# ASTM A210 and ASME SA210 American Standard (Seamless Medium Carbon Steel Pipe for Boiler and Superheater)

## Standard:

ASTM A210/A210M/ASME SA-210/SA-210M

# Application:

It is applied to seamless medium carbon steel pipe for boiler pipe and boiler flue pipe with the minimum thickness, including safety end, vault, supporting pipe and superheater pipe.

# Grades of Main Steel Pipe:

A-1 and C, and other grades of steel pipe are provided based on negotiations.

### **Mechanical Properties**

	Standard	Grade	Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)		
AS	STMA210	A-1	≥415	≥255	≥30		
ASME SA210 C		С	≥485	≥275	≥30		

# Chemical Composition

Standard	Grade	Chemical Composition Limits, %									
Standard		С	Si	Mn	Р	S	Cr	Mo	Cu	Ni	V
ASTM A210	С	≤0.35	≥0.10	0.29~1.06	≤0.035	≤0.035	/	/	/	/	/
ASME SA210	A-1	≤0.27	≥0.10	≤0.93	$\leq 0.035$	≤0.035	/	/	/	/	/

#### Remarks

HR: hot rolled	CW: cold worked	SR: stress relieved			
A: annealed	N: normalized	HF			