



INTRODUCTION

CHAICHANA ASIA INDUSTRY CO.,LTD. Now introduce the straight seam welded steel pipes, fittings and coupling in Thailand.

We now manufacturing pipes and fittings in various sizes and specification to meet every applications in water supply, wastewater treatment, piling and construction projects. We meet the international and national standards such as TIS 427, **AWWA C200,BS534, JIS G 3457, etc**

We can manufacture with every confidence in both quality and quantity with the most up-to-date machinery, pipes and fittings of 3.5 mm. to 19 mm. in wall thickness, small diameter pipe of 150 mm. to large diameter pipe of 1500 mm.

All fittings shall be shop-fabricated and designed to be the same strength and wall thickness as the pipe with reinforcing rings or saddles to be provided where required.

QUALITY CONTROL

- Visual and Dimension Inspection
- Hydrostatic Pressure Test
- Dye - penetrant Test
- Pin Hole Test
- Magnetic Thickness Test
- Bend Test
- Tensile Test

**TECHNICAL SPECIFICATION OF
METROPOLITAN WATERWORKS AUTHORITY OF THAILAND AND
PROVINCIAL WATERWORKS AUTHORITY OF THAILAND**

UNDERGROUND STEEL PIPE FOR BOTH OF MWA AND PWA

1. Inside lining shall be cement mortar in accordance with AWWA C 205 or liquid epoxy in accordance with AWWA C 210
2. Outside coating shall be wrapped in accordance with AWWA C 203 Which consisting of
 - 2.1 Coal tar primer
 - 2.2 Coal tar enamel 2.4+0.8 mm. Thickness
 - 2.3 Fiberglass mat, asbestos or glass cloth 1 ply
 - 2.4 Coal tar enamel min. 0.8 mm. Thickness
 - 2.5 Asbestos felt or glass felt 1 ply
 - 2.6 White wash

ABOVEGROUND STEEL PIPE FOR BOTH OF MWA AND PWA

1. Inside lining shall be cement mortar in accordance with AWWA C 205 or liquid epoxy in accordance with AWWA C 210
2. Outside coating shall be coated by non bleeding type coal tar epoxy at the minimum dry film thickness of 150 microns and topcoated by another micaceous iron oxide (MIO) paint at the minimum dry film thickness of 60 microns.

SLEEVE PIPE FOR MWA

1. Inside coating shall be non bleeding type coal tar epoxy at the total dry film thickness of at least 100 microns.
2. Outside coating shall be non bleeding type coal tar epoxy at the total dry film thickness of at least 100 microns.

SLEEVE PIPE FOR PWA

1. Inside coating shall be coated of coal tar epoxy.
2. Outside coating shall be coal tar epoxy.

SCHEDULE OF WALL THICKNESS AND CEMENT-MORTAR INSIDE LINING FOR STEEL PIPES AND FITTINGS

Nominal Diameter (mm.)	Outside of Pipe (mm.)	Length of Underground pipe and Aboveground pipe (mm.)	Length of Sleeve Pipe (m)	Wall Thickness (before lining)	
				Underground pipe and Sleeve pipe (mm.)	Aboveground pipe (mm.)
150	168.3±1.6	6.00±0.05	3.00±0.05	3.45±0.25	5.5±0.25
200	219.1±1.6	6.00±0.05	3.00±0.05	4.50±0.25	5.5±0.25
250	273.0±1.6	6.00±0.05	3.00±0.05	4.80±0.25	6.0±0.25
300	323.9±1.6	6.00±0.05	3.00±0.05	6.00±0.25	6.0±0.25
400	406.4±1.6	9.00±0.05	3.00±0.05	6.00±0.25	7.9±0.25
500	508.0±1.6	9.00±0.05	3.00±0.05	6.00±0.25	7.9±0.25
600	609.6±1.6	9.00±0.05	3.00±0.05	6.00±0.25	11.1±0.25
700	711.2±1.6	9.00±0.05	3.00±0.05	6.00±0.25	11.1±0.25
800	812.8±1.6	9.00±0.05	3.00±0.05	7.90±0.25	12.7±0.25
900	914.4±1.6	9.00±0.05	3.00±0.05	7.90±0.25	12.7±0.25
1000	1016.0±1.6	9.00±0.05	3.00±0.05	9.50±0.25	12.7±0.25
1100	1117.6±1.6	9.00±0.05	3.00±0.05	9.50±0.25	12.7±0.25
1200	1219.2±1.6	9.00±0.05	3.00±0.05	11.10±0.25	19.1±0.25
1300	1320.8±1.6	9.00±0.05	3.00±0.05	12.70±0.25	19.1±0.25
1400	1422.4±1.6	9.00±0.05	3.00±0.05	12.70±0.25	19.1±0.25
1500	1524.0±1.6	9.00±0.05	3.00±0.05	12.70±0.25	19.1±0.25
1800	1820.0±1.6	6.00±0.05	3.00±0.05	15.90±0.25	25.4±0.25
2000	2020.0±1.6	6.00±0.05	3.00±0.05	19.10±0.25	-

HYDROSTATIC PRESSURE TEST

NOMINAL DIAMETER	UNDER GROUND KG/CM ²	ABOVE GROUND KG/CM ²	TESTING TIME MINUTE
150-250	50	50	5
300	40	50	5
400	35	50	5
500	30	35	10
600	25	35	10
700-800	20	35	30
900-1500	20	35	30
FITTING TO BE TEST 15 Kg/CM ²			2