Design Report

Shell and Tube type heat exchanger design by improved Delaware method with MATLAB program

Shell outside Diameter =   591   mm

Tube inside diameter =   16   mm

Tube thermal conductivity =   42   W/ m^2 k

Tube inlet temp = 50 C

Tube outlet Temp = 55C

Shell inlet temp =   60 C

Shell outlet temp = 70 C

No of Baffles =

Central Baffle Distance =   250   mm

Heat Transfer Rate =   W

Overall Heat transfer Coefficient =   W/ m^2 k

Pressura Drop across shell side =   KPa

No of Tubes =   652

No of Passes =

Tube Layout Characteristics angle = 30

Tube side heat transfer coefficient = W/ m^2 k

Shell side heat transfer coefficient = W/ m^2 k

Effectiveness =