

Problem Statement: Thermal modelling and simulation of a piston pump

Hydraulic pumps are mostly used in airplanes. The temperature of the oil depends on the various components of the hydraulic system but mostly on pumps.

The output pressure and power of a hydraulic airborne system is really high this can lead to extremely high and undesirable oil temperatures which can lead to many issues

Thus, we need to find the temperature as a function of time of the 4 control volumes of the piston pump system.