

	ITTC – Recommended Procedures and Guidelines	0.0 Page 1 of 11	
	REGISTER	Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
0.0		REGISTER	2011	05	12
1.0		SCOPE			
1.0-01		Description and Rules of the ITTC	2008	01	8
1.0-02		Committee Structure of ITTC	2008	02	3
1.0-03	P	General Guideline for the Activities of Technical Committees, Liaison with Executive Committee and Advisory Council	2008	00	10
4.0		QUALITY MANAGEMENT SYSTEM			
4.0-01	G	Guidelines for Benchmarking	2002	00	11
4.2		DOCUMENT AND DATA CONTROL			
4.2-01	P	Adoption or Modification of ITTC Recommended Procedures	2008	02	5
4.2-02	P	Updating the ITTC Symbols & Terminology List	2011	02	4
4.2-03	P	Review of ITTC Recommended Procedures and Guidelines by the Advisory Council	2008	00	4
4.2-04	P	Updating the ITTC Dictionary of Hydromechanics	2011	00	4
4.2.3		Document Control			
4.2.3-01		Recommended Procedures and Work Instructions			
4.2.3-01-01	P	Guide for the Preparation of ITTC Recommended Procedures	2008	01	4
4.2.3-01-02	G	Guidelines for Preparation of Technical Committee and Working Group Reports	2011	02	7
4.2.3-01-03	P	Work Instruction for Formatting ITTC Recommended Procedures	2008	01	6
4.2.4		Records			

Updated by	Approved
26 th ITTC QS Group	26 th ITTC
Date 2011	Date 09/2011

	ITTC – Recommended Procedures and Guidelines	0.0 Page 2 of 11	
	REGISTER	Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5		PROCESS CONTROL			
7.5-01		Test Preparation			
7.5-01-01		Ship Models			
7.5-01-01-01	P	Ship Models	2011	03	7
7.5-01-02		Propeller Models			
7.5-01-02-01	P	Terminology and Nomenclature for Propeller Geometry	2008	01	21
7.5-01-02-02	P	Propeller Model Accuracy	2005	00	8
7.5-01-03		Instrumentation, Calibration			
7.5-01-03-01	P	Uncertainty Analysis, Instrument Calibration	2008	00	14
7.5-01-03-02	P	Uncertainty Analysis, Laser Doppler Velocimetry Calibration	2008	00	13
7.5-01-03-03	P	Uncertainty Analysis: Particle Imaging Velocimetry (PIV)	2008	00	12

	ITTC – Recommended Procedures and Guidelines		0.0 Page 3 of 11	
	REGISTER		Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5-02		Testing and Extrapolation Methods			
7.5-02-01		General			
7.5-02-01-01	P	Guide to the Expression of Uncertainty in Experimental Hydrodynamics	2008	01	17
7.5-02-01-02		Replaced by 7.5-02-02-02	2008		
7.5-02-01-03	P	Fresh Water and Seawater Properties	2011	02	45
7.5-02-02		Resistance			
7.5-02-02-01	P	Resistance Tests	2011	03	13
7.5-02-02-02	P	Uncertainty Analysis Guidelines for Resistance Towing Tank Tests	2008	01	16
7.5-02-02-03	P	Uncertainty Analysis, Spreadsheet for Resistance Measurements	2002	00	5
7.5-02-02-04	P	Uncertainty Analysis, Spreadsheet for Speed Measurements	2002	00	4
7.5-02-02-05	P	Uncertainty Analysis, Spreadsheet for Sinkage and Trim Measurements	2002	00	5
7.5-02-02-06	P	Uncertainty Analysis, Spreadsheet for Wave Profile Measurements	2002	00	4

	ITTC – Recommended Procedures and Guidelines	0.0 Page 4 of 11	
	REGISTER	Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5-02-03		Propulsion			
7.5-02-03-01		Performance			
7.5-02-03-01.1	P	Propulsion/ Bollard pull Test	2011	04	16
7.5-02-03-01.2	P	Uncertainty Analysis: Example for Propulsion Test	2002	00	25
7.5-02-03-01.3	P C	Podded Propulsor Tests and Extrapolation	2008	00	21
7.5-02-03-01.4	P	1978 ITTC Performance Prediction Method	2011	02	9
7.5-02-03-01.5	G C	Predicting Powering Margins	2008	01	9
7.5-02-03-02		Propulsor			
7.5-02-03-02.1	P	Open Water Test	2008	02	10
7.5-02-03-02.2	P	Uncertainty Analysis, Example for Open Water Test	2002	00	16
7.5-02-03-02.3	P	Nominal Wake Measurements by LDV, Model Scale Experiments	2008	00	11
7.5-02-03-02.4	P	Nominal Wake Measurement by a 5-Hole Pitot Tube	2011	01	11
7.5-02-03-02.5	G	Experimental Wake Scaling Methods	2011	00	7

