



Workshop on Durability Design DTI, Nov. 18th, 2014

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Marine field exposure site in Träslövsläge, SE

Träslövsläge data from: Dimitrios Boubitsas, Tang Luping, Peter Utgenannt:
“Chloride Ingress in Concrete Exposed to Marine Environment – Field data up to
20 years exposure”, SBUF, Final draft rapport: 2014-02-14, 137p.

Marine exposure of approx.
40 different concrete types
starting in 1991.



Marine field exposure site in Träslövsläge, SE

Mix compositions of selected mixes

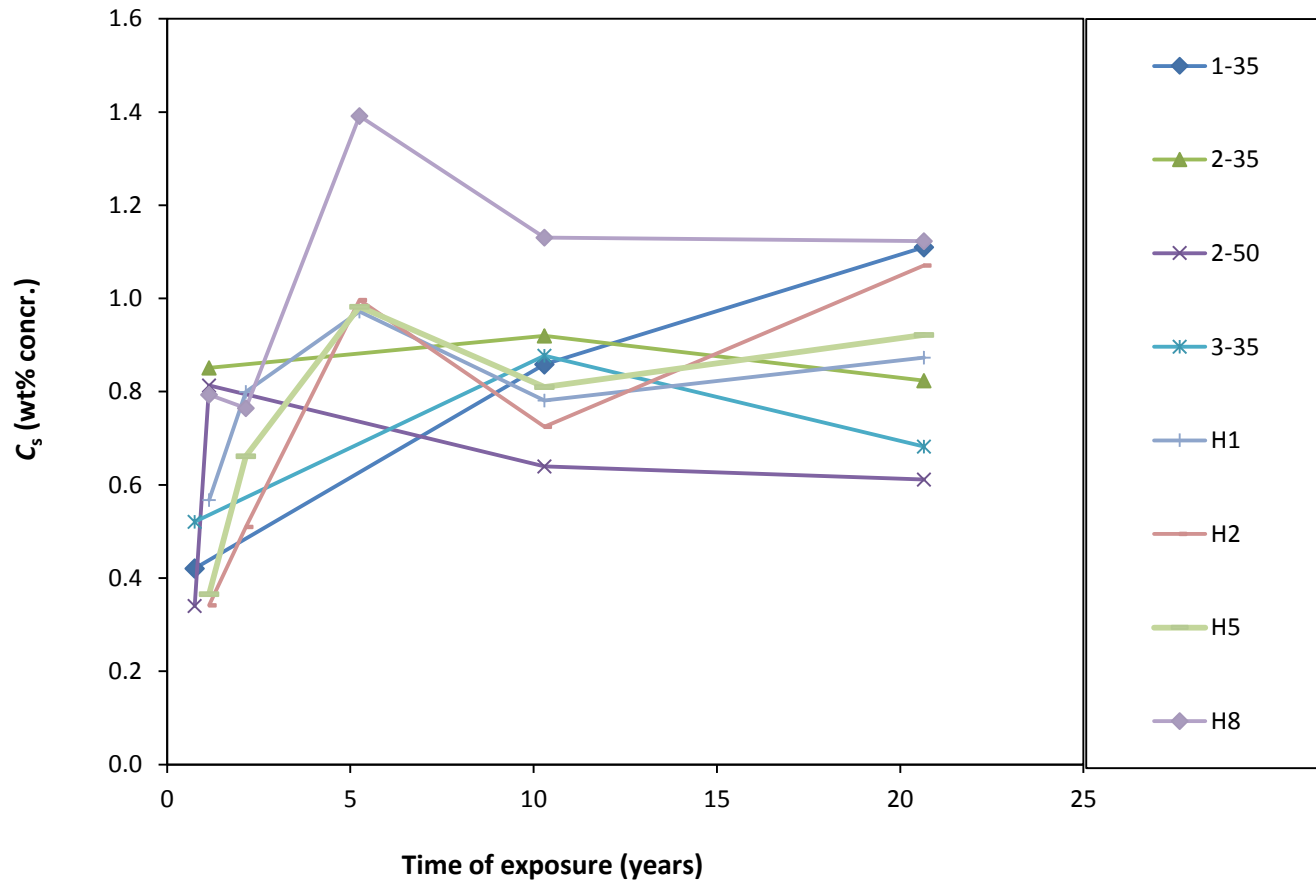
Mix No.	Binder type	Binder kg/m ³	Water-binder ratio	Fine aggreg. 0-8 mm kg/m ³	Coarse aggreg. 8-16 mm kg/m ³	Sp2) % of binder	AEA3) % of binder	Air content %	28d compr. Strength MPa
1-35	100AnI	450	0.35	839	839	1	0.041	6.0	70
2-35	100Slite	450	0.35	801	868	1.7	0.038	5.7	60
2-50	100Slite	390	0.50	853	787	-	0.026	5.8	42
3-35	95AnI+5SF	450	0.35	801	868	1.2	0.08	5.8	72
H1	95AnI+5SF	500	0.30	836	942	2.3	-	0.8	112
H2	90AnI+10SF	500	0.30	820	963	2.1	-	1.1	117
H5	95AnI+5SF	551	0.25	806	946	3	-	1.3	125
H8	80AnI+20FA	616	0.30	680	865	2.8	-	3.0	98



