
PROBLEM 10-8N QUESTION

Turbulent Heat Transfer Coefficient Calculations

The friction factor for a flow channel at a velocity of 10 m/s under fully developed turbulent conditions is 0.014. Find the approximate heat transfer coefficient under these same conditions assuming the fluid is: (1) water at 315°C and (2) sodium at 538°C (see *Nuclear Systems*, Vol. 1, p. 455 for properties).