# ASTM A106 A53 Carbon Seamless Steel Pipe High Temperature Steel Pipe Hot Rolled

Our Product Introduction

## Basic Information

- Place of Origin: cangzhou
- Brand Name: BaoYang
- Certification: CE & ISO
- Model Number: Carbon Seamless Steel Pipe
- 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 Steel Pipes
- Technique: Hot-Rolled
- Standards: ASTM/ASME/DIN/En
- Material: Carbon Steel
- Wall Thickness: 1-20mm (0.04 Inch - 0.78 Inch)
- Outer Diameter: 13.7mm-609.6mm
- Processing Service: Bending, Punching, Cutting
- Usage: Pipeline Transport, Boiler Pipe, Hydraulic/Automobile Pipe, Oil/Gas Drilling
- Highlight: **ASTM a106 carbon steel pipe**, **High Temperature a53 seamless pipe**, **Hot Rolled astm a53 seamless pipe**

## Product Description

### ASTM A106 A53 Carbon Seamless Steel Pipe

ASTM A106 and ASTM A53 are both specifications for carbon steel seamless pipes used in various applications. Here's a brief explanation of each specification:

ASTM A106: This specification covers seamless carbon steel pipe for high-temperature service. It is commonly used in refineries and plants to transport fluids and gases at high temperatures and pressures. A106 pipes are available in three grades: A, B, and C, with different mechanical properties and chemical compositions.

ASTM A53: This specification covers seamless and welded black and hot-dipped galvanized steel pipe. It is commonly used for mechanical and pressure applications, as well as ordinary uses in steam, water, gas, and air lines. A53 pipes are available in Type F (furnace-welded), Type E (electric resistance-welded), and Type S (seamless) grades.

Both ASTM A106 and ASTM A53 pipes are suitable for coiling, bending, flanging, and other similar forming operations. They have different requirements for chemical composition, mechanical properties, and testing. It is crucial to select the appropriate specification based on the specific application requirements and operating conditions.

### Carbon seamless steel pipes offer several advantages over other types of pipes. Here are some of the key advantages:

Strength and Durability: Carbon seamless steel pipes are known for their high strength and durability. They can withstand high-pressure, high-temperature, and corrosive environments, making them suitable for various industrial applications.
Seamless Construction: Carbon seamless pipes are manufactured without any welded joints, resulting in a seamless construction. This eliminates the weak points and potential failure points associated with welded pipes. Seamless pipes have uniform wall thickness throughout their length, providing better structural integrity.
Smooth Interior Surface: The seamless manufacturing process creates pipes with a smooth interior surface. This smoothness reduces frictional resistance, allowing for efficient fluid flow and minimizing pressure drops in pipelines. It also helps to prevent the accumulation of deposits and contaminants inside the pipe.
Wide Range of Sizes and Grades: Carbon seamless steel pipes are available in a wide range of sizes, from small diameter pipes to large diameter pipes suitable for heavy-duty applications. They are also produced in various grades, offering different mechanical and chemical properties to meet specific requirements.
Cost-Effective: Carbon seamless steel pipes can be a cost-effective choice compared to other types of pipes, especially for high-pressure and high-temperature applications. Their strength and durability contribute to a longer service life, reducing the need for frequent replacements and maintenance.
Versatility: Carbon seamless pipes are versatile and can be used in various industries and applications. They are commonly used in oil and gas exploration, refineries, petrochemical plants, power generation, automotive, construction, and infrastructure projects.

### Standards and Applications

| Standards | Grades | Class |
|---|---|---|
| API | API 5L | Line pipe for pipeline transportation systems |
| | API 5CT | Tubing and casing for wells |
| | API 5DP | Drill Pipe for well drilling |
| ASTM | ASTM A53 | Used as structural steel or for low-pressure plumbing |
| | ASTM A106 | seamless carbon steel pipe for high-temperature service |
| | ASTM A335 | for seamless ferritic alloy-steel pipe for high-temperature service |
| | ASTM A213 | for seamless ferritic and austenitic alloy-steel boiler, superheater, and heat-exchanger tubes |
| | ASTM A179 | for seamless Cold-drawn low-carbon steel heat-exchanger and condenser tubes |
| | ASTM A192 | for seamless carbon steel boiler tubes for high-pressure service |
| | ASTM A210 | for seamless medium-carbon steel boiler and superheater tubes |
| | ASTM A333 | for seamless steel pipe for low-temperature service and other applications with required notch toughness |
| | ASTM A519 | for seamless carbon and alloy steel mechanical tubing |
| | ASTM A252 | for seamless and welded steel pipe piles |
| DIN | DIN 17175 | for heat resistant seamless steel pipe lines |
| | DIN 1629 | for seamless circular tubes of non alloys steels wth special quality requirements |
| | DIN 2391 | for cold drawn or cold rolled precision seamless steel tubes |
| JIS | JIS G3454 | seamless carbon steel pipe for pressure service |
| | JIS G3456 | seamless carbon steel pipe for high temperature service |
| | JIS G3461 | seamless carbon steel pipe for boiler and heat exchanger |
| EN | EN 10210 | for hot finished seamless structural hollow sections of non-alloy steels |

| | | |
|---|---|---|
| | EN 10216 | seamless steel tubes for pressure purposes |
| BS | BS 3059 | for carbon,alloy and austenitic stainless steel tubes with specified elevated temperature properties |

### Uses of Carbon Steel Seamless Pipe

Oil and Gas Industry: They are extensively used for transporting oil, gas, and other fluids over long distances due to their seamless construction which ensures no weak points or potential areas of leakage. The smooth interior surface minimizes friction, allowing for efficient flow of fluids.
Automotive Industry: Carbon steel seamless pipes are used in the manufacturing of components such as exhaust systems, fuel injection systems, and hydraulic systems. They can withstand high pressure and temperature conditions, and their resistance to corrosion and erosion makes them durable and low maintenance.
Construction and Structural Engineering: These pipes are utilized in the construction of high-rise buildings, bridges, and other structures where strength and durability are essential. They can withstand heavy loads and extreme weather conditions.
Power Generation: Seamless pipes are used for transporting steam, water, and other fluids in power plants. They can handle high-pressure and high-temperature conditions, making them suitable for boilers and other power generation equipment. Their corrosion resistance is also beneficial for power plant operators.
Aerospace Industry: They are used in aircraft engines, hydraulic systems, and fuel systems. The seamless construction allows them to withstand extreme conditions such as high pressure, high temperature, and vibration. Their lightweight nature also contributes to fuel efficiency and overall performance in the aerospace industry.
Fire Fighting: Carbon steel pipes are used in fire fighting systems for their ability to withstand high pressure and for reliable fluid transport.
Piling Work: In civil engineering, they are used in piling work for foundation support due to their strength and durability.
Solar Energy: Carbon steel pipes are also used in the solar energy industry for heat transfer and fluid transport applications.
Boiler Systems: They are used in high-pressure boiler systems for thermal equipment generating steam, highlighting their ability to operate under high temperatures and pressures.
Chemical Plants: Seamless pipes are ideal for chemical plants where they transport chemicals and withstand the corrosive nature of the substances.
Residential, Commercial, and Industrial Infrastructure: They are used in walls, labs, factories, and other infrastructures for their structural integrity and operational efficiency

### Product Photos

**Cangzhou Baoyang Pipeline Equipment Co., Ltd.**

+8615131762322 BYpipe001@pipe-seamless.com pipe-seamless.com

Room 512, Block B, Tiancheng Building, Yunhe District, Cangzhou City