Atmospheric conditions requirements according to new ISO 12944-6:2018

Corrosivity acc. to ISO 12944 - 5	Durability acc. to ISO 12944 - 5	Durations – test regime 1		Durations - test regime 2
		Condensation ISO 6270 hours	Salt spray ISO 9227 hours	Cycle corrosion test ISO 12944-9 hours
C3	Low	48	120	
C3	Med	120	240	
C3	High	240	480	
C3	Very High	480	720	
C4	Low	120	240	
C4	Med	240	480	
C4	High	480	720	
C4	Very High	720	1440	1680
C5	Low	240	480	
C5	Med	480	720	
C5	High	720	1440	1680
C5	Very High			2688
CX				4200

Durability indications	Low	Medium	High	Very High
	upto 7 years	7 -15 years	15 - 25 years	> 25 years

Immersion condition requirements according to ISO 12944 - 6

Corrosivity acc. to ISO 12944 - 5	Durability acc. to ISO 12944 - 5	Water immersion ISO 2812 - 2 hours	Condensation (a) ISO 6270 hours	Salt spray (a) ISO 9227 hours
Im1 (Fresh)	High	3000	1440	
Im1	Very High	4000	2160	
Im2 (Sea)	High	3000		1440
Im2	Very High	4000		2160
Im3 (buried)	High	3000		1440
Im3	Very High	4000		2160

(a) Only required if systems are partially or temporarily immersed/ buried.

Testing procedure for water immersion – ISO 12944 - 6.

Condition	Medium	Procedure
Im1	distilled water	Without scribe, aerated, partially immersed
Im2, Im3	5% NaCl sol.	Without scribe, partially immersed

Requirements according to ISO 12944 - 9

Corrosivity acc. to ISO 12944 - 9	Environment	Seawater immersion ISO 2812 – 2 (b) hours	Cycle corrosion test ISO 12944-9 hours	Cathodic disbonding ISO 15711 hours
CX	Offshore		4200	
CX and Im4	splash/ tidal	4200	4200	4200
Im4	Immersion	4200		4200

(b) To be executed with 2 mm scribe, using artificial seawater solution of ISO 15711, medium aerated, exposure can be partially or fully immersed.

Do note the difference in seawater immersion procedure between ISO 12944 – 6 and 9!