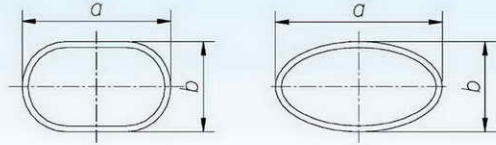


不锈钢管 Stainless steel Tube



平椭圆形异形管
Flat Elliptic Tube

椭圆形异形管
Elliptic Tube

椭圆形异形管规格 b * a
Specification of Elliptic Tube b * a

9.6*15	17*21	30*45	46*100
10*20	17*25	30*60	48*76
12*24	20*30	30*70	50*120
13*23	20*40	35*53	50*150
13*33	20*50	35*65	55*95
14*22	25*35	38*76	58*118
14*28	25*38	40*60	60*90
14.5*25	25*39	40*80	63*133
15*30	25*40	43*58	70*105
16*44	28*57	45*75	80*120

平椭圆形异形管规格 b * a
Specification of Flat Elliptic Tube

7*16	8*15	9.5*19.5	12*23
12*24	13*22	14*43	15*25
15*30	19*38	20*40	20*58
25*35	25*45	30*60	40*75
40*96	50*110		

注：直管长度不大于6M，弯管长度不大于5M

Note: The length of straight tube is less than 6M, and the bending one is less than 5M.

矩形管规格
Specification of Common Stainless Steel Tubes (mm)

规格 Specification	0.5	0.6	0.7	0.8	0.9	1.0	1.2A	1.2	1.5A	1.5	2.0A	2.0	2.5	3.0	4.0	5.0	6.0
10×20																	
10×25																	
10×30																	
10×40																	
10×50																	
10×60																	
10×70																	
10×80																	
10×90																	
10×100																	
12.7×25.4																	
15×25																	
15×30																	
15×40																	
15×50																	
15×60																	
15×70																	
15×80																	
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25×70																	
25×80																	
25×90																	
25×100																	
25.4×38.1																	
30×40																	
30×50																	
30×60																	
30×70																	
30×80																	
30×90																	
40×50																	

注：橙色阴影部分表示有此类规格

Note: The shaded part indicates availability of the specified type

圆管规格mm
Specification of Common Stainless Steel Tubes (mm)

规格 规格 mm	壁厚 壁厚 mm	外径 外径 mm	9.5	10	12.7	15.9	19.1	22.2	25.4	28.6	31.8	35.6	38.1	41.3	44.5	50.8	57	63.5	76.2	80	88.9	101.6	
英寸 英寸 (inch)	壁厚 壁厚 (inch)	英寸 英寸 (inch)	3/8	50/127	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	3	2 19/32	3 1/2	4	
0.8																							
0.9																							
1.0																							
1.2																							
1.5																							
2.0																							
2.5																							
3.0																							
4.0																							
5.0																							

注:橙色阴影部分表示有此规格

Note: The shaded part indicates availability of the specified type

方管规格mm

规格 规格 mm	壁厚 壁厚 mm	10*10	12.7*12.7	15.9*15.9	18*18	18*18	20*20	22.2*22.2	25*25	25.4*25.4	30*30	31.8*31.8	38.1*38.1	40*40	50*50	60*60	70*70	76.2*76.2	80*80	100*100	125*125	150*150	
0.8																							
0.9																							
1.0																							
1.2																							
1.5																							
2.0																							
2.5																							
3.0																							
4.0																							
5.0																							

注:橙色阴影部分表示有此规格

Note: The shaded part indicates availability of the specified type

材料使用说明 instruction of material usage

1、不锈钢所指的不锈是指在大气、水、酸、碱、盐等溶液或其它腐蚀介质中具有一定化学稳定性，不易腐蚀和生锈，但并非完全不生锈。是否生锈主要受到其分子结构、加工工艺、使用环境等因素影响。为最大程度避免不锈钢生锈，应注意以下几点：

The non rust of the stainless steel means it can have certain chemical stability around the corrosion mediums of air, water, acid, alkali, salt or others. But it does not mean the stainless steel does not rust completely. Whether the stainless steel will rust or not is influenced by the molecular structures, the processing technical, the operating environment and so on. To prevent the stainless steel from rusting extremely, please pay attention to the following factors.

- 铸造件应按要求进行固溶处理；
The die and casting parts should be carried out the solution treatment according to requirements.
- 应根据环境合理选用不锈钢牌号；
Choosing the reasonable stainless steel mark according to the operating environment.
- 选择合理的表面处理；
Selecting the reasonable surface treatment.
- 施工中应做好产品的保护；
Taking protection measures of hardware products into action on site.
- 产品的应用应避免积灰、积水；
The application of the hardware should avoid dust deposit and hydrous.
- 定期对产品进行清洁，避免长期脏污。
Cleaning the hardware regularly to avoid long time smudge.

