



## 公司简介

### COMPANY PROFILE

邯郸市正大制管有限公司（以下简称ZDP）坐落河北省邯郸市，是国内一家专业生产钢管的制造型企业。正大制管成立于2005年，依靠自身的不断发展壮大，邯郸正大制管于2014年建立了迁安正大通用钢管有限公司。至2016年，正大制管已经成为国内钢管制造企业前三甲。目前拥有职工4000余名，年生产能力达到600万吨。

正大制管的六大产品为：ERW钢管，热镀锌钢管，方矩管，热镀锌方矩管和钢塑复合管。公司先后通过了国际ISO9001-2008质量体系认证，摩迪英联质量、环境、职业健康与安全三体系认证，美国石油协会API 5L认证和欧盟CE认证。正大制管的产品广泛应用于油气输送、给排水、天然气、采暖蒸汽和其他低压流体输送，同时还应用于脚手架搭建、家具、大棚管以及其他机械制造用。

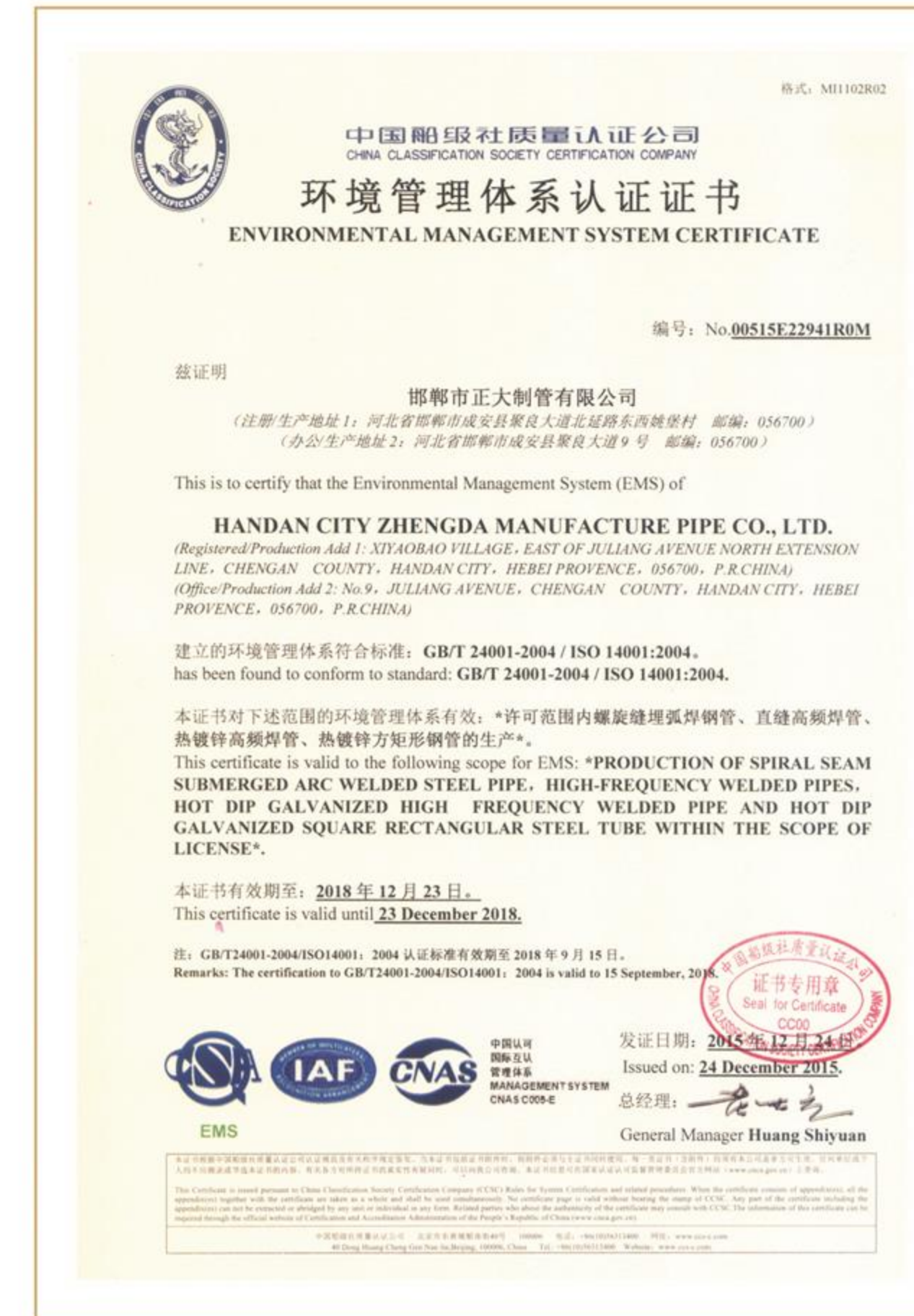
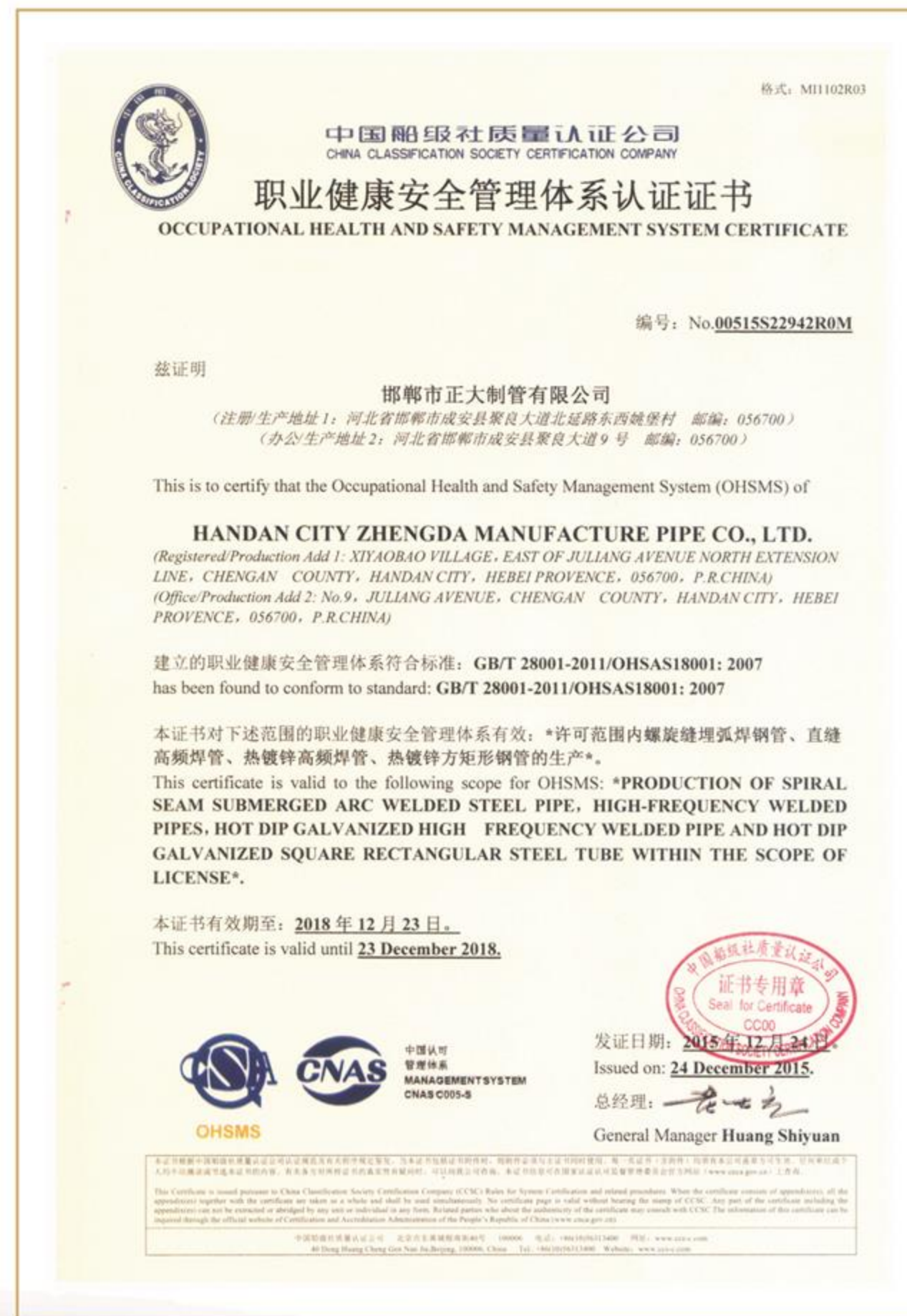
正大制管是中建、中铁、中石油、中石化、中煤等其他诸多国家大型企业的指定供应商。目前正大产品已出口到英国、美国、加拿大、墨西哥、利比亚、俄罗斯、秘鲁、澳大利亚、塔吉克斯坦、哥伦比亚、葡萄牙、阿尔巴尼亚等国家。

Handan Zhengda Steel Pipe Co., Ltd. (ZDP) is located in Handan Hebei, which is known as a professional steel pipe manufacture in China. Established in 2005, based on its own strength, ZDP has been developing continuously. It has invested in constructing Qian'an Zhengda General Steel Pipe Co., Ltd. in 2014, ZDP is the top 2 steel pipe manufacture in China, now has more than 4,000 employees, with annual production capacity 6 million tons.

Main products are ERW Steel Pipe, Hot-Dip Galvanized Pipe, Square and Rectangular Steel Pipe, Galvanized SHS and RHS, Spiral Steel Pipe and Steel-Plastic Composite Pipe. ZDP has got ISO9001-2008, ISO14001:2004, BS-OHSAS 18001:2007, API 5L and CE Certificates. ZDP pipes are widely used in transporting of water, gas, air, oil, heating steam and other low-pressure fluid, also used for scaffolding, furniture, greenhouse and other mechanical construction.


ZDP is the assigned supplier of China Construction, CRCC, CNPC, Sinopec, CRCC, China Coal and other national companies. ZDP's Products have been exported to UK, USA, Canada, Mexico, Libya, Russia, Peru, Australia, Tajikistan, Columbia, Portugal, Albania etc..





CERTIFICATES  
资质证书

# CERTIFICATES 资质证书




**Certificate of Conformity of the Factory  
Production Control  
CN17/40002**

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

**ERW Round pipe**  
 (OD: 21.3mm-219mm,WT: 2.0mm-6.0mm)  
**ERW Square pipe**  
 (25\*25mm-200\*200mm,WT: 2.0mm-10.0mm)  
**ERW Rectangular pipe**  
 (40\*20mm-200\*150mm,WT: 2.0mm-10.0mm)  
 Material  
**S235JRH,S275J0H**  
 placed on the market under the name or trade mark of


**Handan City Zhengda Manufacture Pipe Co.,Ltd.**  
 No.9 Juliang Avenue, Chengan County, Handan City,  
 Hebei Province, 056700, P.R.China  
 and produced in the manufacturing plant  
**Handan City Zhengda Manufacture Pipe Co.,Ltd.**  
 No.9 Juliang Avenue, Chengan County, Handan City,  
 Hebei Province, 056700, P.R.China

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard(s)  
**EN 10219-1:2006**  
 under system 2+ for the performances set out above are applied and that the factory production control fulfills all the prescribed requirements for these performances.  
 This certificate is valid from 12/01/2017 until 12/01/2020 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performances of the declared essential characteristics, do not change, and the construction product and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the factory production control certification body.




