Heavy Thickness SCH80S SCH160S Stainless Steel Inconel 625 Pipes

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: DEYE
- Certification: ISO9001:2015 CE
- Model Number: DY-SP-S14
- Minimum Order Quantity: 5 TONS
- Price: USD600/ each ton
- Packaging Details: wooden case, pallet , bundles or as customers' requirement
- Delivery Time: 30 days for usual order, 7 days for stock sizes
- Payment Terms: T/T, D/P, L/C
- Supply Ability: 1000 tons for each month

Product Specification

- Standard: ASME B36.19M, DIN, GOST
- Material: SS316/SS316L, SS304/304L, SAF2507, SAF2205, UNS31803, UNS32750, 904L, INCONEL625
- Size: 1/2"(DN15)-24"(DN600) For SMLS 12" (DN200)-88"(DN2200) For Welded
- Types: Seamless Pipe, Welded Pipe, ERW Pipe, SAW Pipe, FAW Pipe
- Highlight: **SCH160S stainless steel pipes**, **SCH80S stainless steel pipes**, **sch 80s**

Our Product Introduction

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Product Description

Heavy Thickness SCH80S SCH160S Stainless Steel Inconel 625 Pipes

Alloy 625 pipe is a pipe made from thenickel-chromium-molybdenum alloy625
Inconel 625 is a popular nickel-based superalloy primarilyused in high-temperature and highly corrosive environments.
The alloy is known for its excellent strength, durability, andresistance to corrosion

Alloy 625 pipe is often used in high-temperature and high-pressure applications, such as in power generation plants and oil and gas production facilities.It is resistant to corrosion by a wide range of chemicals, including chlorine and sulfuric acid. Additionally, it is also resistant to oxidation and
carburization at high temperatures.

Chemical Compositions of Alloy 625
Nickel: 58% – 63%
Chromium: 20% – 23%
Molybdenum: 8% – 10%
Iron: 5% – 9%
Manganese: 1% max
Carbon: 0.10% max
Silicon: 0.50% max
Phosphorus: 0.015% max
Sulfur: 0.015% max
Niobium: 3.15-4.15%
Titanium: 0.40-1.00%

Physical Properties of Alloy 625
Density: 8.44 g/cm3 (0.306 lbs/in3)
Melting point: 1350-1370 °C (2460-2490 °F)
Specific heat: 0.107 J/g·°C (0.025 BTU/lb·°F)
Thermal conductivity: 11.4 W/m·°C (6.5 BTU/ft·hr·°F) at 100°C
Thermal expansion: 13.3 µm/m°C (7.3 x 10^{-5} in/in°F)
Electrical resistivity: 0.073 µΩ·cm (20°C)
Magnetic susceptibility: <1.05 x 10^{-5} (cm^3/g)

Product Information/Product Description/Basis Information/Specification

Name	HEAVY THICKNESS SCH80S SCH160S STAINLESS STEEL INCONEL625 PIPES
Size	DN: Seamless:10-914mm 3/8"-36"
Thickness	Wall Thickness: SCH5S, SCH10S SCH10 SCH20 SCH30 STD SCH40S , SCH40, SCH80S, SCH80, SCH60 XS SCH100 SCH120S SCH120 SCH140 SCH160 XXS 2mm-120mm Accept customization
Length	Single random length/Double random length/Fixed Length 5m-14m,5.8m,6m,10m-12m,12m Accept customization
Surface Treatment	Annealed, acid pickling or polished.
Material	Stainless steel: SS304, SS304L, SS304H, SS321, SS316, SS316L, SS310S, 904L, Dual grade SS304/304L, SS316/316L Duplex: 2205, 2507, F55, UNS31083, UNS32750, UNS32760 Stainless steel pipes with material of 1.4301, 1.4307, 1.4541, 1.4401, 1.4404, 1.4571, 1.4878, 1.4432, 1.4462 Nickle Alloy: Hastelloy C276, Inconel 601, Inconel 625, Inconel 718
Standard	AASME, ASTM, MSS, JIS, DIN, EN * American ASME B36.10M, ASTM, API 5L, API 5CT * Japanese JIS * German DIN * Chinese GB * BS standard
End	Plain end/Beveled, protected by plastic caps on both ends, cut square, grooved, threaded and coupling.
Applications	Petroleum, chemical, power, gas, metallurgy, shipbuilding, construction, etc
Packing	wooden case, pallet , bundles or as customers' requirement
Shipment	By 20GP/ 40GP containers, by loose Containers LCL; bulk vessels, top open containers

