57	20.83	1.79	2.16	3 030	±6	25.4	>= 20 micron	TH 1.6 to under 3.2mm. 45 micron	45 - 55 micron (High Micron Series)
21	3/4"	26.01	26.26	1.90	2.29	3 030		34.6			
27	1"	32.64	32.89	2.16	2.54	3 025		49.9			
35	1-1/4"	41.40	41.78	2.16	2.67	3 025		64.3			
41	1-1/2"	47.62	48.01	2.29	2.79	3 025		79.1			
53	2"	59.74	60.12	2.41	2.92	3 025		105.2			
63	2-1/2"	72.31	72.82	3.56	4.06	3 010		186.2		TH 3.2 to under 4.8 mm. 75 micron	50 - 55 micron (High Micron Series) / 75 - 85 micron (Hot - Dip Series)
78	3"	88.04	88.54	3.56	4.06	3 010		229.0			
91	3-1/2"	100.61	101.12	3.56	4.06	3 005		263.0			
103	4"	113.18	113.69	3.56	4.06	3 005		296.1			

Rigid Steel Conduit

STANDARD: ANSI C80.1 , UL6 , ASTM A123 (DAIWA SUPER)

RSC : Rigid Steel Conduit									Coating thickness (Micron)		
SIZE	INCH.	O.D. (mm.)		Thickness (mm.)		Length excluding coupling (mm.)		Minimum weight per pipe (Per set of 10 pieces, including threaded ends) (kg.)	TIS 770-2567	ASTM A123 (Minimum Avg)	
		Lowest	Criteria	Lowest	Criteria	Specified	Criteria		DAIWA	DAIWA SUPER	
16	1/2"	21.34	+/- 0.38	2.64	-12.5%	3 030	±6	35.83	>= 20 micron	TH 1.6 to under 3.2mm. 45 micron	45 - 55 micron (High Micron Series)
21	3/4"	26.67		2.72		3 030		47.63			
27	1"	33.40		3.20		3 025		69.40		TH 3.2 to under 4.8 mm. 75 micron	50 - 55 micron (High Micron Series) / 75 - 85 micron (Hot - Dip Series)
35	1-1/4"	42.16		3.38		3 025		91.17			
41	1-1/2"	48.26		3.51		3 025		112.95			
53	2"	60.33	+/-1%	3.71		3 025		150.60			
63	2-1/2"	73.03		4.90		3 010		239.05			
78	3"	88.90		5.21		3 010		309.63		TH 4.8 to under 6.4 mm. 75 micron	50 - 55 micron (Hot - Dip Series)
91	3-1/2"	101.60		5.46		3 005		376.94			
103	4"	114.30		5.72		3 005		441.04			
129	5"	141.30		6.22		2 995		595.85			

DAIWA SUPER :

- Type 3 conduit (Hot-Dip Galvanized exterior with additional zinc spray coating)
- Internal seam coated with zinc (Type D process)
- Approved by Metropolitan Electricity Authority





QUALITY CONTROL | TESTING

ZIGA implements strict quality control from raw material selection to finished product inspection.





01

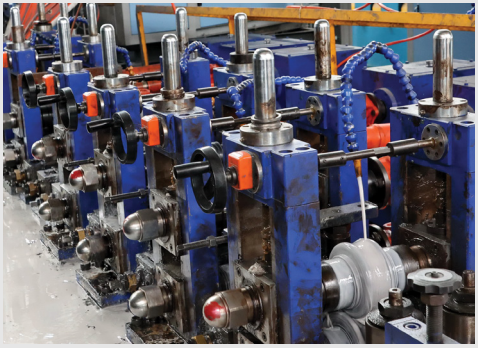
Raw Material Inspection (Hot dip galvanized in coil)

- Thickness and width measurement
- Chemical composition analysis (Spectrometer)
- Tensile testing