2、不锈钢材料生锈后的解决方法 Solution to the stainless steel rusting

2.1 不锈钢生锈 Stainless steel rusting

不要认为不锈钢产品不易生锈就疏忽日常的保养，等到污染生锈严重时再来做清除措施，这种措施是最下下之策。不锈钢产品具有优良的耐蚀性，且不易生锈，因其含有铬元素成分。铬元素在空气中与氧结合成致密不氧化状态皮膜，这种不氧化皮膜可防止钢材表面的氧化作用（生锈），防止表面腐蚀，因此皮膜若因某种腐蚀原因受到损伤，而又在铬与氧无法结合处，不锈钢产品就会开始生锈。所以只要消除腐蚀原因，并让铬能与氧结合，即可再次产生不氧化皮膜，从而恢复其耐蚀性功能。不锈钢产品受污染、生锈的原因有很多种，然而大致上均是由于受大气中浮游铁粉或有害气体中的成分附着、堆积，以及海风中所含盐分的附着所引起的。这些附着物会逐渐聚集，加上湿气而固着，这样便会破坏不锈钢产品表面的不氧化皮膜，并妨碍此皮膜的再生，不锈钢产品便开始生锈。这种生锈的初期状态，做比较简单清除即可，即使经长期放置后，只要做适当的清除工作也可恢复比原来状况稍不同的外观。不锈钢产品的生锈只是表面而已，而非非材质本身的腐蚀，因此不锈钢产品有时也会生锈，但只要经常做维护，即可永远保持不锈钢产品本来的美观。

Stainless steel have certain chemical stability doesn't mean you can stop routine maintenance. It's not a good idea to take measures to clean stainless steel after it rust severely. Stainless steel contains chromium which made it not easy to rust and corrosion. Chromium combines with oxygen into a dense oxidized film in the air which can prevent stainless steel from oxidation and corrosion. So the stainless steel products will begin to rust where the oxide film damaged by some reason and the chromium can't combine with oxygen. The only thing we need to do is guarantee chromium can combine with oxygen cause once the oxide film produced the stainless steel is not easy rust. Stainless steel rusting for many reasons, largely because of iron floating or harmful gas components in the air and sea breeze contained salt. These things accumulate as attachments, combined with moisture will destroy the oxide film and its regeneration. The stainless steel products begin to rust. Simple clean can remove the rust in the initial state of this process. The stainless steel products can be look like a new one as long as the removal of work done, even after long time rust. Stainless steel rusting is only the surface of the products but not the material itself. As long as we take regular maintenance, the original appearance of stainless steel products can be kept forever.

2.2 生锈、污染的原因 Reasons of rust and contamination

a) 当道路施工、建筑工程和各种车辆行走时，受到其飞散的土砂、灰尘、铁粉等附着；

a) Contamination caused by sediment, dust and iron because of road construction, project construction and vehicles.

b) 受汽车、公共汽车等排气中所含亚硫酸气体等有害物质污染；

b) Contamination caused by sulfurous acid gas in exhaust air by cars.

c) 受各种工、矿垃圾焚烧、大厦冷暖气等所排出的灰尘，排气中有害成分污染；

c) Contamination caused by harmful components in air.

d) 受温泉地带产生腐蚀性气体污染；

d) Contamination caused by corrosive gas in hot area.

e) 受海岸海风所含盐分附着污染；

e) Contamination caused by salt in coastal areas

f) 受清扫药液附着污染；

f) Contamination caused by the remain cleaning liquid.

g) 受手纹手垢污染；

g) Contamination caused by hand or fingerprint.

h) 受表面保护膜用粘膜的污染等。

h) Contamination caused by surface protective film.

2.3 维修方法 Maintenance Methods

a) 受异种金属附着而生锈时

a) Rust caused by adhered metals

因铁粉等引起的“附带生锈”或情况不太严重时，可用海绵或布加上中性清洗剂或肥皂水来擦拭即可，然后再用清水冲洗，注意不可让洗药液残留在产品表面。这种程度的生锈只要及时做清除

工作，不仅维护容易，效果较好，而且费用也很便宜。但若处理不及时形成氢氧化铁、氧化铁、亚硫酸铁等混合物，并呈现褐色的严重生锈状态，可用市面销售的不锈钢用清洗药液或硝酸15%的稀释液等清除锈迹，但是有时也有清除不掉的锈迹，此时则用砂纸或不锈钢刷研磨擦拭，然后再用清洗药液清洗干净。

Less severe rust caused by iron and other incidental rust can be removed by sponge or soft cloth with neutral detergent or soapy water. Then clean with water. It's easy for this kind of rust, but if treat no timely, there will be hydrogen iron oxide, iron oxide, ferric sulfate and other mixtures on the surface. Cleaning liquid or dilutions of nitric acid 15% can remove the rust, and then brush the ground with sandpaper or stainless steel brush. Clean with the water at the end of the treatment.

b) 附着排气中有害成分引起的生锈

b) Contamination caused by harmful components in air.