	ITTC – Recommended Procedures and Guidelines		0.0 Page 5 of 11	
	REGISTER		Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5-02-03-03		Cavitation			
7.5-02-03-03.1	P	Model-Scale Cavitation Test	2011	03	9
7.5-02-03-03.2	P	Description of Cavitation Appearances	2002	01	7
7.5-02-03-03.3	P	Cavitation Induced Pressure Fluctuations Model Scale Experiments	2011	04	16
7.5-02-03-03.4	P	Cavitation Induced Pressure Fluctuations Numerical Prediction Methods	2002	01	7
7.5-02-03-03.5	P	Cavitation Induced Erosion on Propellers, Rudders and Appendages Model Scale Experiments	2011	02	14
7.5-02-03-03.6	G	Podded Propulsor, Model - Scale Cavitation Test	2011	02	12
7.5-02-03-03.7	P	Prediction of Cavitation Erosion Damage for Unconventional Rudders or Rudders behind Highly-Loaded Propellers	2008	00	13
7.5-02-03-03.8	P	Modelling the Behaviour of Cavitation in Waterjets	2008	00	13

	ITTC – Recommended Procedures and Guidelines		0.0 Page 6 of 11	
	REGISTER		Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5-02-04		Ice Testing			
7.5-02-04-01	P	General Guidelines	1999	01	5
7.5-02-04-02	P	Test Methods for Model Ice Properties	2002	01	4
7.5-02-04-02.1	P	Resistance Test in Level Ice	2002	01	7
7.5-02-04-02.2	P C	Propulsion Tests in Ice	1999	00	8
7.5-02-04-02.3	P C	Manoeuvring Tests in Ice	1999	00	6
7.5-02-04-02.4	P	Tests in Deformed Ice	1999	00	4
7.5-02-04-02.5	P	Experimental Uncertainty Analysis for Ship Resistance in Ice Tank Testing	2005	00	15
7.5-02-05		High Speed Marine Vehicles			
7.5-02-05-01	P	Resistance Test	2008	02	18
7.5-02-05-02	P	Propulsion Test	2011	02	6
7.5-02-05-03.1	P	Waterjet Propulsive Performance Prediction – Propulsion Test and Extrapolation	2011	02	9
7.5-02-05-03.2	P	Waterjet System Performance	2011	01	10
7.5-02-05-03.3	P	Uncertainty Analysis - Example for Waterjet Propulsion Test	2011	01	9
7.5-02-05-04	P	Seakeeping Tests	1999	00	12
7.5-02-05-04.1	P	Excerpt of ISO 2631, Seasickness and Fatigue	1999	00	5
7.5-02-05-05	P	Manoeuvrability, Evaluation and Documentation of HSMV	2002	01	4
7.5-02-05-06	P	Structural Loads	1999	00	5
7.5-02-05-07	P	Dynamic Instability Tests	1999	00	4

	ITTC – Recommended Procedures and Guidelines		0.0 Page 7 of 11	
	REGISTER		Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5-02-06		Manoeuvrability			
7.5-02-06-01	P	Free Running Model Test Procedure	2008	02	11
7.5-02-06-02	P	Captive Model Test Procedure	2008	03	21
7.5-02-06-03	P	Validation of Manoeuvring Simulation Models	2011	02	11
7.5-02-06.04	P	Uncertainty Analysis: Forces and moment Example for Planar Motion Mechanism Test	2008	00	25
7.5-02-07		Loads and Responses			
7.5-02-07-01		Environmental Modelling			
7.5-02-07-01.1	G	Laboratory Modelling of Multidirectional Irregular Wave Spectra	2005	00	8
7.5-02-07-02		Seakeeping			
7.5-02-07-02.1	P	Seakeeping Experiments	2011	04	22
7.5-02-07-02.2	P	Predicting of Power Increase in Irregular Waves from Model Test	2011	04	13
7.5-02-07-02.3	P	Experiments on Rarely Occurring Events	2011	03	12
7.5-02-07-02.4	P	Validation of Seakeeping Computer Codes in the Frequency Domain	2002	01	13
7.5-02-07-02.5	P	Verification and Validation of Linear and Weakly Nonlinear Seakeeping Computer Codes	2011	01	17
7.5-02-07-.2.6	P	Global Loads Seakeeping Procedure	2011	00	15

