



Basic Information

## Specifications

- Outer Diameter:  $\Phi 6$ - $\Phi 2800$ mm (Minimum - Maximum)
- Wall Thickness: 0,3-45mm (Minimum – Maximum)
- Length: 18000mm (Maximum)
- \*Customized size needs to be confirmed with us

## Standards

- American Standard: ASTM A312, ASTM A358, ASTM A249, ASTM A269, ASTM A554, ASTM A790
- European Standard: DIN 17457
- Japanese Standard: JIS G3459
- GB Standard: GB/T 12770-2002, GB/T 12771-2008

## Applications

Industrial application such as petroleum, chemical, paper plant, sewage system, energy, dyeing workshop, mechanical and structural application, boiler heat exchange and others.

Basic Information

## Introduction

ESPCS produces welded stainless steel pipe & tube in different shapes: round, square and rectangle. In comparison with seamless pipe, the lead time for stainless steel welded time is way shorter.

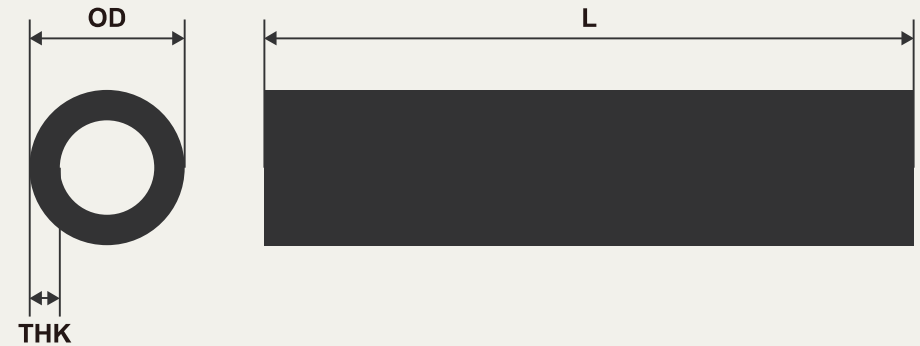


## Features

Anti-corrosion (the degree is susceptible to the alloys contained), heat-resistance, good cold and hot working properties, good toughness, good comprehensive performances and wide application.

Type	Material	Burst pressure (psi)	Expansivity ( 0.2% ) (psi)	Expansivity ( 1% ) (psi)	Recommended Max working pressure (psi)
1/4" * 0.035"	316L	17,370	7,600	9,000	12,160
1/4" * 0.035"	Alloy400	17,370	7,700	8,200	12,160
1/4" * 0.035"	Alloy825	21,150	9,700	10,600	14,720
1/4" * 0.035"	Alloy625	29,790	16,600	17,800	20,800
1/4" * 0.049"	316L	25,200	11,000	13,100	16,000
1/4" * 0.049"	Alloy400	25,200	12,000	11,900	16,000
1/4" * 0.049"	Alloy825	30,600	14,000	15,400	19,440
1/4" * 0.049"	Alloy625	43,200	24,000	25,800	27,440
1/4" * 0.065"	316L	34,560	15,100	17,900	19,840
1/4" * 0.065"	Alloy400	34,560	15,400	16,300	24,800
1/4" * 0.065"	Alloy825	41,940	19,200	21,100	19,840
1/4" * 0.065"	Alloy625	59,220	32,900	35,400	34,000
3/8" * 0.035"	316L	11,340	4,900	5,800	8,480
3/8" * 0.035"	Alloy400	11,340	5,000	5,300	8,480
3/8" * 0.035"	Alloy825	13,680	6,300	6,900	10,320
3/8" * 0.035"	Alloy625	19,350	10,800	11,600	14,560
3/8" * 0.049"	316L	18,100	7,100	8,400	11,520
3/8" * 0.049"	Alloy400	18,100	7,200	7,700	11,520
3/8" * 0.049"	Alloy825	19,710	9,000	9,900	13,920
3/8" * 0.049"	Alloy625	27,900	15,500	16,700	19,680
3/8" * 0.065"	316L	22,230	9,700	11,500	14,640
3/8" * 0.065"	Alloy400	22,230	9,900	10,500	14,640
3/8" * 0.065"	Alloy825	27,000	12,400	13,600	17,760
3/8" * 0.065"	Alloy625	38,160	21,200	22,800	25,040

