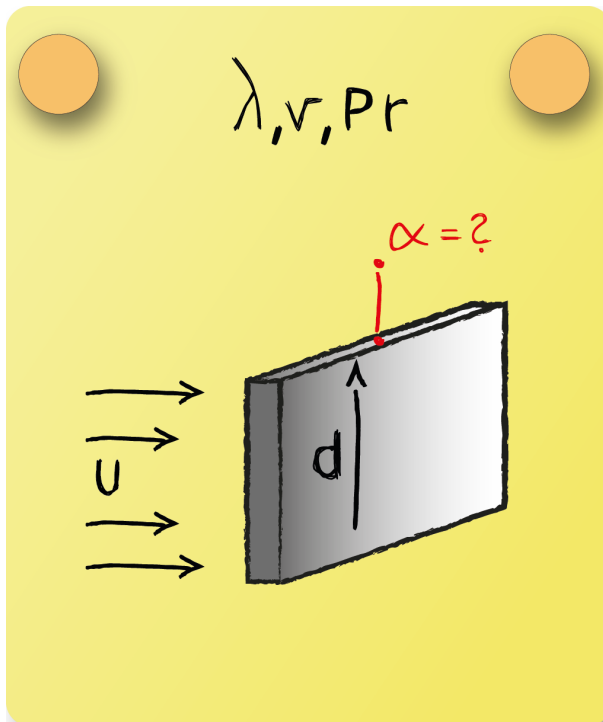




Heat Transfer Correlation: Task 10



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

1



HTC.9e: $\overline{Nu_d} = \frac{\overline{\alpha}d}{\lambda} = C \cdot Re_d^m Pr^{0.4}$ with $C = 0.228$.
 $m = 0.731$ and $Re_d = \frac{ud}{\nu}$

2



Results: $Re_d = 12000$ $\overline{Nu_d} = 190.69$ $\overline{\alpha} = 11.02$