DESIGN AND ANALYSIS OF A CONVERGENT DIVERGENT NOZZLE

ABSTRACT:

The effects of Mach number and Nozzle pressure ratios (NPR) on Mass flow rate, Maximum pressure, and Maximum velocity and on Maximum force are studied using Fluent Analysis. The classical one dimensional in viscid theory does not reveal the complex flow features in a convergent divergent nozzle accurately. The code fluent has been used to compute flow using a coupled and axisymmetric Convergent Divergent nozzle for different nozzle ratios and for different Mach numbers.