UKAS  
PRODUCT  
CERTIFICATION  
0005

Re certification audit due before 1/11/2020.  
 Issue 1. This certificate was first issued on 12 Jan 2017.  
 Authorised by



J. Saunders  
BUSINESS MANAGER



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 SGS CE 13 0715

**Certificate of Authority to use the Official API Monogram**  
**ORIGINAL**  
**License Number: 5L-0786**



Vice President, API Global Industry Services

The American Petroleum Institute hereby grants to

**HANDAN ZHENGDA MANUFACTURE PIPE CO., LTD.**  
 North Side, Julian Road  
 Chengxi Industry Zone, Chengan County  
 Handan, Hebei  
 People's Republic of China

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-5L and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **5L-0786**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Manufacturer of Line Pipe Plain End at PSL 1, Manufacturer of Line Pipe Plain End at PSL 2 - Type of Pipe: SAWH / Delivery Condition: M / Max. Grade: X70

QMS Exclusions: Design and Development; Servicing  
**Effective Date: AUGUST 18, 2017**  
**Expiration Date: AUGUST 18, 2018**

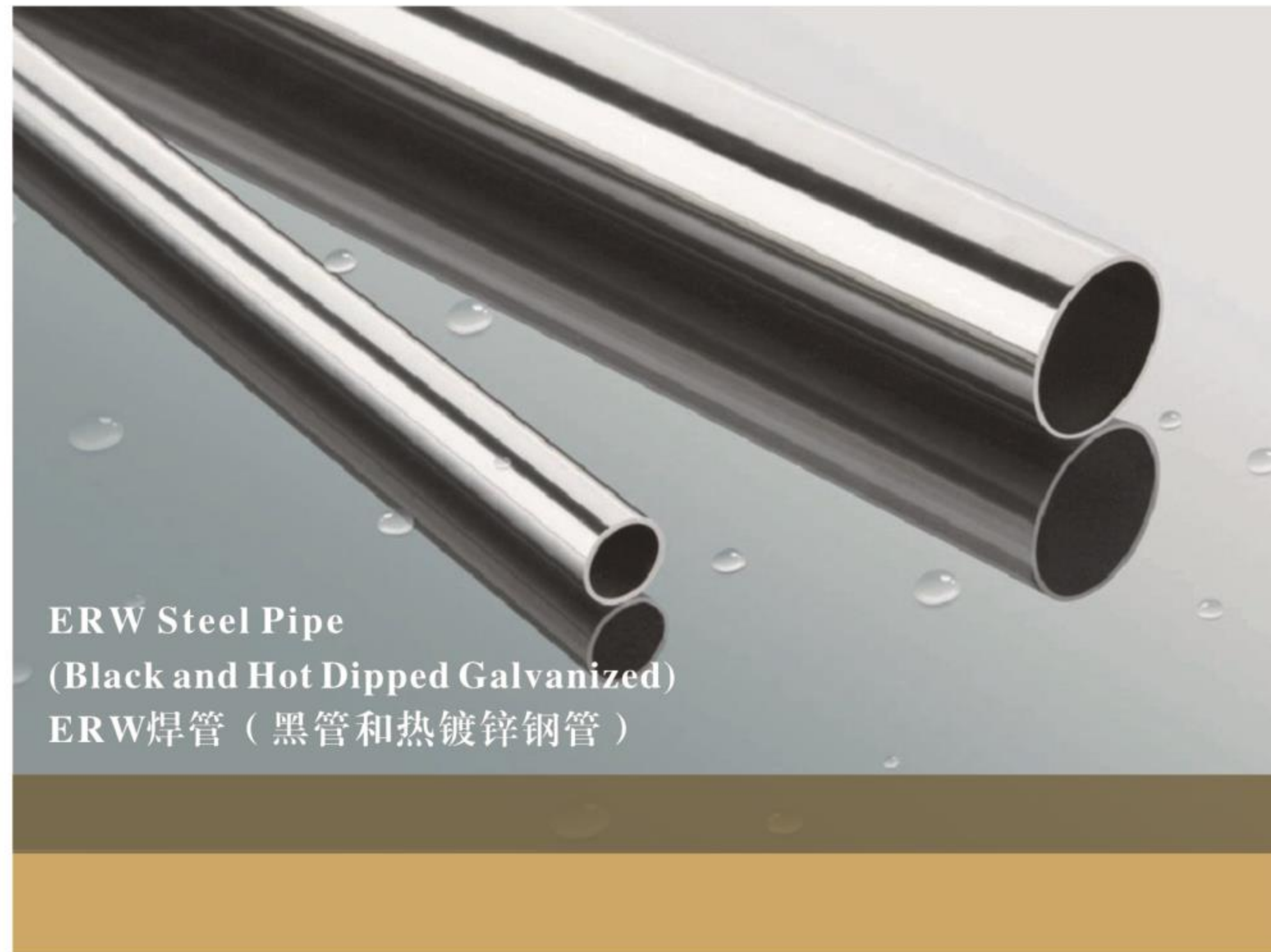
To verify the authenticity of this license, go to [www.api.org/compositelist](http://www.api.org/compositelist).



**American  
Petroleum  
Institute**

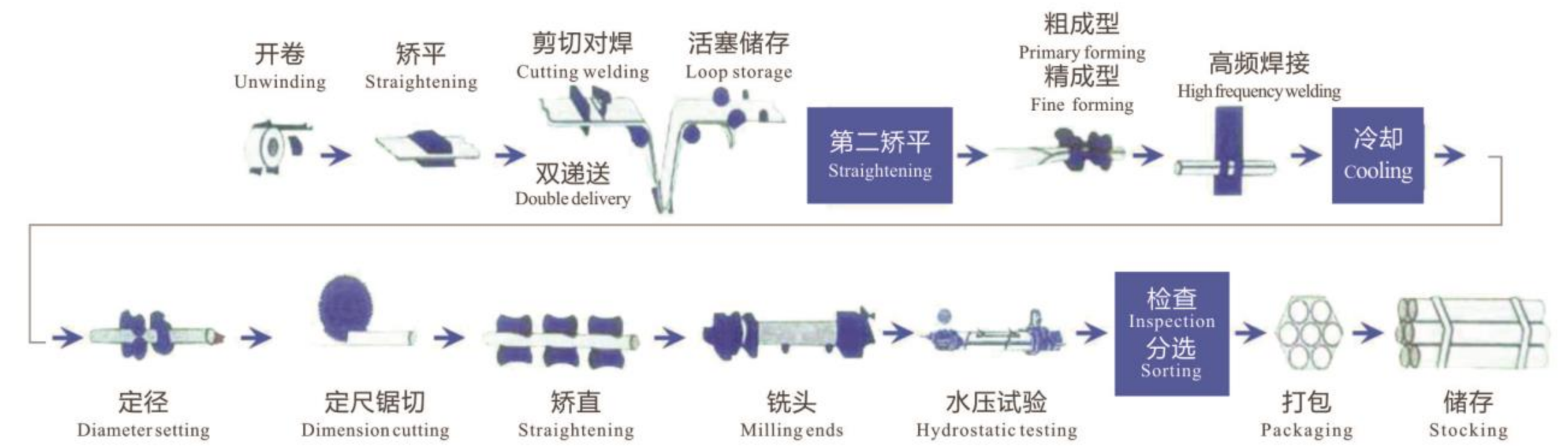


AMERICAN PETROLEUM INSTITUTE  
CORPORATE SEAL  
2015-313



### 直缝焊管工艺流程图

PFD of ERW Steel Pipe



### ERW焊管重量 (kg/m)

Size & Weight of ERW Steel Pipe

Diameter Wall Thickness	1/2"(21.3)	3/4"(26.7)	1"(33.4)	1-1/4"(42.4)	1-1/2"(48.3)	2"(60.3)	2-1/2"(73)	3"(88.9)	4"(114.3)	5"(141.3)	6"(165)	8"(219.1)
1.50	0.73	0.93										
1.60	0.78	0.99										
1.70	0.82	1.05	1.33	1.71	1.95							
1.80	0.87	1.11	1.40	1.80	2.06							
1.90	0.91	1.16	1.48	1.90	2.17	2.74	3.33					
2.00	0.95	1.22	1.55	1.99	2.28	2.88	3.50					
2.20	1.04	1.33	1.70	2.18	2.50	3.15	3.84					
2.30	1.08	1.38	1.76	2.27	2.61	3.29	4.01					
2.40	1.12	1.44	1.83	2.37	2.72	3.43	4.18	5.12	6.62			
2.50	1.16	1.50	1.90	2.46	2.82	3.56	4.35	5.33	6.90	8.56	10.02	
2.75	1.26	1.62	2.08	2.69	3.09	3.90	4.76	5.84	7.56	9.40	11.00	
3.00			2.25	2.91	3.35	4.24	5.18	6.35	8.23	10.23	11.99	15.99
3.25			2.42	3.14	3.61	4.57	5.60	6.86	8.90	11.06	12.96	17.30
3.50					3.87	4.90	6.00	7.37	9.56	11.90	13.93	18.61
3.75					4.12	5.23	6.40	7.87	10.22	12.72	14.91	19.91
4.00					4.37	5.55	6.81	8.37	10.88	13.54	15.88	21.22
4.25								8.87	11.53	14.36	16.85	22.52
4.50								9.37	12.18	15.18	17.81	23.81
4.75									12.83	15.99	18.77	25.11
5.00									13.48	16.81	19.73	26.40
5.25												27.69
5.50												28.98
5.75												30.25
6.00												31.53

#### 产品应用

输送水、煤气、消防、空气、油和取暖蒸汽等低压流体输送，以及农业大棚、家具、脚手架等机械结构用途的焊接钢管。

#### 生产标准

GB/T 9711-2011  
GB/T 3091-2015  
GB/T 13793-2008  
ASTM A53  
EN10217  
JIS G3444

#### ERW焊管

生产线：16条  
年生产能力：120万吨

#### 热镀锌圆管

生产线：12条  
年生产能力：120万吨

#### Application Fields

Transport of water, gas, fire, air, oil and heating steam and other low-pressure fluid transport, and agricultural greenhouses, furniture, scaffolding and other mechanical structure of the use of welded steel pipe.

#### Production Standards

GB/T 9711-2011  
GB/T 3091-2015  
GB/T 13793-2008  
ASTM A53  
EN10217  
JIS G3444

#### ERW Black Steel Pipe

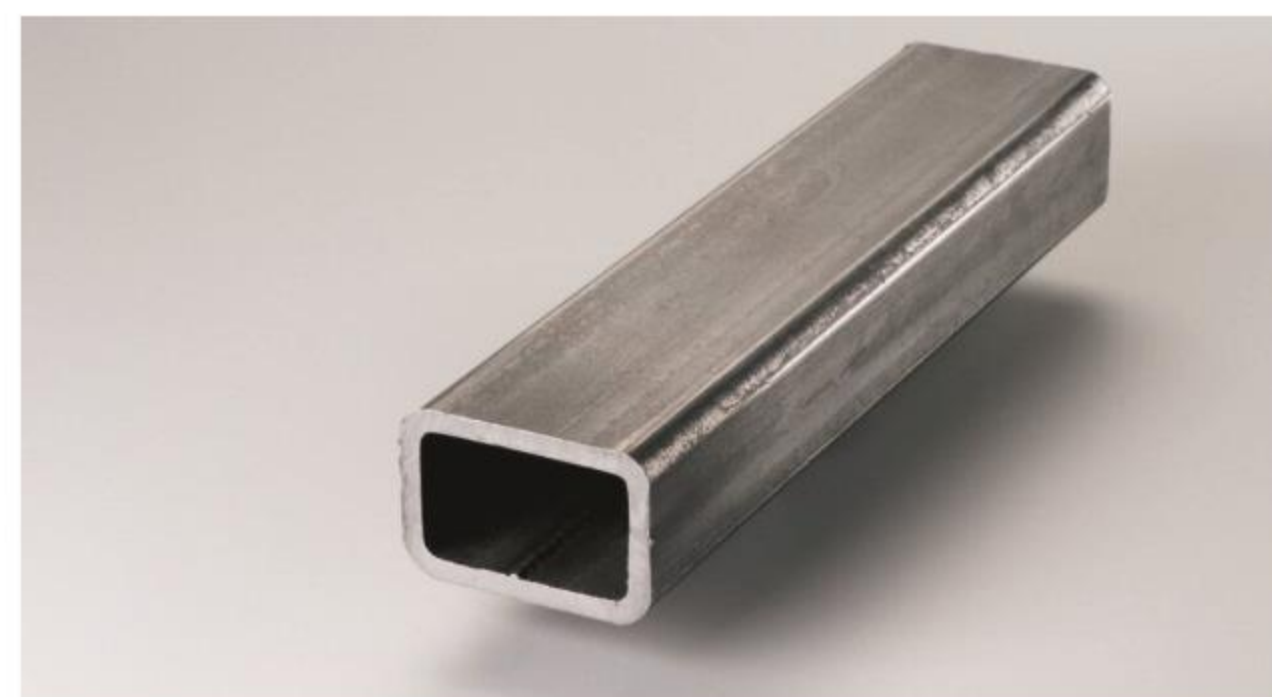
1. Production Line: 16  
2. Annual Capacity: 1,200,000 Tons

#### Galvanized Steel Pipe

1. Production Line: 12  
2. Annual Capacity: 1,200,000 Tons



## Square and Rectangular Steel Pipe (Black and Hot Dipped Galvanized) 方矩管（黑管和热镀锌钢管）



### 产品应用

机械设备，太阳能设备，钢结构，汽车部件，桥梁地桩，护栏，船舶内部结构。

### 生产标准

GB/T6728-2002  
GB/T6725-2008  
GB/T3094-2012  
JG/T 178-2005  
JIS G3466-2006  
EN 10219-2006  
ASTMA500

### 黑管

生产线：12条  
年生产能力：80万吨

### 热镀锌方管

生产线：16条  
年生产能力：80万吨

### Application Fields

Machinery and equipment, solar energy equipment, steel structure, auto parts, bridge pile, guardrail, ship internal structure.