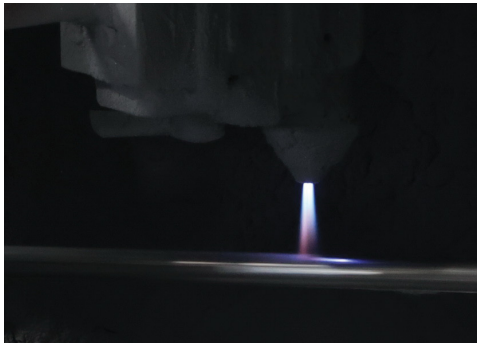
02

Slit Steel Inspection (Slit products)

- Dimension verification
- Edge condition inspection









03

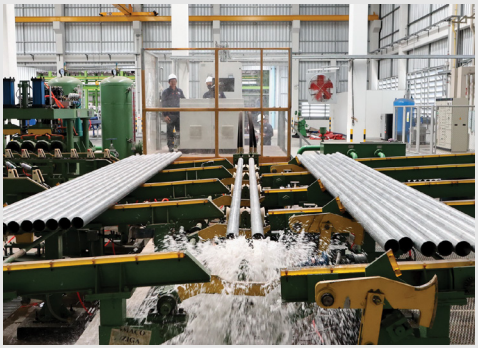
Forming Inspection (Forming)

- Diameter, thickness, straightness, length measurement
- Bend and flattening tests

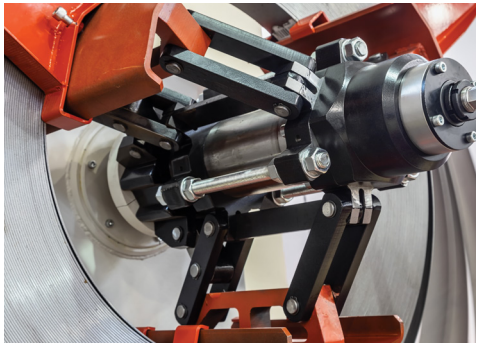
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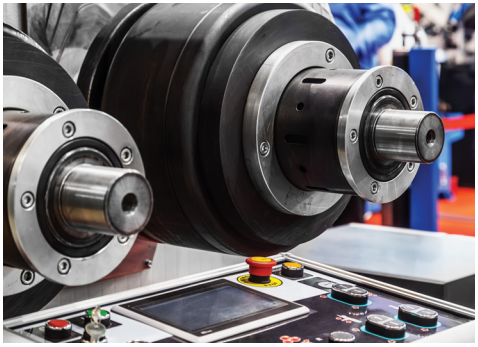
Hydrostatic Test

- High-pressure water leak testing









05

Zinc Coating Inspection
(Zinc coating)

- Coating thickness measurement
- Adhesion testing (bend & flatten test)

06

Thread Inspection
(Ring Gauge)

- Thread dimension and length verification





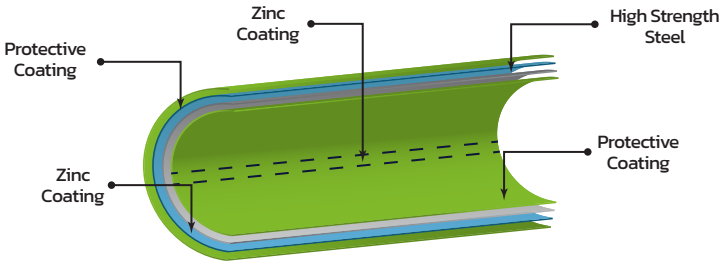




07

Final Product Inspection
(Product inspection)

- Visual and dimensional check
- Marking and bundling
- Standard packaging before warehouse storage
- Only qualified products are delivered to customers.



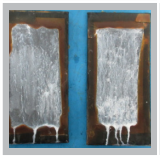
HIGH MICRON ハイマイクロン | **Anti-Corrosion Innovation**

- Salt Spray Test up to 4,000 hours
- Service life 25–30 years even in high-salinity environments
- ASTM A123 hot-dip galvanizing standard compliant
- Zinc-protected seam for full corrosion coveraget

ZiGA Galvanized Steel Paint & Welding Electrode



Salt Spray Test

Specimen Conditions Thickness 2.0,2.8 mm.	800 hours	1200 hours	1,440 hours	3,000 hours	3,600 hours	4,000 hours
Galvanized Pipe						
HIGH MICRON	← START AT 3,000 HOURS →					
Hot-dip Pipe						