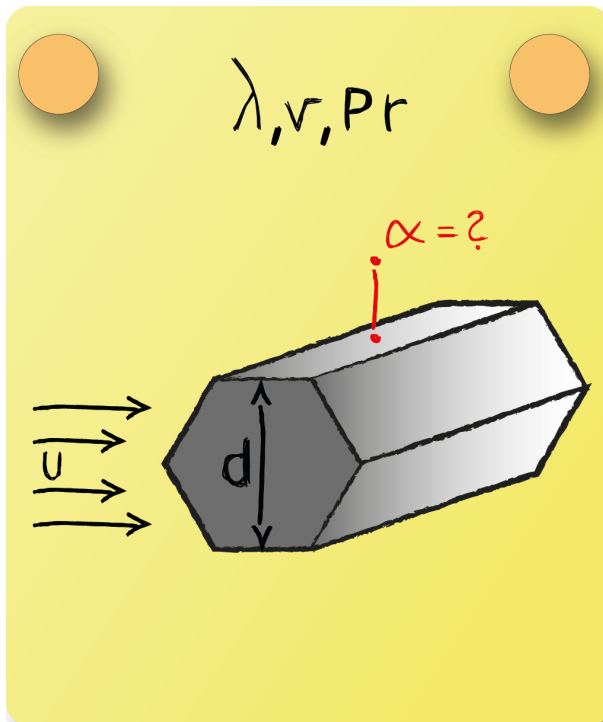




Heat Transfer Correlation: Task 9



The image describes a hexagonal bar which is flowed transversely on one edge by a fluid with velocity u .

1



HTC.9d: $\overline{Nu_d} = \frac{\bar{\alpha}d}{\lambda} = C \cdot Re_d^m Pr^{0.4}$ with $C = 0.153$, $m = 0.638$ and $Re_d = \frac{ud}{\nu}$

2



Results: $Re_d = 12600$ $\overline{Nu_d} = 84.28$ $\bar{\alpha} = 7.30$