### Production Standards

GB/T6728-2002  
GB/T6725-2008  
GB/T3094-2012  
JG/T 178-2005  
JIS G3466-2006  
EN 10219-2006  
ASTMA500

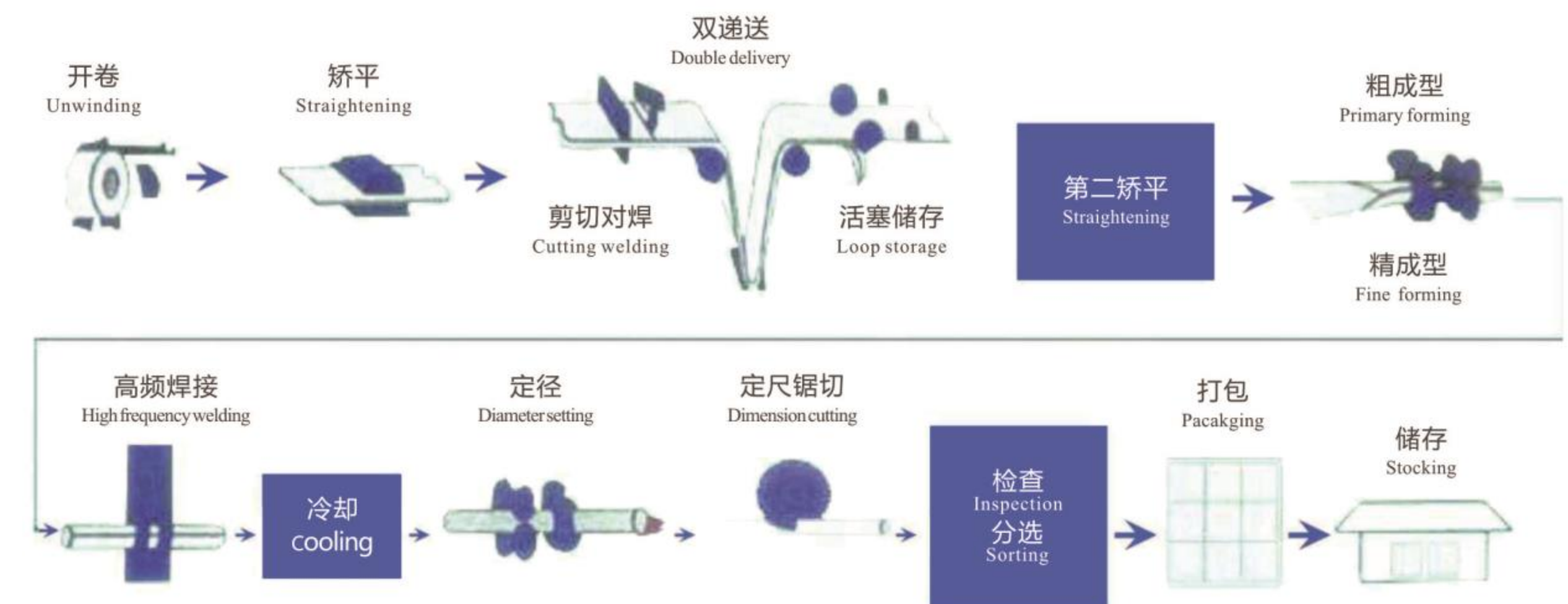
### Black SHS/RHS

1. Production Line: 12  
2. Annual Capacity: 800,000 Tons

### Galvanized SHS/RHS

1. Production Line: 16  
2. Annual Capacity: 800,000 Tons

## 方矩型管工艺流程图 PFD of Square & Rectangular Steel Pipe



### 方管重量 (kg/m)

Size & Weight of Square Pipe

Diameter Wall Thickness	25*25	30*30	40*40	50*50	60*60	70*70	80*80	100*100	120*120	150*150	200*200	300*300
1.50	1.08	1.31	1.78	2.25								
1.60	1.14	1.39	1.89	2.40								
1.70	1.20	1.47	2.01	2.54								
1.80	1.27	1.61	2.12	2.68								
1.90	1.33	1.63	2.22	2.82								
2.00	1.39	1.70	2.33	2.96	3.59							
2.20	1.51	1.86	2.55	3.24	3.93							
2.30	1.57	1.93	2.65	3.37	4.10							
2.40	1.63	2.00	2.76	3.51	4.26							
2.50	1.68	2.07	2.86	3.64	4.43	5.21	6.00	7.57	9.14			
2.75	1.82	2.25	3.11	3.98	4.84	5.71	6.57	8.30	10.02			
3.00		2.42	3.36	4.31	5.25	6.19	7.13	9.02	10.90	13.73		
3.25			3.61	4.63	5.65	6.67	7.69	9.73	11.77	14.83		
3.50			3.85	4.95	6.04	7.14	8.24	10.44	12.64	15.94	21.43	32.42
3.75			4.08	5.26	6.43	7.61	8.79	11.14	13.50	17.03	22.96	34.69
4.00			4.31	5.56	6.82	8.07	9.33	11.84	14.35	18.12	24.40	36.96
4.25				5.86	7.20	8.53	9.87	12.53	15.20	19.21	25.88	39.22
4.50				6.16	7.57	8.98	10.40	13.22	16.05	20.29	27.35	41.48
4.75				6.44	7.94	9.43	10.92	13.90	16.89	21.36	28.82	43.73
5.00				6.73	8.30	9.87	11.44	14.58	17.72	22.43	30.28	45.98
5.25							11.95	15.25	18.55	23.49	31.73	48.22
5.50							12.46	15.91	19.37	24.55	33.18	50.45
5.75							12.96	16.57	20.18	25.60	34.63	52.68
6.00								17.22	21.00	26.64	36.06	54.9
6.50										28.72	38.92	59.33
6.75										29.75	40.35	61.54
7.00										30.77	41.76	63.74
7.50										32.80	44.58	68.12
7.75										33.81	45.97	70.31
8.00										34.81	47.37	72.49
9.75											56.96	87.58
10.00											58.31	89.71

### 矩管重量 (kg/m)

Size & Weight Of Rectangular Pipe

Diameter Wall Thickness	40*20	40*30	50*25	50*30	60*40	70*50	80*40	80*60	100*50	100*60	120*60	120*80	150*100	160*80	200*100	250*150	400*200
1.50	1.31																
1.60	1.39																
1.70	1.47	1.74	1.87	2.01													
1.80	1.55	1.83	1.97	2.12	2.68												
1.90	1.63	1.93	2.08	2.22	2.82												
2.00	1.70	2.02	2.18	2.33	2.96	3.59	3.59										
2.20	1.86	2.20	2.37	2.55	3.24	3.93	3.93	4.62	4.96								
2.30	1.93	2.29	2.47	2.65	3.37	4.10	4.10	4.82	5.18	5.54							
2.40	2.00	2.38	2.57	2.76	3.51	4.26	4.26	5.02	5.39	5.77							
2.50	2.07	2.47	2.67	2.86	3.64	4.43	4.43	5.21	5.61	6.00	6.78	7.57					
2.75	2.25	2.69	2.90	3.11	3.98	4.84	4.84	5.71	6.14	6.57	7.43	8.30					
3.00	2.42	2.90	3.13	3.36	4.31	5.25	5.25	6.19	6.66	7.13	8.07	9.02	11.37	10.90	13.73	18.44	32.42
3.25		3.10	3.35	3.61	4.63	5.65	5.65	6.67	7.18	7.69	8.71	9.73	12.82	11.77	14.83	19.94	34.69
3.50				3.85	4.95	6.04	6.04	7.14	7.69	8.24	9.34	10.44	13.19	12.64	15.94	21.43	36.96
3.75				4.08	5.26	6.43	6.43	7.61	8.20	8.79	9.97	11.14	14.09	13.50	17.03	22.92	39.22
4.00					5.56	6.82	6.82	8.07	8.70	9.33	10.59	11.84	14.98	14.35	18.12	24.40	41.48
4.25								8.53	9.20	9.87	11.20	12.53	15.87	15.20	19.21	25.88	43.73
4.50								8.98	9.69	10.40	11.81	13.22	16.75	16.05	20.29	27.35	45.98
4.75								9.43	10.17	10.92	12.41	13.90	17.63	16.89	21.35	28.82	48.22
5.00								9.87	10.65	11.44	13.01	14.58	18.50	17.72	22.43	30.28	50.45
5.25									11.13	11.95	13.60	15.25	19.37	18.55	23.49	31.73	52.68
5.50									11.59	12.46	14.19	15.91	20.23	19.37	24.55	33.18	54.90
5.75									12.06	12.96	14.86	16.57	21.09	20.18	25.60	34.63	59.33
6.00									12.51	13.46	15.34	17.22	21.93	21.00	26.64	36.06	61.54
6.50													23.62	22.60	28.72	38.92	63.74
6.75													24.45	23.39	29.75	40.35	68.12
7.00													25.28	24.18	30.77	41.76	70.31
7.50													26.91	25.74	32.80	44.58	72.49
7.75													27.72	26.51	33.81	45.97	87.58
8.00													28.53	27.27	34.81	47.37	89.71
9.75																56.96	
10.00																58.31	



## 螺旋缝双面埋弧焊管 SSAW Steel Pipe (Spiral Submerged Arc Welded Steel Pipe)

### 产品应用

可用于输送天然气、水、空气、燃气、暖气等普通液体，也可用于打桩、结构等施工领域。

### Application Fields

It can be used for the transportation of ordinary fluids such as gas, water, gas, fire, air and heating steam, and can be used for piling, Structure and other construction areas.