	ITTC – Recommended Procedures and Guidelines		0.0 Page 8 of 11	
	REGISTER		Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5-02-07-03		Ocean Engineering			
7.5-02-07-03.1	P	Floating Offshore Platform Experiments	2005	01	12
7.5-02-07-03.2	P	Analysis Procedure for Model Tests in Regular Waves	2002	01	8
7.5-02-07-03.3	P	Model Tests on Tanker-Turret Systems	1999	00	4
7.5-02-07-03.4	P	Stationary Floating System Hybrid Mooring Simulation, Model Test Experiments	2008	01	9
7.5-02-07-03.5	P	Truncation of Test Models and Integration with Numerical Simulations	2008	01	8
7.5-02-07-03.6	P	Dynamic Positioning System, Model Test Experiments	2001	00	9
7.5-02-07-03.7	P	Wave Energy Converter, Model Test Experiments	2001	00	8
7.5-02-07-04		Stability			
7.5-02-07-04.1	P	Model Tests on Intact Stability	2008	02	9
7.5-02-07-04.2	P	Model Tests on Damage Stability in Waves	2005	01	7
7.5-02-07-04.3	G	Predicting the Occurrence and Magnitude of Parametric Rolling	2006	01	7
7.5-02-07-04.4	G	Numerical Simulation of Capsize Behaviour of Damaged Ships in Irregular Beam Seas	2011	00	10
7.5-02-07-04.5	P	Numerical Estimation of Roll Damping	2011	00	33

	ITTC – Recommended Procedures and Guidelines		0.0 Page 9 of 11	
	REGISTER		Effective Date 2011	Revision 05

7.5-03		CFD			
7.5-03-01		General			
7.5-03-01-01	P	Uncertainty Analysis in CFD, Verification and Validation Methodology and Procedures	2008	02	12
7.5-03-01-02	G C	Uncertainty Analysis in CFD, Guidelines for RANS Codes	1999	00	2
7.5-03-01-03	P	CFD User’s Guide	1999	00	4
7.5-03-01-04	P	CFD Verification	1999	00	7
7.5-03-02		Resistance and Flow			
7.5-03-02-01	C	Uncertainty Analysis in CFD, Examples for Resistance and Flow	1999	00	12
7.5-03-02-02	P	Benchmark Database for CFD Validation for Resistance and Propulsion	1999	00	7
7.5-03-02-03	G	Practical Guidelines for Ship CFD Applications	2011	00	18
7.5-03-03		Propulsion			
7.5-03-04		Manoeuvrability			
7.5-03-04-01	G	Guideline on Use of RANS Tools for Manoeuvring Prediction	2011	00	16

	ITTC – Recommended Procedures and Guidelines		0.0 Page 10 of 11	
	REGISTER		Effective Date 2011	Revision 05

Section		Contents	Effective Date	Revision	Pages
7.5-04		Full Scale Measurements			
7.5-04-01		Speed and Power Trials			
7.5-04-01-01.1	P	Preparation and Conduct of Speed/Power Trials	2005	03	10
7.5-04-01-01.2	P	Analysis of Speed/Power Trial Data	2005	00	11
7.5-04-02		Manoeuvrability			
7.5-04-02-01	P	Full Scale Manoeuvring Trials Procedure	2002	01	18
7.5-04-03		Ice Testing			
7.5-04-03-01	C	Ship Trials in Ice	1999	00	8

- P** signifies Procedure
G signifies Guideline
C signifies Concern, needs updating!

	ITTC – Recommended Procedures and Guidelines	0.0 Page 11 of 11	
	REGISTER	Effective Date 2011	Revision 05

Section	Contents	Effective Date	Revision	Pages
7.6	CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT			
7.6-01	Measuring Equipment			
7.6-01-01	Control of Inspection, Measuring and Test Equipment	1999	00	8
Appendix 1	Sample of Measuring Equipment Card	1999	00	1
Appendix 2	Sample of Calibration Certificate	1999	00	2
Appendix 3	Sample Procedure	1999	00	3
Appendix 4	Sample Work Instruction	1999	00	5
7.6-02	Sample Work Instructions			
7.6-02-01	Calibration of Steel Rulers	2002	00	7
7.6-02-02	Calibration of Vernier Callipers	2002	00	11
7.6-02-03	Calibration of Height Callipers	2002	00	10
7.6-02-04	Calibration of Micrometers	2002	00	12
7.6-02-05	Calibration of Dial Gauges	2002	00	11
7.6-02-06	Calibration of Chronometers with Pointer Indication	2002	00	7
7.6-02-07	Calibration of Chronometers with Digital Indication	2002	00	13
7.6-02-08	Calibration of Weights	2002	00	18
7.6-02-09	Calibration of a Load Cells	2002	00	21
7.6-02-10	Calibration of Non Self Indicating Weighing Instruments	2002	00	10
7.6-02-11	Calibration of Liquid-in-Glass Thermometers	2002	00	12
7.6-02-12	Calibration of Bourdon Tube Pressure Gauges, Pressure-Vacuum and Vacuum Gauges for General Use	2002	00	11