



GB/T 5310 12Cr2MoG High Pressure Seamless Boiler Tubes Alloy Steel

Basic Information

- Place of Origin: cangzhou
- Brand Name: BaoYang
- Certification: CE & ISO
- Model Number: ASTM/DIN/GB/EN/JIS
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Standard Export Packing
- Delivery Time: 7~30 working days
- Payment Terms: L/C, D/A, D/P, T/T, Western Union



Product Specification

- Name: Seamless Carbon Steel Pipes
- Process: Hot Rolled Cold Rolled Cold Drawn
- Standards: ASTM/DIN/GB/EN/JIS GB/T 5310 12Cr2MoG
- Material: Alloy Steel Pipe
- Wall Thickness: 1-20mm (0.04 Inch - 0.78 Inch)
- Outer Diameter: 6-2500mm
- Processing Service: Bending, Punching, Cutting
- Usage: Pipeline Transport, Oil/Gas Drilling, Machinery Industry
- Highlight: **high pressure seamless boiler tubes, gb seamless boiler tubes, gb carbon steel boiler tubes**



Product Description

GB/T 5310 12Cr2MoG High Pressure Seamless Boiler Tubes:

Product Description: GB/T 5310 12Cr2MoG High Pressure Seamless Boiler Tubes are specifically engineered for high-pressure boiler applications. These tubes are manufactured in accordance with the Chinese national standard GB/T 5310, which dictates the standards for seamless steel tubes suitable for high-temperature and high-pressure service. The 12Cr2MoG grade indicates an alloy steel with chromium (Cr) and molybdenum (Mo) additions, providing excellent heat resistance and creep strength, while the 'G' denotes its intended use for high-pressure purposes.

These tubes are seamless, ensuring a uniform material structure free from welds, which can be a source of weakness in lower quality tubing. The seamless construction also allows for better tolerance control and higher pressure ratings, making them ideal for critical boiler applications.

Product Applications:

Power Plants: Widely used in power plants for steam generation, where high pressure and temperature are maintained.

Industrial Boilers: Utilized in various industrial boilers for process heating, power generation, and other applications requiring high-pressure steam.

Pressure Vessels: Suitable for the construction of pressure vessels and heat exchangers that operate under high thermal and pressure loads.

Petrochemical Industry: Employed in the petrochemical sector for high-pressure piping and components in refineries and chemical plants.

Nuclear Power Stations: Used in nuclear power stations for their ability to withstand the rigors of high radiation and pressure environments.

Key Features:

High-Pressure Capability: Designed to withstand the high pressures found in boiler systems.

Heat Resistance: Alloy composition provides resistance to high temperatures, reducing the risk of failure in thermal cycling.

Creep Strength: The addition of chromium and molybdenum enhances the creep strength, crucial for long-term performance under continuous load.

Seamless Design: Offers superior structural integrity and reliability compared to welded tubes.

Heat treatment for GB 5310 15CrMoG Tubes

Grade	Heat treatment
15CrMoG	900 °C~960 °C,Normalizing ; 660 °C~730 °C,Tempering

Chemical composition of GB 5310 15CrMoG

Steel Pipe	Chemical Composition(%)								
	C	Si	Mn	Cr	Mo	Ni	Cu	P Max	S
15CrMoG	0.12~0.18	0.17~0.37	0.40~0.70	0.80~1.10	0.40~0.55	≤0.30	≤0.20	0.025	0.020

Mechanical properties of GB 5310 15CrMoG

Tensile properties				Impact energy(Akv),J		Hardness		
Tensile strength (MPa)	Yield Strength (MPa)	Elongation %		Portrait	Landscape	A	B	C
		Portrait	Landscape			HBW	HV	HRC
	Max					Min		
440~640	235	21	19	40	27	170	180	88HRB

Allowable deviation of outer diameter and wall thickness

Type of steel pipe	Outer diameter(mm)		Tolerance	
			ordinary	advanced
Hot rolled tube	OD	≤50	±0.40	±0.30
		>50~≤325	WT≤35	±0.75%
			WT>35	±1%
		>325	±1%	±0.75%
	WT	≤4.0	±0.4	±0.3
		>4.0~≤20	±10%	±7.5%
			OD<219	±10%
		>20	OD≥219	+12.5% -10%

Cold drawn tube	OD	≤25.4	±0.15	—
		>25.4~≤40	±0.20	—
		>40~≤50	±0.25	—
		>50~≤60	±0.30	—
		>60	±0.5%	—
	WT	≤2.8	±0.2	—
		>2.8	±7.5%	—

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PRODUCT DISPLAY





Company Profile

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Cangzhou BaoYang Pipe Industry Co., Ltd

Cangzhou Baoyang Pipe Industry Co., Ltd. is located in the Hope New Area of Mengcun County, Hebei Province, China's pipeline equipment base. It is an enterprise that integrates spot storage of steel pipes, production of pipe fittings, and sales and exports. Our company mainly operates seamless pipes made of special materials, and has long-term good cooperative relationships with major steel mills such as Tianjin Seamless, Hengyang Hualing, Yantai Lubao, Inner Mongolia Baosteel, Shanghai Baosteel, Jiangsu Chengde, Anhui Tianda, etc. Our products are widely used in pipeline engineering fields such as petroleum, petrochemical, chemical, natural gas, thermal power, boilers, etc

Factory Tour

Factory Picture

Cangzhou Baoyang Pipeline Co., Ltd



team introduction

OUR FRIENDS



Applications

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