### 生产标准

GB/T9711-2011  
API 5L (PSL1/PSL 2)  
SY/T5037

### Production Standards

GB/T9711-2011  
API 5L (PSL1/PSL 2)  
SY/T5037

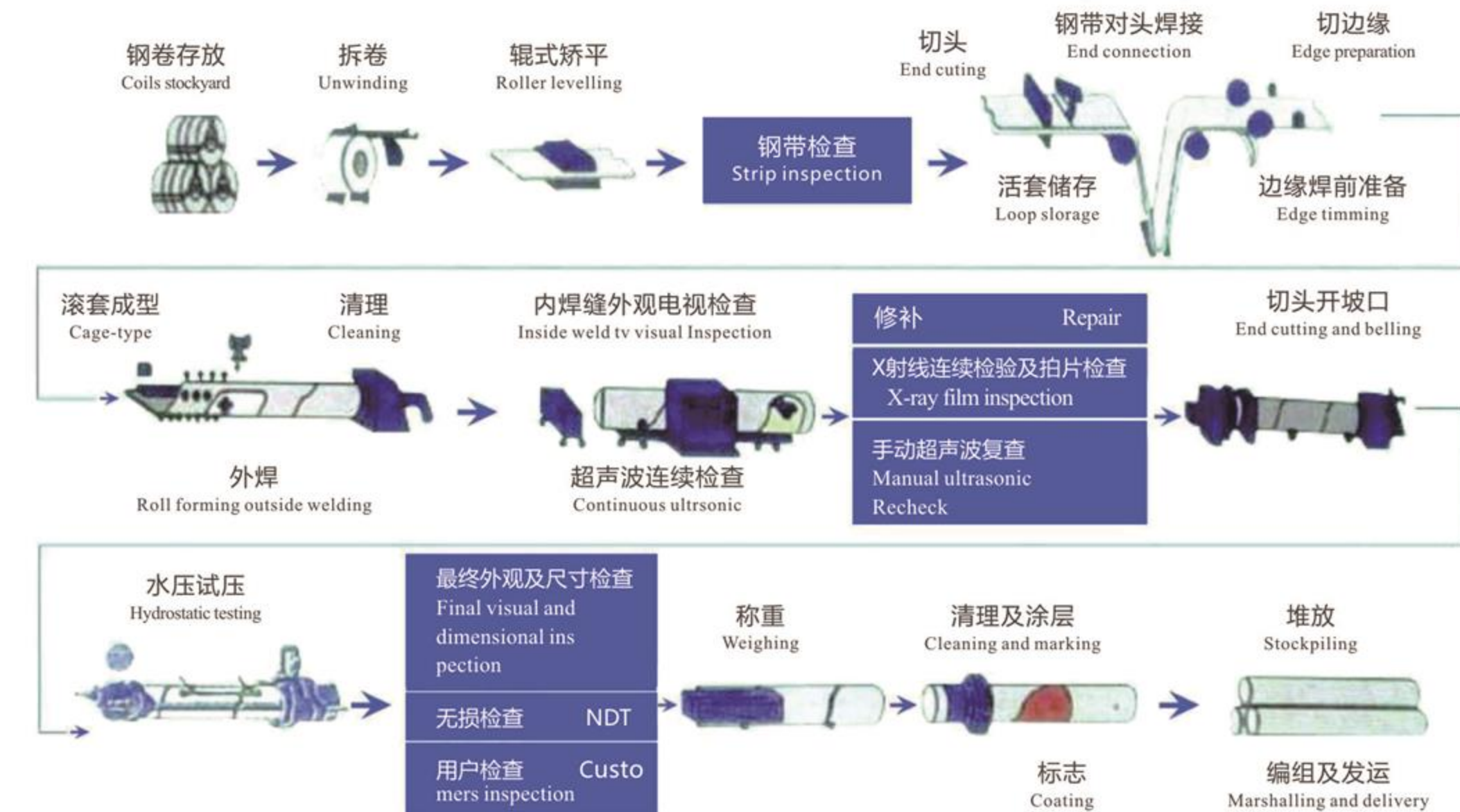
### 螺旋焊钢管

生产线：6条  
年生产能力：16万吨

### SSAW Steel Pipe

1. Production Line: 12  
2. Annual Capacity: 160,000 Tons

## 螺旋缝双面埋弧焊管工艺流程图 PFD of SSAW Steel Pipe

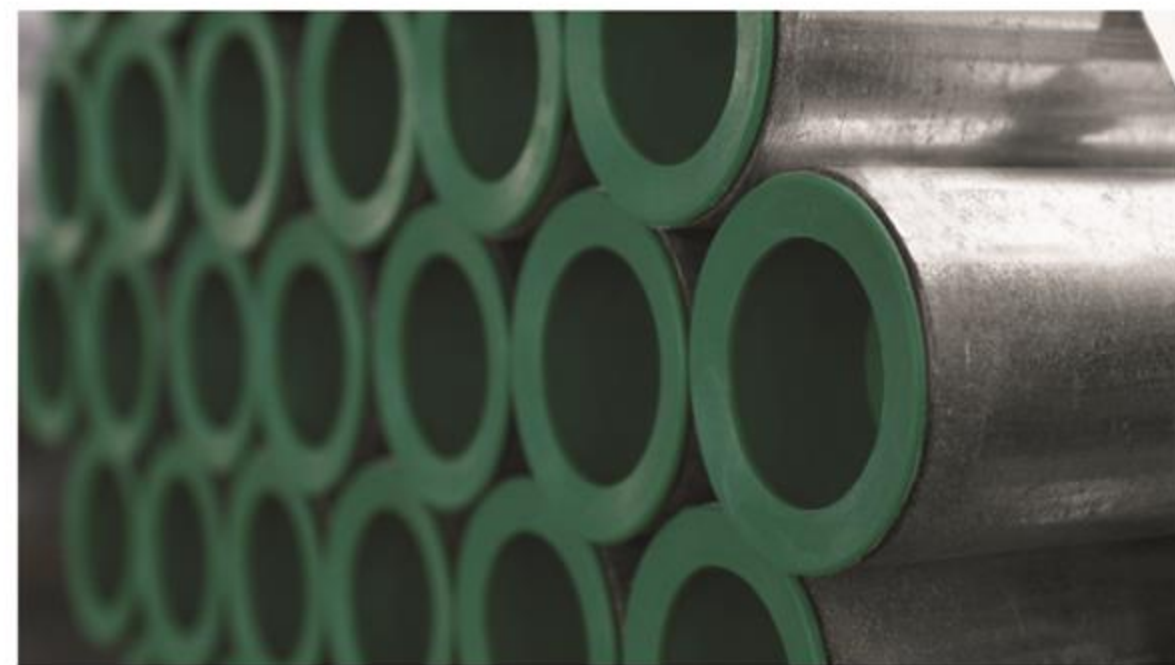


## 螺旋缝双面埋弧焊管重量 (kg/m) Size & Weight of SSAW Steel Pipe

Diameter	Wall thickness		6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00
	inch	mm											
8	219.1		31.53	36.61	41.65	48.63	51.57	56.45					
10	273.1		39.52	45.94	52.30	58.62	64.88	71.10					
12	323.9		47.04	54.71	62.32	69.89	77.41	84.88					
14	355		51.73	60.18	68.58	76.93	85.23	93.48					
16	406.4		59.25	68.95	78.60	88.20	97.76	107.26					
18	457		66.73	77.68	88.58	99.44	110.24	120.99	131.69				
20	508		74.28	86.49	98.65	110.75	122.81	134.82	146.79				
22	559		81.83	95.29	108.71	122.07	135.39	148.66	161.88				
24	610		89.37	104.10	118.77	133.39	147.97	162.49	176.97	191.40			
26	660		96.77	112.73	128.63	144.49	160.30	176.06	191.77	207.43			
28	711		104.32	121.53	138.73	155.81	172.88	189.89	206.86	223.78			
32	813		119.41	139.14	158.82	178.45	198.03	217.56	237.05	256.48	275.86		
36	914		134.36	156.58	178.75	200.87	222.94	244.96	266.94	288.86	310.73		
40	1016		149.45	174.18	198.87	223.51	248.09	272.63	297.12	321.56	345.95		
42	1067		156.99	182.98	208.92	234.81	260.65	286.45	312.19	337.89	363.54		
44	1118		164.54	191.79	218.99	246.15	273.25	300.30	327.31	354.26	381.17	408.02	434.83
48	1219		179.49	209.23	238.92	268.56	298.16	327.70	357.20	386.64	416.04	445.39	474.68
56	1422			244.27	278.97	313.62	348.22	382.77	417.27	451.72	486.13	520.48	554.79
64	1626			279.49	319.22	358.90	398.53	438.11	477.64	517.13	556.56	595.95	635.28
68	1727				339.14	381.32	423.44	465.51	507.53	549.51	591.43	633.31	675.13
72	1829				359.27	403.96	448.59	493.18	537.72	582.21	626.65	671.04	715.38
80	2032				396.15	448.98	498.63	548.22	597.76	647.25	696.69	746.09	795.43



## Steel-Plastic Composites Pipe 钢塑复合管



### 产品应用

适用于日常生活用水、饮用水、自来水、燃气、消防、化工产品等的流体输送和加热工程。

### Application Fields

Suitable for fluid transportation and heating engineering for daily use, drinking water, tap water, gas, fire fighting, chemical products, etc.

### 生产标准

GB/T28897-2012  
GB/T3091-2015

### Production Standards

GB/T28897-2012  
GB/T3091-2015

## 钢塑复合管工艺流程图

### PFD of Steel&Plastic Complex Pipe



# List of Specifications

Specifications	Application	Chemical Requirement(%)						Physical Requirement		
		C (MAX)	Si (MAX)	Mn (MAX)	P (MAX)	S (MAX)	Others	Tensile Strength Min MPa(Psi)	Yield Strength Min MPa(Psi)	
ASTMA53	A	Carbon Steel pipes for ordinary piping	0.25	—	0.95	0.05	0.045	Cu,Cr,Ni ≤0.40 MO≤0.15 V≤0.08	330MPa (48000 Psi)	205MPa (30000 Psi)
	B		0.30	—	1.20	0.05	0.045		415MPa (60000 Psi)	240MPa (35000 Psi)
ASTMA252	Grade I	—	—	—	—	0.05	—	—	345MPa (50000 Psi)	207MPa (30000 Psi)
	Grade II		—	—	—	0.05	—	—	414MPa (60000 Psi)	241MPa (35000 Psi)
	Grade III		—	—	—	0.05	—	—	455MPa (66000 Psi)	310MPa (45000 Psi)
ASTMA500	A	Structural Carbon Steel Pipes in Round	0.30	—	—	0.045	0.045	Cu≥0.20 When required	310MPa (45000 Psi)	228MPa (33000 Psi)
	B		0.30	—	—	0.045	0.045		400MPa (58000 Psi)	289MPa (42000 Psi)
	C		0.27	—	1.40	0.045	0.045		428MPa (62000 Psi)	317MPa (46000 Psi)
	D		0.30	—	—	0.045	0.045		400MPa (58000 Psi)	248MPa (36000 Psi)
	A	Structural Carbon Steel Pipes in Square & Rectangular	0.30	—	—	0.045	0.045	Cu≥0.20 When required	310MPa (45000 Psi)	269MPa (39000 Psi)
	B		0.30	—	—	0.045	0.045		400MPa (58000 Psi)	317MPa (46000 Psi)
	C		0.27	—	1.40	0.045	0.045		428MPa (62000 Psi)	345MPa (50000 Psi)
	D		0.30	—	—	0.045	0.045		400MPa (58000 Psi)	248MPa (36000 Psi)
ASTMA795	A	Carbon Steel Pipes For Fire Protection Use	0.25	—	0.95	0.035	0.035	—	—	—
	B		0.30	—	1.20	0.035	0.035	—	—	—
KS D 3566 (JIS G3444)	STK 290	General Structural Purposes	—	—	—	0.050	0.050	—	290(30)	—
	STK 400		0.25	—	—	0.040	0.040	—	400(41)	235(24)
	STK 500		0.24	0.35	0.30-1.00	0.040	0.040	—	490(51)	315(36)
	STK 490		0.18	0.55	1.50	0.040	0.040	—	500(50)	355(32)
	STK 540		0.23	0.23	1.50	0.040	0.040	—	540(55)	390(40)

