

# ASTM A213 / ASME SA213 T5 SMLS Tubes

We are the professional manufacturer of ASTM A213 / ASME SA213 T5 SMLS Tubes in China

As a reliable manufacturer and exporter of [ASME SA213](#) T5

Seamless Alloy Steel Tubes, We are supplying high-quality boiler, heat exchanger, and superheater tubes for high-temperature and high-pressure applications.

Grade T5 is a 5Cr-0.5Mo alloy steel offering excellent creep strength, oxidation resistance, and thermal stability, making it ideal for use in power plants, refineries, and petrochemical industries.

ASTM A213 is the Standard Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes

This specification covers seamless ferritic and austenitic steel boiler, superheater, and heat-exchanger tubes, designated Grades T5, TP304, etc.

## ASTM A213 Tube Materials and Manufacture

Tubes shall be made by the seamless process and shall be either hot finished or cold finished

## ASTM A213 T5 Tube heat treatment

normalize and temper at 675deg

## Chemical Compositions of ASTM A213 / ASME

### SA213 T5 SMLS Tubes:

C, %	Mn, %	P, %	S, %	Si, %	Cr, %	Mo, %
0.15 max	0.30-0.60	0.025 max	0.025 max	0.50 max	4.00-6.00	0.45-0.65

## Mechanical Properties of ASTM A213 ASME SA213

### T5 SMLS Tubes:

Tensile Strength , MPa	Yield Strength, MPa	Elongation, %	Hardness, HB
415 min	205 min	30 min	163 max

## ASTM A213 ASME SA213 T5 tube Hydrostatic or Nondestructive Electric Test

Each tube shall be subjected to the nondestructive electric test or the hydrostatic test. The type of test to be used shall be at the option of the manufacturer, unless otherwise specified in the purchase order.

## ASTM A213 ASME SA213 T5 tube Product Marking

In addition to the marking prescribed in Specification A1016/A1016M, the marking shall include: the condition, hot finished or cold finished; and the wall designation, minimum wall or average wall.

## WALL THICKNESS TOLERANCE ASTM A213 TUBE

NPS	ASTM A213 Tube Tolerance, %	
	+	-
1/8-2 1/2	20.0	12.5
3~18, t/D ≤ 5%	22.5	12.5
3~18, t/D > 5%	15.0	12.5
≥ 20, welded	17.5	12.5
≥ 20, seamless, t/D ≤ 5%	22.5	12.5
≥ 20, seamless, t/D > 5%	15.0	12.5

## Equivalent Grades of ASTM A213

Standard	Grade
ASTM	A213 T5
ASME	SA213 T5
UNS	K41545
EN	13CrMo44
DIN	1.7362

## Testing and Inspection of SA213 T5 Tubes

All SA213 T5 Tubes are tested in accordance with ASME SA213 and SA450 standards:

- Hydrostatic Test

- Eddy Current and Ultrasonic Test
- Hardness and Flattening Test
- Flaring and Flange Test
- Visual and Dimensional Inspection
- Non-Destructive Testing (NDT) as required

## Related Products

- [ASME SA213 T11 Seamless Alloy Steel Tubes](#)
- ASME SA213 T22 Seamless Tubes
- [ASTM A335 P5 Alloy Steel Pipes](#)
- [ASTM A234 WP5 Alloy Steel Pipe Fittings](#)

