

DIN EN 1864:2008-06 (E)

Inland navigation vessels - Wheelhouse - Ergonomic and safety requirements

Contents		Page
Foreword		5
1	Scope	7
2	Normative references	7
3	Terms and definitions	8
4	General requirements	9
4.1	Layout of the wheelhouse	9
4.2	Safety measures against falling and tripping	9
4.2.1	Floors	9
4.2.2	Passageway to accommodation areas	9
4.2.3	Window cleaning	9
4.3	Fire protection	9
4.4	Safety equipment	9
4.4.1	Fire extinguishers	9
4.4.2	Stationary fire-extinguishing systems	10
4.4.3	Lifebuoy	10
5	Wheelhouse cabin requirements	10
5.1	Elements	10
5.1.1	Main elements	10
5.1.2	Types of construction	10
5.1.3	General design	11
5.2	Size	11
5.2.1	Area	11
5.3.2	Height	11
5.3	Access points	11
5.3.1	Doors	11
5.3.2	Stairs	12
5.4	Emergency exits	12
5.5	Climate	12
5.5.1	Air conditioning	12
5.5.2	Air velocities	13
5.6	Lighting and colour	13
5.6.1	General	13
5.6.2	Controls	13
5.6.3	Glare and direct and scattered light reflections	13
5.6.4	Interior colour design	14
5.7	View	14
5.7.1	Unrestricted view from the wheelhouse	14
5.7.2	Additional viewing improvement from camera installations	16
5.7.3	Front windows	16
5.7.4	Requirements for the built-in wheelhouse	16
5.8	Noise and vibration	16
5.8.1	Noise	16
5.8.2	Vibration	16
5.8.3	Normal operating conditions	17
5.9	Additional requirements for wheelhouse cabins that can be lowered and "up-and-over" wheelhouses	17
5.9.1	Wheelhouse cabins that can be lowered	17

5.9.2	"Up-and-over" wheelhouses	17
6	Requirements for the control position	17
6.1	General	17
6.2	Elements	17
6.3	Layout	18
6.4	General	18
6.4.1	Electrical safety	18
6.4.2	Electromagnetic compatibility	18
6.4.3	Mechanical safety	18
6.5	Areas for the fixed installation of control position instruments	18
6.5.1	Arrangement and layout	18
6.5.2	Arrangement of special systems	22
6.5.3	Ergonomic dimensioning requirements	22
6.5.4	Controls	23
6.5.5	Display instruments	27
6.5.6	Monitoring devices	29
6.5.7	System response	31
6.6	Radars and other navigation and location equipment	31
6.6.1	Radar types	31
6.6.2	Connections with other devices	32
6.7	Radio, IT and other installations	32
6.7.1	General	32
6.7.2	External telephone	32
6.7.3	Intercom	32
6.7.4	Internal alarm system	32
6.7.5	Sound signals	32
6.7.6	Stern anchor	33
6.7.7	Floodlight	33
6.8	Wheelhouse chair	33
6.9	Additional requirements for the wing control position	33
7	Requirements for the paperwork workplace and computer workplace	33
8	Seating and resting area	34
9	Manufacturer's certificate	34
	Bibliography	39
	Figures Figure 1 -- Minimum unrestricted field of view requirements	15
	Figure 2 -- Reaches of a sitting person (grasping range)	21
	Figure 3 -- Field of view of a sitting person	24
	Figure 4 -- Ceiling arrangement of instruments, side view	25
	Figure A.1 -- Large wheelhouse	35
	Figure A.2 -- Medium wheelhouse	36
	Figure A.3 -- Small wheelhouse	37
	Annex B (informative) Additional viewing improvement from camera installations	38
	Annex A (informative) Examples of wheelhouse layout	35
	Tables Table 1 -- Lighting and colour	13
	Table 2 -- Arrangement of the most important instruments in the control position	20