## Drawing & Formula



### Formula:

$$m = (OD - THK) \times THK \text{ (mm)} \times L \text{ (m)} \times 0.02491$$

\* For 316, 316L, 310S, 309S, etc., ratio=0.02507

OD = Outer diameter, THK = Wall Thickness, L = Length

# Tolerance

## ASTM A312

NPS Designator	Tolerance, % from Nominal	
	Over	Under
¼ to 2½ incl., all t/D ratios	20	12.5
3 to 18 incl., t/D up to 5% incl.	22.5	12.5
3 to 18 incl., t/D > 5%	15	12.5
20 and larger, welded, all t/D ratios	17.5	12.5
20 and larger, seamless, t/D up to 5% incl.	22.5	12.5
20 and larger, seamless, t/D > 5%	15	12.5

## ASTM A554

OD Size, in. (mm)	Wall Thickness		OD, ±	
	in.	mm	in.	mm
Under ½ (12.7)	0.020 to 0.049	0.51 to 1.24	0.004	0.1
½ to 1 (12.7 to 25.4)	0.020 to 0.065	0.51 to 1.65	0.005	0.13
½ to 1 (12.7 to 25.4)	over 0.065 to 0.134	over 1.65 to 3.40	0.01	0.25
Over 1 to 1½ (25.4 to 38.1), incl	0.025 to 0.065	0.64 to 1.65	0.008	0.2
Over 1 to 1½ (25.4 to 38.1), incl	over 0.065 to 0.134	over 1.65 to 3.40	0.01	0.25
Over 1½ to 2 (38.1 to 50.8), incl	0.025 to 0.049	0.64 to 1.24	0.01	0.25
Over 1½ to 2 (38.1 to 50.8), incl	over 0.049 to 0.083	over 1.24 to 2.11	0.011	0.28
Over 1½ to 2 (38.1 to 50.8), incl	over 0.083 to 0.149	over 2.11 to 3.78	0.012	0.3
Over 2 to 2½ (50.8 to 63.5), incl	0.032 to 0.065	0.81 to 1.65	0.012	0.3
Over 2 to 2½ (50.8 to 63.5), incl	over 0.065 to 0.109	over 1.65 to 2.77	0.013	0.33
Over 2 to 2½ (50.8 to 63.5), incl	over 0.109 to 0.165	over 2.77 to 4.19	0.014	0.36
Over 2½ to 3½ (63.5 to 88.9), incl	0.032 to 0.165	0.81 to 4.19	0.014	0.36
Over 2½ to 3½ (63.5 to 88.9), incl	over 0.165	over 4.19	0.02	0.51
Over 3½ to 5 (88.9 to 127.0), incl	0.035 to 0.165	0.89 to 4.19	0.02	0.51
Over 3½ to 5 (88.9 to 127.0), incl	over 0.165	over 4.19	0.025	0.64
Over 5 to 7½ (127.0 to 190.5), incl	0.049 to 0.250	1.24 to 6.35	0.025	0.64
Over 5 to 7½ (127.0 to 190.5), incl	over 0.250	over 6.35	0.03	0.76
Over 7½ to 16 (190.5 to 406.4), incl	all	all	0.00125 in./in. or mm/mm of circumference	

Tolerance

## ASTM A269

Group	Size, Outside Diameter, in.	Permissible Variations in Outside Diameter, in. (mm)	Permissible Variations in Wall Thickness, %	Permissible Variations in Cut Length, in. (mm)		Thin Walled Tubes
				Over	Under	
1	Up to ½	±0.005(0.13)	±15	¼(3.2)	0	...
2	½ to 1½, excl	±0.005(0.13)	±10	¼(3.2)	0	less than 0.065 in. (1.65 mm) nominal
3	1½ to 3½, excl	±0.010(0.25)	±10	3/16(4.8)	0	less than 0.095 in. (2.41 mm) nominal
4	3½ to 5½, excl	±0.015(0.38)	±10	3/16(4.8)	0	less than 0.150 in. (3.81 mm) nominal
5	5½ to 8, excl	±0.030(0.76)	±10	3/16(4.8)	0	less than 0.150 in. (3.81 mm) nominal
6	8 to 12, excl	±0.040(1.01)	±10	3/16(4.8)	0	less than 0.200 in. (5.08 mm) nominal
7	12 to 14, excl	±0.050(1.26)	±10	3/16(4.8)	0	less than 0.220 in. (5.59 mm) nominal

# Delivery State

Delivery State Choice	Surface Condition
Hot Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)
Cold Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.  
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Delivery State



## Package

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In ESPCS, all of our stainless steel welded pipes & tubes are packaged as per international standard to prevent any possible damage or loss. By default, we will use thick woven plastic bag to bundle the finished pipes together in batches. However, for some special pipes that are vulnerable to dirt, scratches, stress or rough handling, we will suggest wooden case for protection. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation. For enhanced customer experience, we also provide dedicated package as per your special requirements.



Thick woven  
plastic bag



Wooden  
case

## Logistics

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By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.



By sea



By air

Package & Logistics

