

# ISO 23453:2022-12 (E)

## Ships and marine technology - Guidelines for the design and manufacture of the hub cap with fins for a fixed-pitch marine propeller

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Guidelines for HCWF design and manufacture .....	2
4.1	Hydrodynamic performance and energy-saving effect evaluation .....	2
4.2	Manufacture .....	2
4.3	Tightness test .....	3
4.4	Accessibility .....	3
5	Hydrodynamic design procedure of HCWF .....	3
5.1	Applicability analysis .....	3
5.2	Preliminary principle dimensions and main parameters .....	3
5.3	Pitch and camber distribution .....	3
5.4	Verification with open water testing .....	3
5.5	Verification using full-scale tests .....	5
6	Strength check of HCWF .....	5
6.1	Strength check method of HCWF .....	5
6.2	Strength check method of connecting bolts between HCWF and propeller .....	6
Bibliography .....		7