Features /Characteristics

Stainless steel is with low-cost and corrosion-resistant material with a high level of durability.
It is ideal for both residential and marine applications. Not only is it durable and long-lasting with a perfect surface finish, but it also has excellent strength.
Stainless Steel Seamless Pipes / Tubes are widely used in commercial and industrial fields, especially fluid

transportation. With appropriate processes, they have superior performance in high pressure, high strength, and corrosion resistance.
Stainless steel seamless pipe can resist both very Low Temperature and high temperatures for cleanliness and maintain the purity of materials which contact stainless steel directly

Technology/ Technical Data Sheets

Thickness List for seamless stainless-steel pipes								
UNIT:MM								
Norminal Pipe Size DN (in)	Outside Dimeter D	Norminal Wall Thickness						
		Sch5s	Sch10S	Sch40s	**Sch40**	Sch80s	Schl20	Sch160
1/8	10. 3	——	1. 24	1. 73	1. 73	2. 41	——	——
1/4	13. 7	—	1. 65	2. 24	2. 24	3. 02	—	—
3/8	17. 1	—	1. 65	2. 31	2. 31	3. 20	—	—
1/2	21. 3	1.65	2. 11	2. 77	2. 77	3. 73	——	4. 78
3/4	26. 7	1.65	2. 11	2. 87	2. 87	3. 91	——	5. 56
1	33.4	1. 65	2. 77	3. 38	3. 38	4. 55	—	6. 35
1 1/4	42. 2	1.65	2. 77	3. 56	3. 56	4. 85	—	6. 35
1 1/2	48. 3	1.65	2. 77	3. 68	3. 68	5. 08	——	7. 14
2	60. 3	1. 65	2. 77	3. 91	3. 91	5. 54	——	8. 74
2 1/2	73. 0	2. 11	3. 05	5. 16	5. 16	7. 01	—	9. 53
3	88. 9	2. 11	3. 05	5. 49	5. 49	7. 62	—	11. 13
3 1/2	101. 6	2. 11	3. 05	5. 74	5. 74	8. 08	——	——
4	114. 3	2. 11	3. 05	6. 02	6. 02	8. 56	11. 13	13. 49
5	141. 3	2. 77	3. 40	6. 55	6. 55	9. 53	12. 70	15. 88
6	168. 3	2. 77	3. 40	7. 11	7. 11	10. 97	14. 27	18. 26
8	219. 1	2. 77	3. 76	8. 18	8. 18	12. 70	18. 26	23. 01
10	273. 1	3. 40	4. 19	9. 27	9.27	12. 70	21. 44	28. 58
12	323.9	3. 96	4. 57	9. 53	10. 31	12. 70	25. 40	33. 32
14	355. 6	3. 96	4. 78	—	11. 13	—	27. 79	35. 71
16	406. 4	4. 19	4. 78	——	12. 70	——	30. 96	40. 49
18	457. 2	4. 19	4. 78	——	14. 27	——	34. 96	45. 24
20	508. 0	4. 78	5. 54	—	15. 09	—	38. 10	50. 01
22	558. 8	4. 78	5. 54	—	—	—	41. 28	53. 98
24	609. 6	5. 54	6. 35	——	17. 48	——	46. 02	59. 54

Welded stainless steel with single Longitudinal Welded seam and double Weld seam
Size range from 1/2" to 48" DN15-DN1200.

