

ASTM A214

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Production Standard of ASTM A214

● ASTM A214

ASTM A214 is a standard specification established by ASTM International, originally known as the American Society for Testing and Materials, which covers electric-resistance-welded carbon steel tubes used for heat exchangers, condensers, and similar heat transfer apparatus.

● Dimensions and Sizes of ASTM A214

| | |
|--------------------|----------------|
| Standard | ASTM A214 |
| Procedure | ERW |
| Dimensions | 3.2mm – 76.2mm |
| | 1/8" – 3" |
| | DN6 – DN80 |
| Thickness | 1.65 – 7mm |
| Unit Length | specific |

| | |
|------------------------|--|
| | random |
| Steel Grade | SA214 |
| Surface Coating | Varnishing, Oiling, Hot Dip Galvanizing |
| End Type | Square cut, Plain, Bevelled, Threaded, Socket, |
| Joint Method | Fitting, Flange, Coupling, Clamp, Pipe Shoulder, Welding |
| Pipe Machining | Welding, Bending, Hole Drilling, Punching, Swaging, Tapering, Flaring, Expanding |

●Chemical Composition of ASTM A214

| | | |
|---------------------------|--------------|-------|
| Carbon, max % | | 0.18 |
| Manganese, % | 0.27 to 0.63 | |
| Phosphorus, max, % | | 0.035 |
| Sulfur, max,% | | 0.035 |

●Mechanical Properties Tensile Strength and Yield Strength of ASTM A214

| Mechanical Properties | | | |
|--------------------------------|------------------------------|------------------|----------|
| Tensile Strength min ksi (MPa) | Yield Strength min ksi (MPa) | Elongation min.% | Hardness |
| 47[325] | 26[180] | ≥35% | ≤72 HRB |