

Title: Convection in turbulent flow system

The summary report shall include the following components:

1. definition of convection and its relation to the flow
2. turbulent flow and classic models to the turbulence flow
3. formulation to estimate the heat transfer coefficient and rate
 - a. forced and natural convection - boundary layer flow including horizontal and vertical wall geometry
 - b. forced and natural convection – other geometry such as around cylinder
 - c. forced convection inside duct flow
 - d. others such as convection (optional)