The reference Standard for the stainless pipes

ASTM A312/A312M, ASME SA312/SA312M for Seamless Austenitic Stainless-Steel Pipes:
ASTM A269, ASME SA269 for Seamless Austenitic Stainless-Steel Tubing for General Service
ASTM A213/A213M, ASME SA213/SA213M for Seamless Austenitic Alloy-Steel Boiler, Super Heater and Heat-Exchanger Tubes
ASTM A789 / A789M. Seamless Duplex Stainless Steel Tubing for General Service.
ASTM A790 / A790M for Seamless Duplex Stainless Steel Pipes
ASTM A511 for Seamless Stainless Steel Mechanical Tubing
EN 10216, DIN 17456, 17458 for Seamless Stainless-Steel Tubes for Pressure Purposes

Material Grades:

Stainless steel is the abbreviation for stainless and acid resistant steel. Steel that is resistant to weak corrosive media such as air, steam, water, or has rust resistance is called stainless steel; And the steel grade that is resistant to chemical corrosion media (such as acid, alkali, salt, etc.) corrosion is called acid resistant steel.

The most common used material is SS304/304L, SS316/316L, DUPLEX SAF2507, SAF2205, Detail's specification of the material as below.

304/304L (UNS S30400/S30403)							
Chemical Composition%							
C	Cr	Mn	Ni	P	S	Si	
≤	--	≤	--	≤	≤	≤	
0.035	18.0-20.0	2.00	8.0-13.0	0.045	0.03	1.00	

Tensile Strength: ≥ 485 Mpa (70KSI)
Yield Strength: ≥170Mpa (25KSPI)
Elongation ≥ 40%

316/316L (UNS S31600/S31603)							
Chemical Composition%							
C	Cr	Mn	Mo	Ni	P	S	Si

≤	--	≤		--	≤	≤	≤
0.035	16.0-18.0	2.00	2.0-3.0	10.0-14.0	0.045	0.03	1.00

Tensile Strength: ≥ 485 Mpa (70KSI)
Yield Strength: ≥170Mpa (25KSPI)
Elongation ≥ 40%

SAF2205 (UNS31803)
Chemical Composition%

C≤	Si ≤	Mn≤	P ≤	S ≤	Cr	Ni	Mo	Cu	N
0.03	1.0	2.0	0.03	0.02	22-23	4.5-6.5	3.0-3.50	/	0.14-0.2

Mechanical Performance

Test Items	Test Temp.	Performance	Standard Data
Tensile Strength	Room Temp.	Yield Strength s≥	450 Mpa
		Tensile Strength h ≥	620 Mpa
		Elongation % >	25
		Reduction of Area=>	/
Impact Value KV(J)	Room Temp.	**Lateral**	/
Brinell hardness	Room Temp.	≤	290
Rockwell hardness	Room Temp.	≥	/

