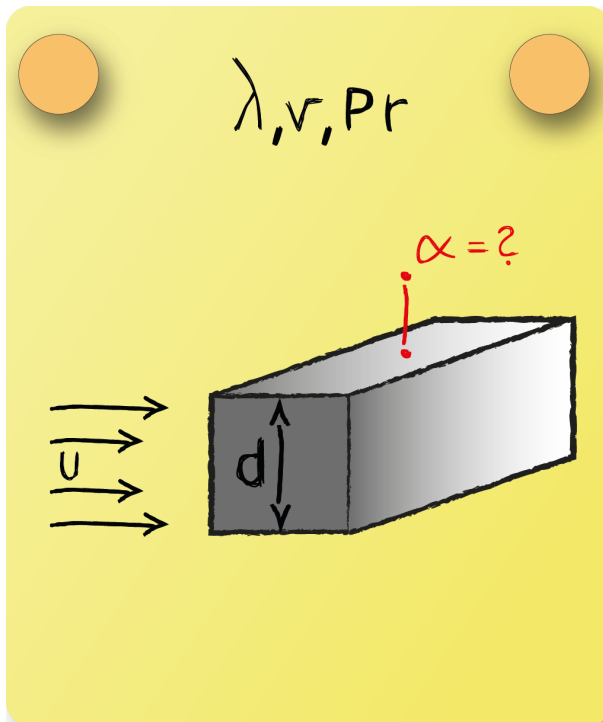




Heat Transfer Correlation: Task 7



The image describes a square bar which is flowed transversely on one side surface by a fluid with velocity u .

1



HTC.9b: $\overline{Nu_d} = \frac{\bar{\alpha}d}{\lambda} = C \cdot Re_d^m Pr^{0.4}$ with $C = 0.102$.
 $m = 0.675$ and $Re_d = \frac{ud}{\nu}$

2



Results: $Re_d = 7020$ $\overline{Nu_d} = 35.11$ $\bar{\alpha} = 7.02$