Elongation Min(%)		Flattening Test	Bend Test	Hydrostatic & NDT	Others
Longitudinal Direction	Transverse Direction				
e-625,000x e: minimum elongation in 2 in(50.8mm) A: Cross - Sectional area of the test specimen in sq in U: Specified minimum ultimate tensile strength in Psi		Weld portion: H=2/3D The other side of weld portion: H=1/3D	For Pipe NPS 2 and under 90°X12D 180°X8D When order for close coiling	Specified respectively in size and grade(p=2st/D) The maximum pressure NPS ≤3 : P=2500Psi NPS >3 : P=2800 Psi NDT and NDT (NPS 2 and over)	*ZN Coating Weight: 500g/m <sup>2</sup>  *Heat treatment on the weld seem area(Grade B)
30 (E=48t+15.00),t=(inch)	—	—	—	—	—
25 (E=40t+12.50),t=(inch)	—	—	—	—	—
20 (E=32t+10.00),t=(inch)	—	—	—	—	—
25	—	—	—	—	If necessary, Stress relieved, anneal
23	—	—	—	—	
21	—	—	—	—	
23	—	—	—	—	
25	—	H = $\frac{(1+e)t}{e+tD}$	—	—	
23	—	A:e=0.07 B:e=0.09 C:e=0.06	—	—	
21	—	—	—	—	
23	—	—	—	—	
—	—	Weld portion: H=2/3D The other side of weld portion: H=1/2D	—	In accordance with the specified hydrostatic pressures or NDT	*ZN Coating Weight : 460g/m <sup>2</sup> (min)
30	25	H=2/3D	Outside Diameter 50mm and Under 90°X8D	—	—
23	18	H=2/3D	90°X6D	—	—
15	10	H=7/8D	90°X6D	—	—
23	18	H=7/8D	90°X6D	—	—
20	16	H=7/8	90°X6D	—	—

### ASTM A500 GRADE A/B/C

Dimension (inch)	Thickness (inch)	Thickness (mm)	Thickness (gaug)
1/2"×1/2"	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
5/8"×5/8"	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
3/4"×3/4"	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
1"×1"	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
1 1/4"×1 1/4"	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
1 1/2"×1 1/2"	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
2"×1"	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15

Dimension (inch)	Thickness (inch)	Thickness (mm)	Thickness (gaug)
2"×1"	0.095	2.41	13
	0.109	2.77	12
	0.120	3.05	11
	0.042	1.07	19
2"×2"	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
	0.083	2.11	14
	0.109	2.77	12
	0.120	3.05	11
2-1/2"×2-1/2"	0.165	4.19	8
	0.180	4.57	7
	0.042	1.07	19
	0.049	1.24	18
	0.058	1.47	17
	0.065	1.65	16
	0.072	1.83	15
	0.083	2.11	14
	0.109	2.77	12
	0.120	3.05	11
3"×3"	0.165	4.19	8
	0.180	4.57	7
	0.083	2.11	14
	0.095	2.41	13
	0.120	3.05	11
3 1/2"×3 1/2"	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
	0.083	2.11	14
	0.095	2.41	13
	0.120	3.05	11
	0.180	4.57	7
4"×2"	0.250	6.35	
	0.313	7.95	
	0.083	2.11	14
	0.095	2.41	13
4"×3"	0.120	3.05	11
	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
4"×4"	0.083	2.11	14
	0.095	2.41	13
	0.120	3.05	11
	0.180	4.57	7
	0.250	6.35	

### ASTM A500 GRADE A/B/C

Dimension (inch)	Thickness (inch)	Thickness (mm)	Thickness (gaug)
5"×5"	0.120	3.05	11
	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
6"×2"	0.120	3.05	11
	0.180	4.57	7
6"×3"	0.250	6.35	
	0.313	7.95	
	0.120	3.05	11
	0.180	4.57	7
	0.250	6.35	
6"×4"	0.313	7.95	
	0.120	3.05	11
	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
6"×6"	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
	0.180	4.57	7
	0.250	6.35	
7"×7"	0.375	9.53	
	0.500	12.7	
	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
8"×4"	0.375	9.53	
	0.500	12.7	
	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
8"×6"	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
	0.180	4.57	7
	0.250	6.35	
8"×8"	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
	0.180	4.57	7
	0.250	6.35	
10"×4"	0.250	6.35	
	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
	0.180	4.57	7
10"×6"	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
	0.375	9.53	
	0.500	12.7	

Dimension (inch)	Thickness (inch)	Thickness (mm)	Thickness (gaug)
10"×10"	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
	0.375	9.53	
12"×4"	0.500	12.7	
	0.180	4.57	7
	0.250	6.35	
12"×8"	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
	0.180	4.57	7
12"×12"	0.250	6.35	
	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
	0.180	4.57	7
14"×14"	0.250	6.35	
	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
	0.562	14.27	
	0.625	15.88	
16"×16"	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
	0.562	14.27	
20"×20"	0.625	15.88	
	0.180	4.57	7
	0.250	6.35	
	0.313	7.95	
	0.375	9.53	
	0.500	12.7	
24"×24"	0.625	15.88	
	0.562	14.27	
	0.500	12.7	
	0.375	9.53	
	0.313	7.95	
=			
Dimension: 2/5"×2/5"-24"×24"(inch)			
Thickness: 0.5-18(mm)			
Length: 100-12000(mm)			

### ASTM A53 GRADE A/B/C

Nominal Diameter		Outerside Diameter		Sch. No	Wall Thickness		Nominal Weight	
NPS	DN	inch	mm		inch	mm	lb/ft	kg/m
1/2	15	0.84	21.3	40	0.109	2.77	0.85	1.27
	15	0.84	21.3	80	0.147	3.73	1.09	1.62
	15	0.84	21.3	160	0.188	4.78	1.31	1.95
	15	0.84	21.3	-	0.294	7.47	1.72	2.55
3/4	20	1.05	26.7	40	0.113	2.87	1.13	1.69
	20	1.05	26.7	80	0.154	3.91	1.48	2.20
	20	1.05	26.7	160	0.219	5.56	1.95	2.90
	20	1.05	26.7	-	0.308	7.82	2.44	3.64
1	25	1.315	33.4	40	0.133	3.38	1.68	2.50
	25	1.315	33.4	80	0.179	4.55	2.17	3.24
	25	1.315	33.4	160	0.25	6.35	2.85	4.24
	25	1.315	33.4	-	0.358	9.09	3.66	5.45
1 1/4	32	1.66	42.2	40	0.14	3.56	2.27	3.39
	32	1.66	42.2	80	0.191	4.85	3	4.47
	32	1.66	42.2	160	0.25	6.35	3.77	5.61
	32	1.66	42.2	-	0.382	9.70	5.22	7.77
1 1/2	40	1.90	48.3	40	0.145	3.68	2.72	4.05
	40	1.90	48.3	80	0.20	5.08	3.63	5.41
	40	1.90	48.3	160	0.281	7.14	4.86	7.25
	40	1.90	48.3	-	0.40	10.15	6.41	9.55
2	50	2.375	60.3	40	0.154	3.91	3.66	5.44
	50	2.375	60.3	80	0.218	5.54	5.03	7.48
	50	2.375	60.3	160	0.344	8.74	7.47	11.11
	50	2.375	60.3	-	0.436	11.07	9.04	13.44
2 1/2	65	2.875	73	40	0.203	5.16	5.8	8.63
	65	2.875	73	80	0.276	7.01	7.67	11.41
	65	2.875	73	160	0.375	9.53	10.02	14.92
	65	2.875	73	-	0.552	14.02	13.71	20.39
3	80	3.50	88.9	40	0.216	5.49	7.58	11.29
	80	3.50	88.9	80	0.30	7.62	10.26	15.27
	80	3.50	88.9	160	0.438	11.13	14.34	21.35
3 1/2	90	4.00	101.6	40	0.226	5.74	9.12	13.57
	90	4.00	101.6	80	0.318	8.08	12.52	18.64
4	100	4.50	114.3	40	0.237	6.02	10.80	16.08
	100	4.50	114.3	80	0.337	8.56	15.00	22.32
	100	4.50	114.3	160	0.531	13.49	22.53	33.54
5	125	5.563	141.3	40	0.258	6.55	14.63	21.77
	125	5.563	141.3	80	0.375	9.53	20.80	30.97
	125	5.563	141.3	160	0.625	15.88	32.99	49.12
6	150	6.625	168.3	40	0.280	7.11	18.99	28.26
	150	6.625	168.3	80	0.432	10.97	28.60	42.56
	150	6.625	168.3	160	0.719	18.26	45.39	67.57
8	200	8.625	219.1	20	0.250	6.35	22.38	33.32
	200	8.625	219.1	40	0.322	8.18	28.58	42.55
	200	8.625	219.1	80	0.500	12.7	43.43	64.64
	200	8.625	219.1	160	0.906	23.01	74.76	111.27

### BS 1387-1985 / BS EN10255

Tube	Size		Outside Dia Black/galvanized Tube				Wall Thickness		Weight Of Black/galvanized Tube				Pieces Per Bundle
	inch	DN	Minimum		Maximum		Plain Ends		Screwde&socketed				
			inch	mm	inch	mm	inch	mm	inch	mm			
Light	1/2"	15	0.825	21.0	0.841	21.4	0.079	2.0	0.289	0.947	0.291	0.956	153
	3/4"	20	1.041	26.4	1.059	26.9	0.091	2.3	0.421	1.38	0.424	1.39	127
	1"	25	1.309	33.2	1.328	33.8	0.102	2.6	0.603	1.98	0.61	2.00	91
	1 1/4"	32	1.650	41.9	1.670	42.5	0.102	2.6	0.774	2.54	0.783	2.57	61
	1 1/2"	40	1.882	47.8	1.903	48.4	0.114	2.9	0.985	3.23	0.997	3.27	61
	2"	50	2.347	59.6	2.370	60.2	0.114	2.9	1.24	4.08	1.26	4.15	37
	2 1/2"	65	2.960	75.2	2.991	76	0.126	3.2	1.74	5.71	1.78	5.83	37
	3"	80	3.460	87.9	3.491	88.7	0.126	3.2	2.05	6.72	2.1	6.59	19
Medium	4"	100	4.450	110.0	4.481	113.9	0.142	3.6	2.97	9.75	3.05	10.00	19
	1/2"	15	0.831	21.1	0.856	21.7	0.102	2.6	0.369	1.21	0.372	1.22	127
	3/4"	20	1.047	26.6	1.072	27.2	0.102	2.6	0.475	1.56	0.479	1.57	101
	1"	25	1.316	33.4	1.346	34.2	0.126	3.2	0.735	2.41	0.741	2.43	61
	1 1/4"	32	1.657	42.1	1.687	42.9	0.126	3.2	0.945	3.10	0.954	3.13	51
	1 1/2"	40	1.889	48.0	1.919	48.8	0.126	3.2	1.09	3.57	1.10	3.61	44
	2"	50	2.354	59.8	2.394	60.8	0.142	3.6	1.53	5.03	1.55	5.10	29
	2 1/2"	65	2.969	75.4	3.014	76.6	0.142	3.6	1.96	6.43	1.99	6.55	24
Heavy	3"	80	3.469	88.1	3.524	89.5	0.157	4.0	2.55	8.37	2.6	8.54	19
	4"	100	4.459	113.3	4.524	114.9	0.177	4.5	3.72	12.2	3.81	12.5	14
	5"	125	5.461	138.7	5.535	140.6	0.197	5.0	5.06	16.6	5.21	17.1	10
	6"	150	6.460	164.1	6.539	166.1	0.197	5.0	6.00	19.7	6.19	20.3	7
	1/2"	15	0.831	21.1	0.856	21.7	0.126	3.2	0.439	1.44	0.442	1.45	127
	3/4"	20	1.047	26.6	1.072	27.2	0.126	3.2	0.570	1.87	0.573	1.88	101
	1"	25	1.316	33.4	1.346	34.2	0.157	4.0	0.896	2.94	0.902	2.96	61
	1 1/4"	32	1.657	42.1	1.687	42.9	0.157	4.0	1.16	3.80	1.17	3.83	51
Heavy	1 1/2"	40	1.889	48.0	1.919	48.8	0.157	4.0	1.33	4.38	1.35	4.42	44
	2"	50	2.354	59.8	2.394	60.8	0.177	4.5	1.89	6.19	1.91	6.26	29
	2 1/2"	65	2.969	75.4	3.014	76.6	0.177	4.5	2.42	7.93	2.45	8.05	24
	3"	80	3.469	88.1	3.524	89.5	0.197	5.0	3.14	10.3	3.2	10.5	19
	4"	100	4.459	113.3	4.524	114.9	0.212	5.4	4.42	14.5	4.51	14.8	14
	5"	125	5.461	138.7	5.535	140.6	0.212	5.4	5.46	17.9	5.61	18.4	10
6"	150	6.460	164.1	6.539	166.1	0.212	5.4	6.49	21.3	6.67	21.9	7	