Selected results from Träslövsläge

Calculated surface chloride concentrations versus exposure time

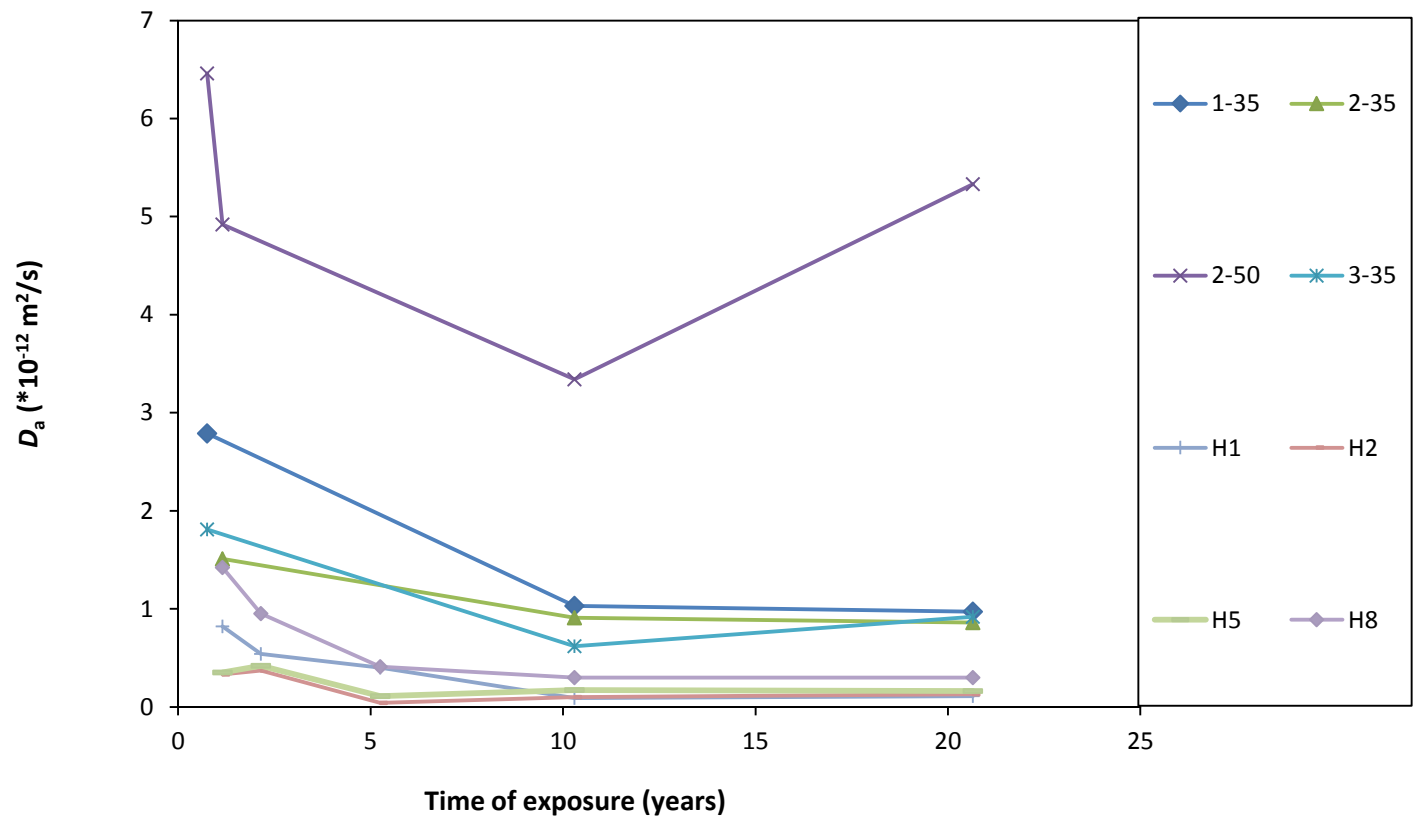
Submerged zone



Selected results from Träslövläge

Achieved diffusion coefficients versus exposure time

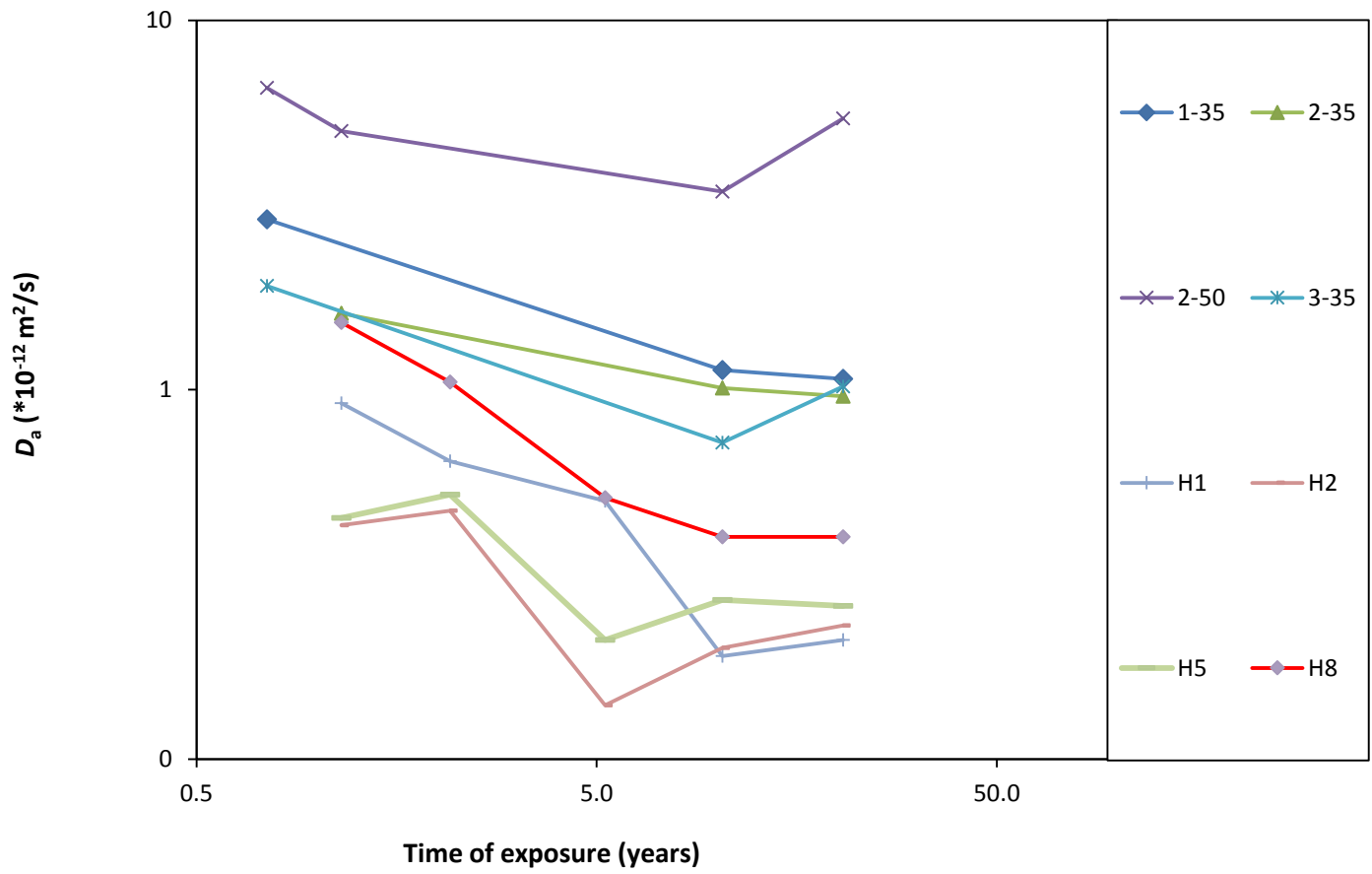
Submerged zone



Selected results from Träslövsläge

Achieved diffusion coefficients versus exposure time (Log-Log scale)

Submerged zone



Selected results from Träslövsläge

Achieved diffusion coefficients versus exposure time (Log-Log scale)

Submerged zone

