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Abstract :

A general purpose computer code called 'PHOENICS' has been used to compute flow field in an air intake duct geometry provided by ADA. Computations have been carried out for both inviscid and viscous three-dimensional flows for a low subsonic uniform inlet Mach number of 0.2. The results have been presented in the form of static and total pressure contours and Mach number contours at different sections of the intake duct. They bring out the effect of the complex geometry of the duct on the flow.