### ASTM A795 Black and Hot dipped Zinc-Coated, Welded Steel Pipe for Fire Protection Use

Dimensions, Weights, and Test Pressures For Light-Weight Fire Protection Pipe-Schedule 10

NPS Designator	Outerside Diameter		Nominal Wall Thickness		Weight Plain End		Test Pressure	
	inch	mm	inch	mm	lb/ft	kg/m	psi	Mpa
3/4	1.050	(26.7)	0.083	(2.11)	0.86	(1.28)	700	(4.83)
1	1.315	(33.4)	0.109	(2.77)	1.41	(2.09)	700	(4.83)
1 1/4	1.660	(42.2)	0.109	(2.77)	1.81	(2.69)	1000	(6.89)
1 1/2	1.900	(48.3)	0.109	(2.77)	2.09	(3.11)	1000	(6.89)
2	2.375	(60.3)	0.109	(2.77)	2.64	(3.93)	1000	(6.89)
2 1/2	2.875	(73.0)	0.120	(3.05)	3.53	(5.26)	1000	(6.89)
3	3.500	(88.9)	0.120	(3.05)	4.34	(6.46)	1000	(6.89)
3 1/2	4.000	(101.6)	0.120	(3.05)	4.98	(7.41)	1200	(8.27)
4	4.500	(114.3)	0.120	(3.05)	5.62	(8.37)	1200	(3.05)
5	5.563	(141.3)	0.134	(3.40)	7.78	(11.58)	1200	(3.40)
6	6.625	(168.3)	0.134	(3.40)	9.30	(13.85)	1000	(3.40)
8	8.625	(219.1)	0.188	(4.78)	16.96	(25.26)	800	(4.78)
10	10.750	(273.1)	0.188	(4.78)	21.23	(31.26)	700	(4.78)

### ANSI C80.1&UL 6 Rigid Steel Conduit, Zinc Coated

[ANSI&UL6]

Nominal Size	Nominal Inside Diameter		Outside Diameter		Nominal Wall Thickness		Length Without Coupling		Minimum weight of Ten Unit Lengths with Couplings Attached	
	inch	mm	inch	mm	inch	mm	ft&in	m	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	201.0	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	9'11 1/2"	3.01	527.0	239.05
3	3.090	78.5	3.500	88.9	0.205	5.21	9'11 1/2"	3.01	682.6	309.63
3 1/2	3.570	90.7	4.000	101.6	0.215	5.46	9'11 1/4"	3.00	831.0	376.94
4	4.050	102.9	4.500	114.3	0.225	5.72	9'11 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

Dimensions, Weights, and Test Pressures For Light-Weight Fire Protection Pipe-Schedule 30 and Schedule 40

NPS Designator	Outerside Diameter		Nominal Wall Thickness		Weight Plain End		Weight Plain and Couplings		Test Pressure	
	inch	mm	inch	mm	lb/ft	kg/m	lb/ft	kg/m	psi	Mpa
1/2	0.840	(21.3)	0.109	(2.77)	0.850	(1.27)	0.85	(1.27)	700	(4.83)
3/4	1.050	(26.7)	0.113	(2.87)	1.130	(1.69)	1.13	(1.68)	700	(4.83)
1	1.315	(33.4)	0.133	(3.38)	1.680	(2.50)	1.68	(2.50)	700	(4.83)
1 1/4	1.660	(42.2)	0.140	(3.56)	2.270	(3.39)	2.28	(3.40)	1000	(6.89)
1 1/2	1.900	(48.3)	0.145	(3.68)	2.720	(4.05)	2.73	(4.07)	1000	(6.89)
2	2.375	(60.3)	0.154	(3.91)	3.660	(5.45)	3.69	(5.50)	1000	(6.89)
2 1/2	2.875	(73.0)	0.203	(5.16)	5.880	(8.64)	5.83	(8.68)	1000	(6.89)
3	3.500	(88.9)	0.216	(5.49)	7.580	(11.29)	7.62	(11.35)	1000	(6.89)
3 1/2	4.000	(101.6)	0.226	(5.74)	9.120	(13.58)	9.21	(13.71)	1200	(8.27)
4	4.500	(114.3)	0.237	(6.02)	10.80	(16.09)	10.91	(16.25)	1200	(8.27)
5	5.563	(141.3)	0.258	(6.55)	14.63	(21.79)	14.82	(22.07)	1200	(8.27)
6	6.625	(168.3)	0.280	(7.11)	18.99	(28.29)	19.20	(28.60)	1200	(8.27)
8	8.625	(219.1)	0.277	(7.04)	24.72	(36.82)	25.57	(38.09)	1200	(8.27)
10	10.750	(273.1)	0.307	(7.80)	34.72	(51.05)	35.78	(53.29)	1000	(6.89)

[UL6 Rigid Metal Conduit]

Nominal Size	Nominal Inside Diameter		Outside Diameter		Nominal Wall Thickness		Length Without Coupling		Minimum acceptable weight of ten lengths of finished conduit with one coupling attached to each length	
	inch	mm	inch	mm	inch	mm	ft&in	m	lb	kg
1/2	0.632	16.05	0.840	21.34	0.104	2.64	9'11 1/4"	3.030	79.0	35.83
3/4	0.836	21.23	1.050	26.67	0.107	2.72	9'11 1/4"	3.030	105.0	47.63
1	1.063	27.00	1.315	33.40	0.126	3.20	9'11"	3.025	153.0	69.40
1 1/4	1.394	35.41	1.660	42.16	0.133	3.38	9'11"	3.025	201.0	91.17
1 1/2	1.624	41.25	1.900	48.26	0.138	3.51	9'11"	3.025	249.0	112.95
2	2.083	52.91	2.375	60.33	0.146	3.71	9'11"	3.025	332.0	150.59
2 1/2	2.489	63.22	2.875	73.03	0.193	4.90	9'11 1/2"	3.010	527.0	239.04
3	3.090	78.49	3.500	88.90	0.205	5.21	9'11 1/2"	3.010	682.6	309.62
3 1/2	3.570	90.68	4.000	101.60	0.215	5.46	9'11 1/4"	3.005	831.0	376.94
4	4.050	102.87	4.500	114.30	0.225	5.72	9'11 1/4"	3.005	972.3	441.03
5	5.073	128.85	5.563	141.30	0.245	6.22	9'10"	2.995	1313.6	595.85
6	6.093	154.76	6.625	168.28	0.266	6.76	9'10"	2.995	1745.3	791.67

### API 5L-2012 Specification for Line Pipe

Specifications	Application	Chemical Requirement(%)						Physical Requirement	
		C (MAX)	Si (MAX)	Mn (MAX)	P (MAX)	S (MAX)	Others	Tensile Strength Min MPa(Psi)	Yield Strength Min MPa(Psi)
API 5L (PSL 1)	L175(A25)	0.21	0.50	0.60	—	—	—	310MPa (45000 psi)	175MPa (25400 psi)
	L175P(A25P)				0.030	—	—	310MPa (45000 psi)	175MPa (25400 psi)
	L210(A)	0.22	—	0.90	0.045-0.080	—	—	335MPa (48600 psi)	210MPa (30500 psi)
	L245(B)							415MPa (60200 psi)	290MPa (42100 psi)
	L290(X42)	0.26	—	1.20	0.030	0.030	—	415MPa (60200 psi)	320MPa (46400 psi)
	L320(X46)							435MPa (63100 psi)	290MPa (42100 psi)
	L360(X52)							460MPa (66700 psi)	360MPa (46400 psi)
	L360(X56)							490MPa (71100 psi)	390MPa (56600 psi)
	L415(X60)							520MPa (75400 psi)	415MPa (60200 psi)
	L450(X65)							535MPa (77600 psi)	450MPa (65300 psi)
L480(X70)	570MPa (82700 psi)							465MPa (70300 psi)	
L480(X70)	570MPa (82700 psi)							465MPa (70300 psi)	
API 5L (PSL 2)	L245M(BM)	0.22	—	1.20	0.025	0.015	CE(PCM) ≤ 0.25% CE(IIW) ≤ 0.43%	415-760MPa (60200-110200 psi)	245-450MPa (35500-65300 psi)
	L290M(X42M)			1.30				415-760MPa (60200-110200 psi)	290-495MPa (42100-71800 psi)
	L320M(X46M)			1.40				435-760MPa (60100-110200 psi)	320-525MPa (46400-76100 psi)
	L360M(X52M)							460-760MPa (66700-110200 psi)	360-530MPa (52200-76900 psi)
	L390M(X56M)			1.45				490-760MPa (71100-110200 psi)	390-545MPa (56600-79000 psi)
	L415M(X60M)							490-760MPa (71100-110200 psi)	390-545MPa (56600-79000 psi)
	L460M(X66M)							520-760MPa (75400-110200 psi)	415-565MPa (60200-81900 psi)
	L485M(X70M)			1.65				520-760MPa (82700-110200 psi)	485-635MPa (70300-81900 psi)
	L555M(X80M)			1.85				625-825MPa (90600-119700 psi)	555-705MPa (80500-102300 psi)
API 5CT	J-55	—	—	—	0.03	0.03	—	517MPa(75000 psi)	379-552MPa (55000-80000 psi)
	K-55	—	—	—				655MPa(95000 psi)	379-552MPa (55000-80000 psi)
	N-80	—	—	—				689MPa(100000 psi)	552-758MPa (80000-110000 psi)
	L-80	—	—	—				655MPa(95000 psi)	552-665MPa (80000-95000 psi)
	P-110	—	—	—				862MPa(125000 psi)	758-965MPa (110000-140000 psi)

Elongation Min(%)	Flattening Test	Bend Test	Hydrostatic & NDT	Others																
					Longitudinal Direction	Transverse Direction														
$e-625,000 \times \frac{A^{0.2}}{U^{0.9}}$ e:minimum elongation in 2 in(50.8mm) A:Cross - Sectional area of the testspecimen in sq in U:Specified minium ultimate tensile strength in Psi	Weld portion:3/4D The other side of weld portion: H=3/5D	2 1/2 and Smaller 90° X12D	$P = \frac{2st}{D}$ P=hydrostatic test Pressure(psi) S=fiber stress, equal to a percentage of specified min. yield strength for the various sizes as shown in the tabulation below.(psi) I=Specified thickness(inch) D=Outside Diameter (inch) and NDT	*Heat treatment on the weld Seam area *Metallographic Examination *Fracture Toughness Test(PSL2)																
	Weld portion:H=2/3D The other side of weld portion:1/3D Weld ductility Test $H = \frac{3.07t}{0.07+3\sqrt{D}}$ less than X 52 $H = \frac{3.05t}{0.05+3\sqrt{D}}$ X 52 and higher	—																		
$e-625,000 \times \frac{A^{0.2}}{U^{0.9}}$ e:minimum elongation in 2 in(50.8mm) A:Cross - Sectional area of the testspecimen in sq in U:Specified minium ultimate tensile strength in Psi	D/t ≥ 16, H=0.5D D/t < 16, H=D(0.83-0.0206 D/t)	—	P=2(f x Yp x t)/D and NDT. P=hydrostatic test pressure in psi. f=a factor of 0.6 or 0.8, Yp=specified yield strength for the pipebody in psi t=specified wall thickness in inch D=Specified Outside diameter in inch Factor f	*Heat treatment on the weld seam area *Fracture Toughness Test																
9 ≤ D/t ≤ 28, H=D(1.074-0.0194 D/t) HD=D(1.086-0.0163 D/t)	<table border="1"> <thead> <tr> <th>Standard Test pressures</th> <th>size</th> <th>H40</th> <th>J55,K55</th> <th>L80,N80</th> </tr> </thead> <tbody> <tr> <td rowspan="2">10t/</td> <td>&lt;</td> <td>0.8</td> <td>0.8</td> <td>0.8</td> </tr> <tr> <td>≥</td> <td>0.6</td> <td>0.6</td> <td>0.8</td> </tr> <tr> <td>Alternate Test pressures</td> <td>All size</td> <td>0.8</td> <td>0.8</td> <td>—</td> </tr> </tbody> </table>	Standard Test pressures			size	H40	J55,K55	L80,N80	10t/	<	0.8	0.8	0.8	≥	0.6	0.6	0.8	Alternate Test pressures	All size	0.8
Standard Test pressures	size	H40	J55,K55	L80,N80																
10t/	<	0.8	0.8	0.8																
	≥	0.6	0.6	0.8																
Alternate Test pressures	All size	0.8	0.8	—																

