

SUpport to SAfety ANalysis of Hydrogen and Fuel Cell Technologies

Verification type	Analytical Solutions
Database reference	ANA-6
Topic / Application	AIAA verification test cases
Physics	Expansion fan
	oblique shock
	incompressible boundary layer flow
	Coquette Thermal Flow
	Detonation wave
	Burgers Equation
Summary	Paper presents a collection of fluid mechanics problems with exact solutions
Description	Paper presents a collection of fluid mechanics problems with exact solutions which can be used to verify the numerical accuracy of solutions obtained by CFD codes. The test cases include Expansion fan, oblique shock,
	incompressible boundary layer flow, Coquette Thermal Flow, Detonation wave, Burgers Equation.
Case Title	The AIAA Code Verification Project - Test cases for CFD Code Verification
Authors	Urmila Ghia, University of Cincinnat et al
Year	2010
Online reference	48th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition
Case image	
Governing equations	
Results	