

Dimensions, tolerances and surface condition

Parameter	What must be specified	Engineering effect
Outside diameter	OD and tolerance	Tubesheet-hole, baffle and expansion-tool compatibility
Wall thickness	Minimum or nominal basis, unit and tolerance	Pressure, corrosion allowance, heat transfer and life
Length	Cut length, tolerance and joint allowance	Bundle assembly and tubesheet connection
Straightness	Maximum bow and deviation	Baffle passage and damage-free assembly
Surface condition	Cleanliness, oxide, oil, roughness and visual defects	Heat transfer, fouling, corrosion and joint quality
Tube ends	Cut, deburring, projection and weld preparation	Expansion, welding and leak-test quality

Source / basis: <https://niktrd.com/condenser-tube>