

SUpport to SAfety ANalysis of Hydrogen and Fuel Cell Technologies

Verification type	Numerical Solution
Database reference	NUM-5
Topic / Application	Numerical solution verification
	Ship Hydrodynamics
Physics	Drag estimation
Summary	Verification via comparison of 13 numerical solutions of ship hydrodynamics
Description	The paper presents a verification process via comparison of 13 numerical solutions of ship hydrodynamics Of primary interest to H2 safety practitioners are the metrics that are used for comparison between these codes.
	The comparison of 13 simulations included different codes, turbulence models and organisations.
	The paper also presents an interesting discussion on numerical error versus numerical accuracy estimates.
Case Title	Quantitative V&V of CFD simulations and certification of CFD codes
Authors	Fred Stern, Robert Wilson and Jun Shao
Year	2005
Online reference	INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS Int. J. Numer. Meth. Fluids 2006; 50:1335–1355
Case image	
Governing equations	
Results	

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