

ASTM A333 Low Temperature Pipe Thick Wall Fluid Seamless Steel Pipe

Basic Information

. Place of Origin: cangzhou Brand Name: BaoYang · Certification: CE & ISO

Model Number: Carbon Seamless Steel Pipe

• Minimum Order Quantity:

• Price: Negotiable

Standard Export Packing Packaging Details: • Delivery Time: 7~30 working days

Payment Terms: L/C, D/A, D/P, T/T, Western Union



Product Specification

Name: Low Temperature Seamless Steel Pipe

. Technique: Hot-Rolled

ASTM/ASME/DIN/En Standards:

Carbon Steel · Material: . Wall Thickness: 4mm-150mm • Outer Diameter: 13.7mm-609.6mm

• Processing Service: Bending, Punching, Cutting

Pipeline Transport, Boiler Pipe, Usage: Hydraulic/Automobile Pipe, Oil/Gas Drilling

• Highlight: astm a333 low temperature pipe,

astm a333 low temperature carbon steel pipe,

asme low temperature pipe



Product Description

Low Temperature Seamless Steel Pipe

Low Temperature Seamless Steel Pipes are designed to operate in environments where extremely low temperatures are encountered, such as in cryogenic storage, liquefied natural gas (LNG) handling, and arctic exploration. Here's a detailed description of these specialized pipes:

Design and Material: These pipes are manufactured from specially selected steel alloys that maintain their toughness and ductility at low temperatures. The material is chosen to prevent brittle fracture and to ensure structural integrity under cold conditions.

Standards and Specifications: Low temperature seamless steel pipes are produced according to strict industry standards such as GB/T 18984-2016 in China, which outlines the requirements for seamless steel tubes for low-temperature-service piping23. ASTM A333 is another standard that covers low-temperature seamless carbon and alloy steel pipes.

Applications: They are used in applications where the operating temperature can drop to as low as -45°C to -195°C, including pressure vessels, heat exchangers, and pipelines in the oil and gas industry, as well as in chemical and power plants. Mechanical Properties: These pipes are characterized by their ability to withstand high pressure and maintain mechanical properties such as yield strength and tensile strength at low temperatures.

Thermal Performance: Due to their material composition, low temperature seamless steel pipes exhibit good thermal conductivity and are capable of withstanding rapid temperature changes without significant thermal shock.

Manufacturing Process: The manufacturing process typically involves hot rolling or extrusion followed by heat treatment to achieve the desired mechanical properties. Some pipes may undergo additional cold processing to refine their microstructure and enhance their low-temperature performance.

Safety and Reliability: The pipes are designed with safety margins to handle the pressure and temperature conditions reliably. They are often used in critical applications where failure is not an option, such as in LNG transportation and storage. Corrosion Resistance: The alloys used for these pipes are often resistant to corrosion, making them suitable for use in environments where corrosive substances may be present.

Testing: Before being used, low temperature seamless steel pipes are rigorously tested for their impact toughness, ductility, and other mechanical properties at low temperatures to ensure they meet the required standards.

Maintenance: Due to their robust nature and corrosion resistance, these pipes require minimal maintenance, which is an advantage in remote or hard-to-reach locations.

Low temperature seamless steel pipes play a crucial role in industries where maintaining the flow of fluids at extremely low temperatures is essential. Their design and material selection make them a reliable choice for high-integrity, low-temperature applications.

Standards of Low Temperature Seamless Steel Pipe

	API5L. ASTM A106 Gr.B. ASTM A53 Gr.B. ASTM A270. ASTM A249. ASTM
	A511.ASTM A778 .ASTM A312.ASTM A358.ASTM A409.ASTM A213.ASTM
	A311,A31M A776 ,A31M A312,A31M A356,A31M A409,A31M A213,A31M A790.ASTM A268.ASTM A269.ASTM A554.ASTM B338.ASTM B673.ASTM
	B674.ASTM B677.ASTM B675, ASTM B676, ASTM B690,ASTM
	A928.ASMEB36.19.ASMEB36.10.ASTMA179/A192/A213/A210/370WP91.WP1.WP2
	GB5310-2009,GB3087-2008,GB6479-2013,GB9948-2013,GB/T8163-2008, GB8162-
	2008.GB/T17396-2009
	EN10216-5,EN10217-7,DIN 17456,DIN 17458
	JIS G3463,JIS G3119,JIS G3446,JIS G3218,JIS G3258,JIS G3448,JIS H4631
	DEP 31,DEP 40,DEP 20,DEP 32,DNV-OS-F101
Gra	Q195 = S195 / A53 Grade A
	Q235 = S235 / A53 Grade B / A500 Grade A / STK400 / SS400 /ST42.2
	Q345 = S355JR / A500 Grade B Grade C
de	
Len	5.8~12.0 m or as customized
9	
Sur	
fac	
e Tre	Prime quality (bared, oiled, color paint, 3LPE, or other anti-corrosive treatment)
atm	
ent	
FIII	
	With Chemical Composition and Mechanical Properties Analysis;
Ins	
	Dimensional and Visual Inspection, also with Nondestructive Inspection.
tion	
A	Structure, Electric power transmission tower projects, Piling, Water, Oil & gas pipeline
App	
lion	Municipal projects, Roads and its auxiliary facilities, etc.
ion	











