



Engineering comparison table

Standard	Product and material family	Principal service	Selection caution
ASTM A179	Seamless cold-drawn low-carbon steel	Heat exchangers, condensers and similar heat-transfer equipment	It is not an automatic choice for high-pressure boiler duty or severe corrosion.
ASTM A192	Seamless minimum-wall carbon steel	High-pressure boiler and superheater service	Higher strength does not make it a direct substitute for A179 in every exchanger.
ASTM A210	Seamless medium-carbon steel	Boiler tubes, boiler flues and superheater tubes	Grade and manufacturing condition must match the thermal design and governing code.
ASTM A213	Seamless ferritic or austenitic alloy steel	Boiler, superheater and heat-exchanger service at elevated temperature or corrosion demand	T/TP grade, heat treatment and corrosion mechanism require engineering review.

Source / basis: <https://niktrd.com/heat-exchanger-tube-comparison>