# 产品 PRODUCTIONS



热镀锌钢管  
Galvanized Steel Pipe



镀锌管车丝  
Threaded Galvanized Pipe



喷漆螺旋管  
Painted SSAW Steel Pipe



ERW钢管  
ERW Steel Pipe



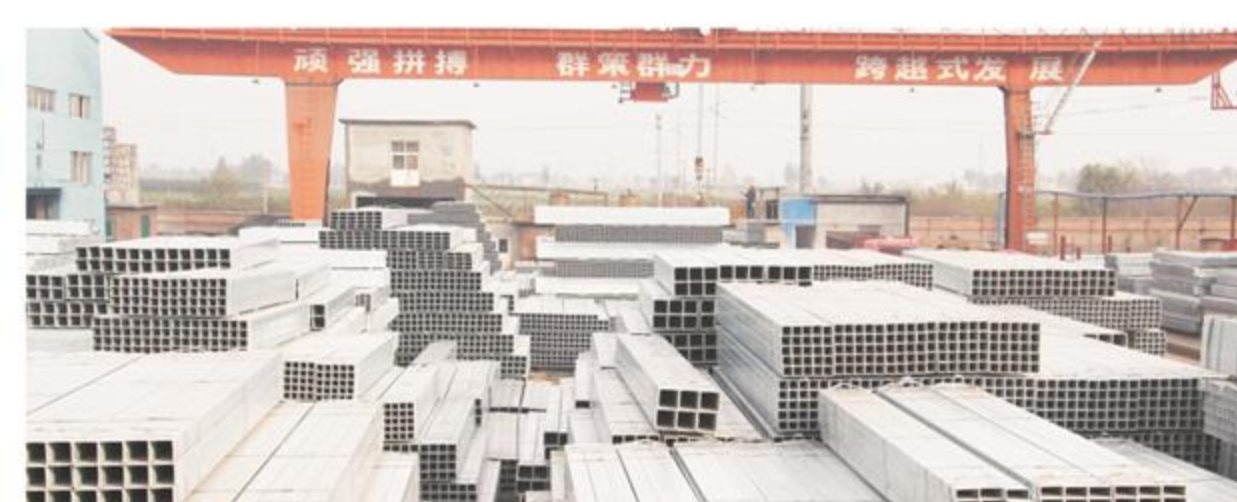
钢塑复合管  
Steel-Plastic Composites Pipe



热镀锌方管  
Galvanized Steel Hollow Section



热镀锌钢管  
Galvanized Steel Pipe



热镀锌钢管库存  
The Stock of Galvanized SHS and RHS



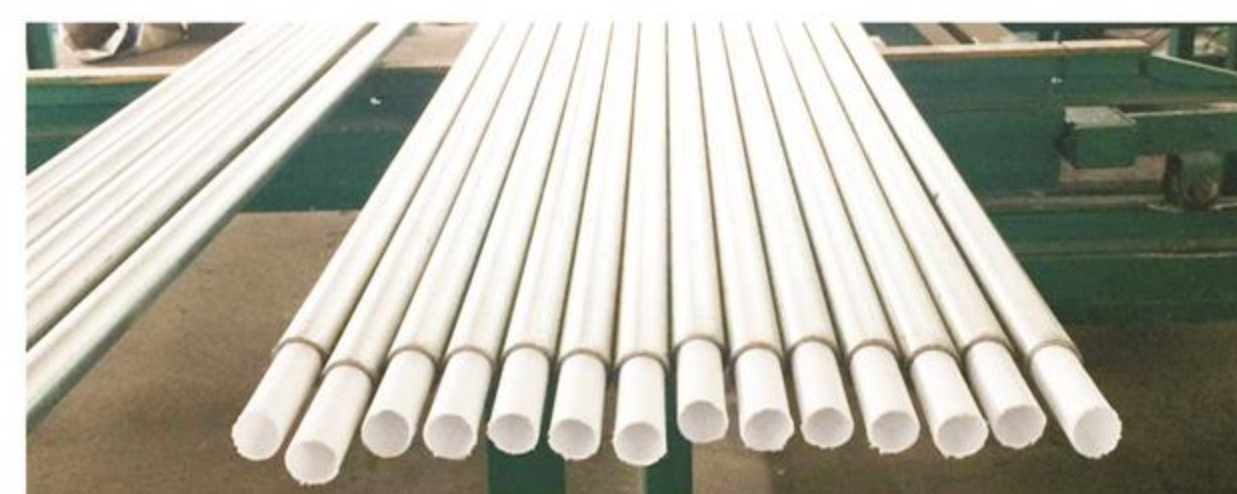
ERW焊管仓库  
The Warehouse of ERW Steel Pipe



方管  
Square Steel Tube



螺旋缝双面埋弧焊管  
Spiral Steel Pipe



钢塑复合管  
Steel-Plastic Composites Pipe



热镀锌钢管  
Galvanized Steel Pipe

# 检验试验 TEST

产品品质的保障，取决于完善的质量管理体系和先进的检测设备。正大制管在严格遵循ISO9001-2008质量管理体系的同时，量身定做了适合自己的独特的质量检测方案，从原材料入厂、生产工艺、产品入库、产品运输、售后检测等各个环节都有科学严密的、苛刻的控制措施。与此同时，公司引进德国直读光谱仪、金相分析仪、电液伺服万能试验机、X光射线探伤、超声波无损探伤仪、水压机等国际国内先进的检测设备。对原材料严格把关，对产品全程监控，确保了正大“天虹”、“吉立”钢管的优良品质。

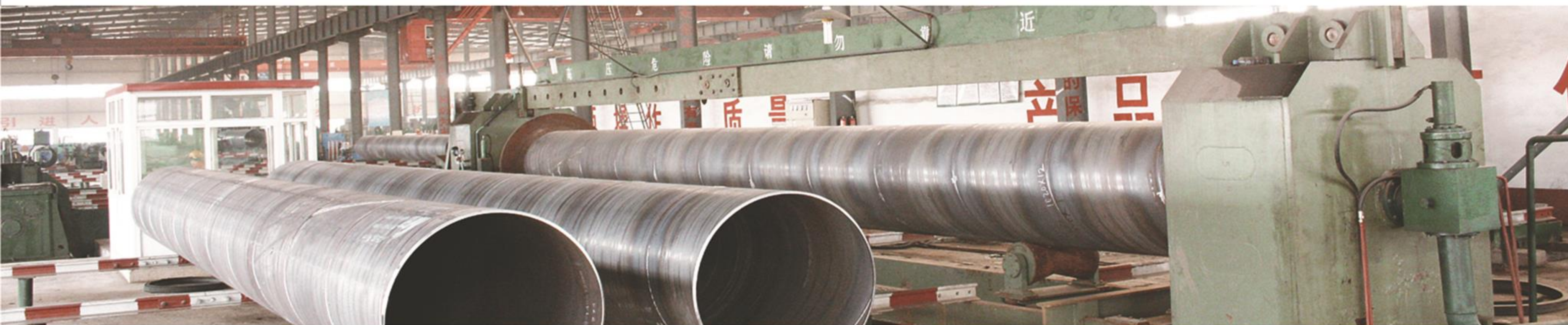
Perfect quality management system and advanced testing equipments can insure the products quality. Not only in strict compliance with ISO9001-2008 quality management system, but also ZDP made unique quality testing program. From raw material, production technology, storage, transportation, customer service and other links, ZDP has scientific control measures. At the same time, ZDP imported Germany Direct Reading Spectrometer, HX-MIAS, Electric-hydraulic Servo Universal Test Machine, X-ray Flaw Detector, Ultrasonic NDT Dector, Hydraulic press and other advanced testing equipments. Strict Control of raw material and production that ensure ZDP pipe's excellent quality.