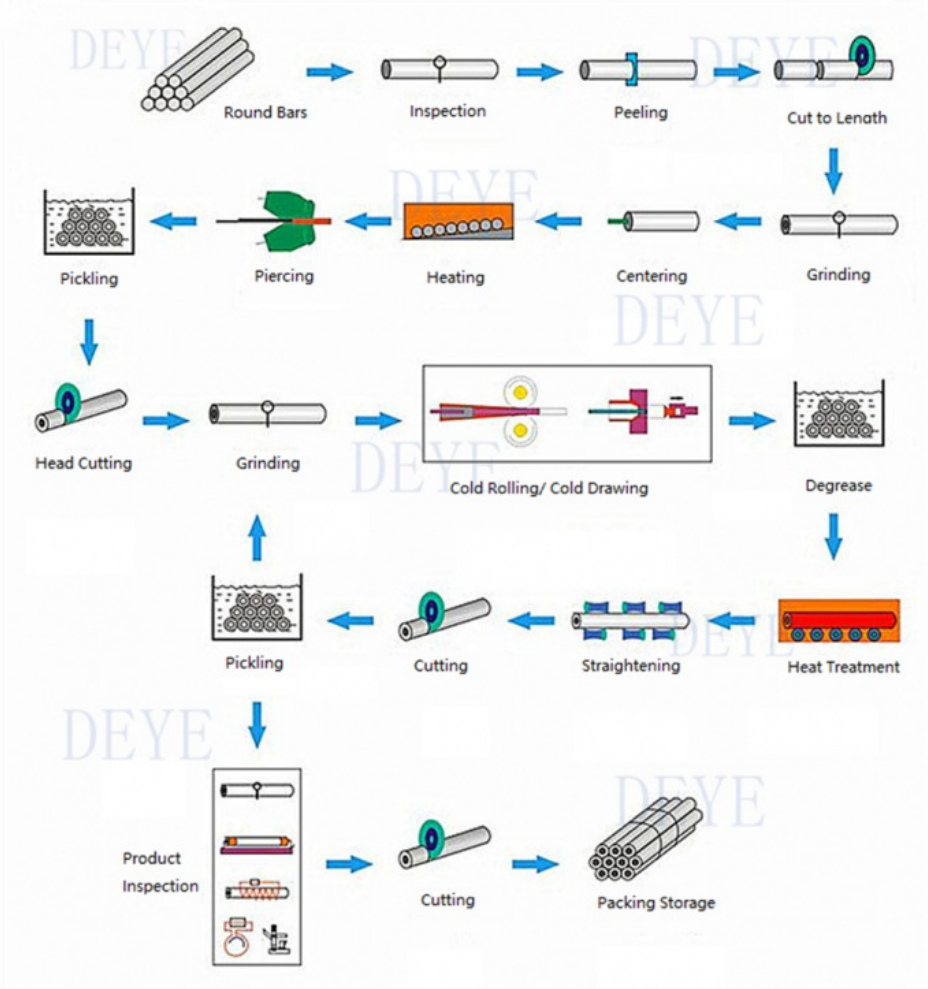
SAF2507(UNS32750)
Chemical Composition%

c ≤	Si≤	Mn≤	P≤	S≤	Cr	Ni	Mo	Cu≤	N
0.03	0.8	1.2	0.03	0.015	24-26	6.0-8.0	3.0-5.0	0.5	0.24-0.32

Mechanical Performance

Test Items	Test Temp.	Performance		Standard Data
Tensile	Room Temp.	Yield Strength	Ø≤55 Rm≥	550 Mpa
			Ø >55 Rm≥	515 Mpa
		Tensile Strength	Ø≤55 R0.002 ≥	800 Mpa
			Ø >55 R0.002≥	760 Mpa
		Elongation A% (4D) >	Ø≤55 ≥	15
			Ø >55 ≥	15
Brinell hardness HB	Room Temp.	Ø≤5 ≤		310
		Ø >55 ≤		310

Production Process



Application/Usage

Stainless steel pipe and tubing are used in chemical plants, aviation fields, marine equipment, cryogenic transportation, medical and architectural industries.

- Chemical plants
- Aviation fields
- Marine equipment
- Cryogenic transportation
- Medical & architectural industries

FAQ/ Customer Question and Answers

Q: What is difference between tubes and pipes?

A: Tubes and pipes are difficult to identify occasionally and some people use the name of tube and pipe interchangeably. However, there are significant differences between tubes and pipes. Tubes are measured in outer diameter and wall thickness. The tube is produced with close tolerance range and requires precise outer diameter and wall thickness to identify its working pressure.

Q: What is Difference Between Stainless Steel Pipes Seamless and Welded?

A: 1) Strength: The main difference between seamless and welded pipes is in their strength. Seamless pipes are stronger because they do not have any welded seams. Welded pipes are weaker because the welds can act as weak points that could break under high pressure.
2)Cost: Seamless stainless-steel pipes are more expensive than welded ones because they require more time and effort. Welded pipes are less expensive because they can be made quickly and with less precision.
3) Applications: Seamless stainless-steel pipes are typically used in high-pressure applications, such as hydraulic systems, while welded pipes are used in low-pressure applications, such as water piping.

Our Service

1. Technical support
2. Raw Material Quality control.
3. Inspection during the production time.
4. Final Test includes Surface, Dimension, PT Test, RT test, ultrasonic Test
5. Test Report each shipment
4. Flexible Delivery terms. EXW FOB CIF CFR DDP DDU
5. Flexible payment Ways: LC. TT. DP
6. Customized Package includes Logo. Cases Dimension.
7. 18 months quality Guarantee time.

9. Free replacement by air if any error founded
10. 24 hours to Feedback your questions

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