在工场地带和市街道交通量繁多的环境下，不锈钢外表面很容易受到污染，有时也会呈现小斑点的生锈。这些状况大多是受到汽车、冷暖气机排气或工厂排烟中含的有害成分影响所致。污染较轻时可用中性清洗剂或肥皂水即可完全清洗干净，严重时可用市面销售的不锈钢用清洗药液或硝酸15%的稀释液等清除锈迹，但是有时也有清除不掉的锈迹，此时则用砂纸或不锈钢刷研磨擦拭，然后再用清洗药液清洗干净。在这种环境中尽可能每年2至3次外表面全面性清洁。

In the area with a lot of workshops and heavy traffic, the harmful ingredients in the exhaust gas coming of the car, heating and air-exhaust or factory waste gas, will leads pollution in the surface of S.S products, sometimes even rust. Neutral detergent or soapy water can clean the minor contamination. If it cannot work, then clean with cleaning liquid or dilutions of nitric acid 15% remove rust. Brush the ground with sand paper for severe contamination. Clean the surface with water after treatment. In this area, 2 or 3 treatment is necessary.

c) 因附着盐份引起生锈

c) Contamination caused by attached salt

在海岸地区部分不锈钢也会在短期间内产生红锈，而且比其它地区生锈的更快，处理方法同上。海岸地区在采用不锈钢室外安装时尽可能采用更具有耐蚀性的316不锈钢。304不锈钢护栏室外安装时，尽可能每年做3-4次的定期清洁。

In coastal areas, red rust always happened within short period, and the S.S products rust quickly than other area. Treatment as above. S.S 316 is a wise choice for outdoor usage in coastal because of its strong corrosion resistance. Please take 3-4 times cleaning for S.S 304 pillar installed in outdoor in coastal area.

d) 附着清洗药液引起的生锈

d) Contamination caused by attached cleaning liquid

若用中性清洗剂无法清除干净时，则使用清洗药液来清除。

If neutral detergent cannot clean up, then use cleaning liquid.

e) 因手垢或指纹引起的生锈

e) Contamination caused by hand or fingerprint.

若用中性清洗剂无法清除干净时，则用海绵、布等沾上有机溶剂（酒精、轻油精、丙酮等）来擦

拭。此方法仍无法完全清除时，再使用不锈钢用清洗药液来清除。总言之，各种清洗方法完成后必须再做一次清水冲洗。

If neutral detergent cleaning doesn't work, then wipe with sponge, cloth stained with organic solvents. (Alcohol, benzene, acetone, etc.) If still doesn't work, use steel cleaning liquid. Take water cleaning after treatment.

f)表面保护膜引起的污染

f) Contamination caused by surface protective film.

使用海绵或布沾上水溶性的中性清洗剂或酒精来擦拭，清洗后须用清水完全冲洗干净。

Wipe with sponge, cloth stained with neutral detergent or alcohol, take water cleaning after that.

2.4 维修注意点 Maintenance Precautions

a) 不锈钢产品生锈的原因和情况很多，每种情形均有所不同，故须采用各种状况下最适合的维修方法：

a) Please take suitable measure to clean S.S products.

b) 为除锈而使用清洗药液时，请事先做局部性“试擦”来确认清洗效果，测试结果若得到满意，再依此方法做全面性清洁。清洁不要只针对污染生锈部分，周围部分也须清洁，避免不锈钢表面光泽在清洁后不均匀，影响产品外观；

b) Please make a partial wipe test to confirm the cleaning effect before using the cleaning liquid for the rust. Then do a comprehensive clean. Partial clean will affect the product appearance, so clean the round of the rust too.

c) 使用清洗药液后，必须用清水完全清洗干净，注意不可让药液残留在不锈钢表面，否则会造成生锈现象。清洗药液会引起手部粗糙或斑疹，请戴橡胶手套工作；

c) Clean the surface with water after using cleaning liquid otherwise remains liquid will cause rust. Cleaning liquid may cause rough or spotted to the skin, so rubber gloves is necessary.

d) 使用布、尼龙制海绵、刷勾和刷子清洁产品时，必须沿着不锈钢表面纹路方向清洁，若作圆形清洁，杂质不容易清除且会损害表面光泽线条影响外观。钢制清洁用具和砂纸的使用虽然可以清除严重的污染，但平常绝对禁止使用，因为它会损害不锈钢表面，并附着铁粉而引起生锈。

d) Please follow the direction of the surface line when use cloth, nylon sponge, brush hook, and brush clean S.S product surface. Circular clean will damage the gloss of the appearance and cannot remove impurities totally. Don't use steel clean appliances or sandpaper, because it will damage the surface of stainless and the attached iron may cause rust.

3、奥氏体不锈钢一般是无磁性或弱磁性，但经过冷加工后可能导致一定的磁性(引用GB/T 20878)。

3. Generally, Austenitic Stainless steel is non-magnetic or weak magnetic, but cold work may lead to magnetic. (Quoted from GB/T 20878)

注：以有无磁性判断是否为奥氏体不锈钢是不科学的。

Note: It's unscientific to confirm the Austenitic Stainless steel by test magnetic.