

ISO 13590:2022-06 (E)

Small craft - Personal watercraft - Construction and system installation requirements

Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Builder's plate	4
5 Watercraft identification	4
6 Fuel system	4
6.1 General	4
6.2 Fuel tanks	4
6.2.1 Materials prohibited for fuel tanks	4
6.2.2 Fuel level indication	4
6.2.3 Tank pressure limitation	5
6.2.4 Fill and vent openings	5
6.2.5 Fuel tank static-pressure test	5
6.2.6 Fuel tank shock test	5
6.3 Fuel tank installations	6
6.3.1 Non-encased metallic fuel tanks	6
6.4 Fuel tank filling system	6
6.5 Fuel pumps	6
6.6 Fuel stop valves	6
6.7 Fuel filters and strainers	6
6.8 Spud, pipe and hose fitting	6
6.9 Clips, straps and hose clamps	6
6.10 Metallic fuel line	7
6.11 Plugs and fittings	7
6.12 Vent and fuel distribution hoses and connections	7
6.13 Fuel fill system grounding	7
6.14 Fire test	7
6.15 Fuel-hose specifications	8
6.15.1 General	8
6.15.2 Tensile strength and elongation	8
6.15.3 Dry heat resistance	8
6.15.4 Ozone resistance	8
6.15.5 Oil resistance	8
6.15.6 Burst test	9
6.15.7 Vacuum collapse test	9
6.15.8 Cold flexibility	9
6.15.9 Adhesion test (reinforced hose with cover)	9
6.15.10 Fuel resistance	9
7 Electrical system	10
7.1 Exemptions	10
7.2 Conductor type, size and identification	10
7.3 Conductor support and protection	12
7.4 External ignition protection	12
7.5 Overcurrent protection	12

7.6	Conductor terminations	13
7.7	Batteries	14
7.8	Secondary circuits of ignition systems	15
8	Ventilation	15
9	Hull structure test	16
9.1	Drop test	16
9.2	Testing	16
9.3	Passing or failing the test	16
10	Floataion test	16
10.1	General	16
10.2	Test conditions	16
10.3	Test procedure	16
10.4	Acceptance level	16
10.5	Floataion material	17
10.5.1	Introduction	17
10.5.2	Vapour test	17
10.5.3	Petrol test lasting 24 h	17
10.5.4	Petrol test lasting 30 days	17
10.5.5	Oil test lasting 24 h	17
10.5.6	Oil test lasting 30 days	17
10.5.7	Bilge cleaner test lasting 24 h	17
10.5.8	Bilge cleaner test lasting 30 days	18
11	Steering-system test	18
11.1	General	18
11.2	Axial force test	18
11.3	Tangential force test	18
11.4	Fatigue test	18
11.5	Impact test	18
11.5.1	Impact test 1	18
11.5.2	Impact test 2	18
12	Stability	19
13	Propulsion engine cut-off device	20
13.1	General	20
13.2	Cut-off device requirements	20
13.3	Mechanical devices employing a physical attachment to the operator	20
13.4	Testing	20
14	Means of reboarding	21
15	Towing	22
16	Off throttle steering when underway	22
17	Flooding -- Detection and removal of water	22
18	Owner's manual	22
	Annex A (normative) Test conditions, procedures and performance requirements for evaluating the off throttle steering capabilities of personal watercraft	23
	Bibliography	28