

Problem definition:

Inviscid flow: Computing density based on free-stream temperature and pressure using the ideal gas law.

Force coefficients computed using free-stream values.

-- Input conditions:

Fluid Model: STANDARD_AIR

Specific gas constant: 287.058 N.m/kg.K.

Specific gas constant (non-dim): 287.058

Specific Heat Ratio: 1.4000

Free-stream static pressure: 101325 Pa.

Free-stream total pressure: 154454 Pa.

Free-stream temperature: 273.15 K.

Free-stream total temperature: 308.113 K.

Free-stream density: 1.29225 kg/m³.

Free-stream velocity: (264.994, 5.78219) m/s. Magnitude: 265.057 m/s.

Free-stream total energy per unit mass: 231152 m²/s².