

All Setup Conditions in Ansys Fluent

Solver : Density-Based, Absolute Velocity Formation, Transient 2D axisymmetric analysis

Fluid : Rocket Fuel (Mixture of RP-1 and LOX)

Density : Ideal Gas

Cp : piecewise-linear

Thermal Conductivity : Constant

Viscosity : Sutherland

Molecular Mass : 23.8144

Inlet Absolute Pressure : 30 bar

Inlet Temperature : 3567.0178 K

Outlet Pressure : 1.01325 bar

Outlet Temperature : 300 K