

SHIPFLOW Training Course Program

Cochin 15-18 April 2013

	Basic Training			Advanced Training
	Monday	Tuesday	Wednesday	Thursday
9:00 – 12:00	Introduction Introduction of FLOWTECH/SHIPFLOW Installation of SHIPFLOW Design Introduction to SHIPFLOW Design Demo Offset file	Meshing details Meshing thumb rules <i>Tutorial: T1.4 Mesh improvement</i> <i>Tutorial: T1.5 Double model</i>	Optimization cont. <i>Tutorial: T3.6 Export of optimized geometry to IGES</i> Offset generation Automatic offset generation <i>Tutorial: T4.1-2 Create offset from IGES</i> Offset modifications <i>Tutorial: T5.4 Offset modifications</i>	Propulsion Propeller models Propulsion case set up: - Hull / propeller / rudder - Shaft - Refinements <i>Exercise: self-propulsion</i>
	Coffee	Coffee	Coffee	Coffee
	XPAN – potential flow module Configuration – automatic mode First example – container ship <i>Tutorial: T1.1-3</i>	Optimization with SHIPFLOW Design Design variables Parameter/data retrieval Design engine <i>Tutorial: T2.2 Speed variation</i>	XBOUND – boundary layer module Transition, resistance, pot. and limiting streamlines <i>Tutorial: T6.1</i>	Viscous free surface <i>Exercise: XCHAP - VOF</i>
	Lunch	Lunch	Lunch	Lunch
13:00 – 16:30	XPAN cont. Wave resistance Sinkage & trim Transom option Variants <i>Tutorial: T2.1 Creating design variants</i>	Optimization cont. Geometry variation Hydrostatic calculation Image Offsets Groups Generalized Lackenby Variation <i>Tutorial: T3.1-3 Geometry variation</i>	XCHAP – RANS module Introduction to XCHAP Grid generation with XGRID <i>Tutorial: T7.1 Automatic grid generation</i> <i>Tutorial: T7.2 XGRID – manual control</i>	Forebody optimization using Friendship Framework together with XPAN: - Delta shift - Surface delta shift - Optimization using Genetic Algorithm
	Coffee	Coffee	Coffee	Coffee
	<i>Exercise: Configure and run a RoRo ship</i> Post-processing <i>Exercise: Bulb size variation on a RoRo ship</i>	Simplex <i>Tutorial: T3.4-5 Optimization with geometry variation</i>	Wake and Resistance Zonal and Global approach Viscous free surface <i>Tutorial T7.3 XCHAP - Post-processing</i> Appendages <i>Tutorial: T7.4 Rudder</i>	<i>Exercise: Optimization competition</i>