X射线探伤  
X-Ray Flaw Detection



夏比冲击试验  
Charpy Impact Test



静水压试验机  
Hydrostatic Pressure Testing Machine



超声波无损检测  
Ultrasonic NDT



化学成分分析  
Chemical Composition

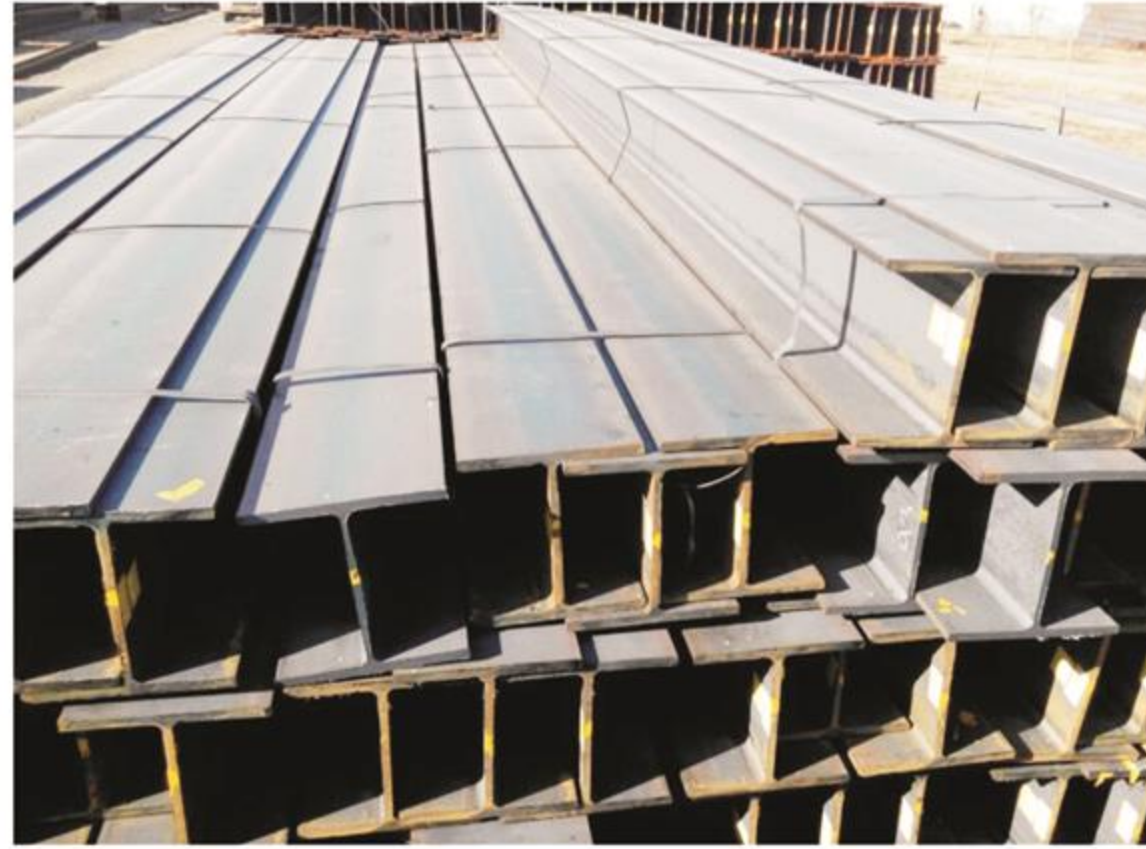


洛氏硬度测试仪  
Digital Rockwell Hardness Tester

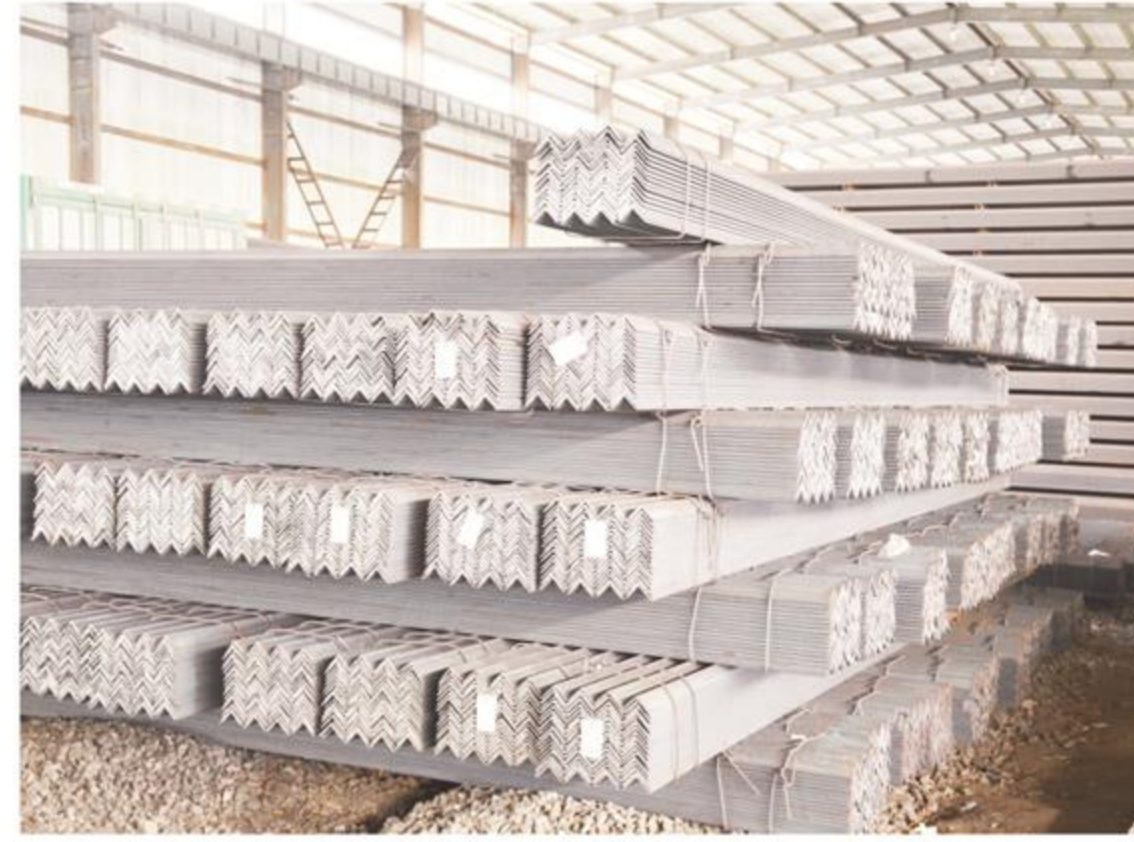


水压测试  
Hydraulic Press Testing

## 其他钢铁产品 OTHER STEEL PRODUCTS



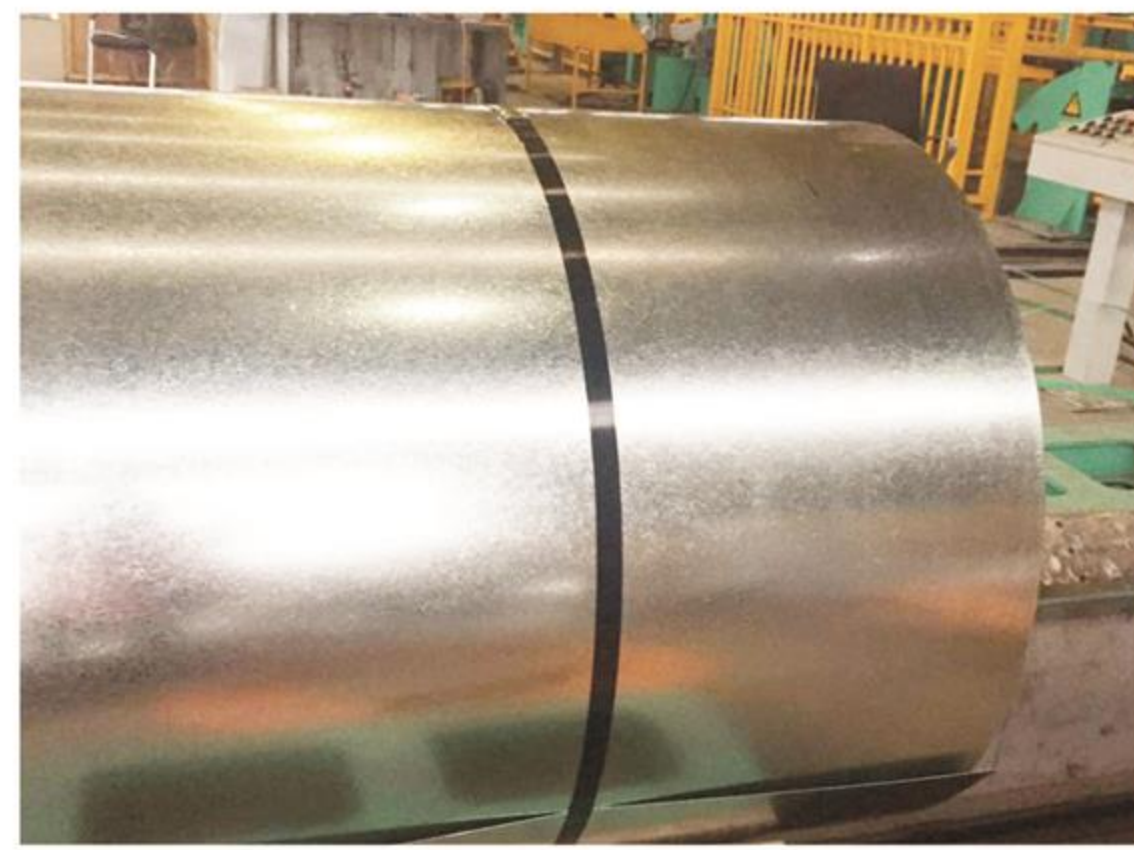
H Beam



Angel Steel



Deformed Rebar



Galvanized Steel Coil



Hot Rolled Coil



Galvanized Steel Strip

## 工程案例 PROJECT CASES



南京长假隧道  
Nanjing Yangze River Tunnel



山西液化天然气 (LNG) 项目  
Shanxi Liquefied Natural Gas Project



水立方  
Water Cube



西安地铁一号线  
Xian Subway



内蒙古煤化工项目  
Inner Mongolia Coal Chemical Project



山西大运汽车制造  
Shanxi Dayun Manufacturing of Automobile



贵州省农村安全饮用水项目  
Guizhou Rural Drinking Water



石武高铁  
Shi Wu High Speed Rail



大连造船项目  
Dalian Shipbuilding



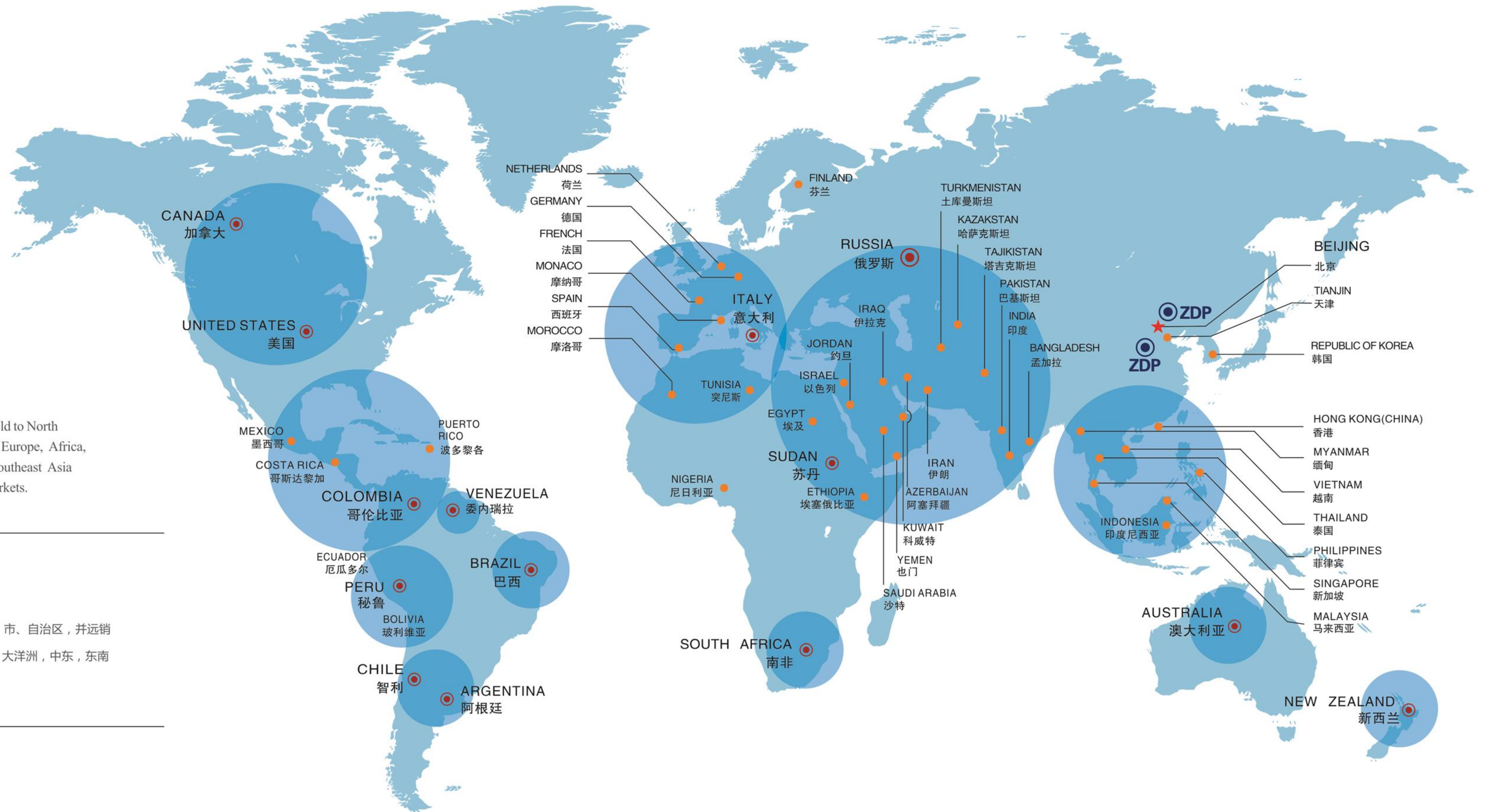
河北省南水北调配套工程  
The South to North Water Diversion Project



三峡工程  
Three Gorges Dam



晋煤300万吨煤制造油项目  
Shanxi Coal Manufacturing Oil Project



## MARKET

Our products have been sold to North America, South America, Europe, Africa, Oceania, Middle East, Southeast Asia and other international markets.

## 市场分布

公司产品销往国内28个省、市、自治区，并远销北美，南美，欧洲，非洲，大洋洲，中东，东南亚等国家和地区。

机械制造  
Mechanical Structure



建筑行业  
Construction



脚手架  
Scaffolding



农业大棚  
Greenhouse



汽车制造  
Automotive Industry



桥梁建设  
Bridge Building

