Article

The Influence of Test-Panel Orientation and Exposure Angle on the Corrosion Rate of Carbon Steel. Mathematical Modelling

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Table S-1. Values of the constants k_i and δ_i in the models (6) to (15) when considering solely the effect of the exposure angle (i.e., $\delta_i = 0$ in all cases).

Variables	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)	Model (11)	Model (12)	Model (13)	Model (14)	Model (15)	Model (16)	Model (17)
Constant	4.1997*	4.1983*	3.4146*	3.4131*	3.7962*	3.7948*	3.6591*	3.6578*	4.0870*	4.0856*	3.9281*	3.9267*
	(0.0408)	(0.0344)	(0.0242)	(0.0174)	(0.3764)	(0.2517)	(0.2918)	(0.1260)	(1.0515)	(0.3407)	(1.0028)	(0.3248)
TEXP	−0.8365*	−0.8365*										
	(0.0608)	(0.0379)										
SO2					−0.0488	−0.0488**	−0.0608	−0.0608*				
					(0. 0557)	(0. 0182)	(0.0503)	(0.0164)				
CL					−0.0054	−0.0054	−0.0104	−0.0104**				
					(0.0119)	(0.0039)	(0.0136)	(0.0044)				
TOW					−0.2872	−0.2872***					−0.3515	−0.3515*
					(0.4360)	(0.1425)					(0.4069)	(0.1317)
LTEXP			−0.4178*	−0.4178*	−0.3262*	−0.3262**	−0.2074	−0.2074**	−0.1562	−0.1562***	−0.3169*	−0.3169*
			(0.0262)	(0.0112)	(0.0896)	(0.0293)	(0.3253)	(0.0838)	(0.2620)	(0.0848)	(0.0891)	(0.0288)
LSO2									−0.0858	−0.0858*	−0.0647	−0.0647
									(0.0682)	(0.0221)	(0.0711)	(0.0230)
LCL									−0.2536	−0.2536***	−0.0941	−0.0941
									(0.3573)	(0.1157)	(0.3007)	(0.0973)
LTOW							−0.2125	−0.2125***	−0.2791	−0.2791**		
							(0.2561)	(0.1065)	(0.2620)	(0.1049)		
I1		0.0899*		0.0899*		0.0899*		0.0899*		0.0899*		0.0899*
		(0.0318)		(0.0191)		(0.0149)		(0.0149)		(0.0147)		(0.0147)
I2		−0.0864**		−0.0864**		−0.0864*		−0.0864*		−0.0864*		−0.0864*
		(0.0318)		(0.0191)		(0.0149)		(0.0149)		(0.0147)		(0.0147)
$\overline{R}^2$	0.86671	0.9482	0.8974	0.9812	0.8942	0.9887	0.8941	0.9887	0.8943	0.9889	0.8944	0.9889
N	30	30	30	30	30	30	30	30	30	30	30	30

Notes: Standard errors are given within brackets below the corresponding estimated coefficients.
* Significant at 1% level. ** Significant at 5% level. *** Significant at 10% level.

Table S-2. Values of the constants k_i and δ_i in the models (6) to (15) when considering solely the effect of the orientation (i.e., $\gamma_n = 0$ in all cases).

Variables	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)	Model (11)	Model (12)	Model (13)	Model (14)	Model (15)	Model (16)	Model (17)
Constant	4.2192*	4.2743*	3.3292*	3.3843*	4.5115*	4.5666*	3.9503*	4.0055*	5.8633*	5.9184*	5.2801*	5.3353*
	(0.0279)	(0.0389)	(0.0235)	(0.0465)	(0.2860)	(0.2517)	(0.2918)	(0.2569)	(0.7979)	(0.6973)	(0.7609)	(0.6651)
TEXP	−0.9625*	−0.9625*										
	(0.0415)	(0.0369)										
SO2					−0.0886**	−0.0886*	−0.1377*	−0.1377*				
					(0. 0423)	(0.0370)	(0.0381)	(0.0333)				
CL					−0.0184**	−0.0184**	−0.0390*	−0.0390**				
					(0.0091)	(0.0079)	(0.0103)	(0.0079)				
TOW					−1.1644*	−1.1644**					−1.2855*	−1.2855*
					(0.3317)	(0.2900)					(0.3092)	(0.2701)
LTEXP			−0.4601*	−0.4610*	−0.1931*	−0.1931*	0.3014	0.3014*	0.4266**	0.4266**	−0.1736**	−0.1736*
			(0.4601)	(0.0243)	(0.0698)	(0.0594)	(0.1971)	(0.0594)	(0.2014)	(0.2014)	(0.0675)	(0.0590)
LSO2									−0. 1960*	−0. 1960*	−0.1184**	−0.1184**
									(0.0517)	(0.0452)	(0.0540)	(0.0471)
LCL									−0.9890*	−0.9890*	−0.4021***	−0.4021***
									(0.2716)	(0.2371)	(0.2281)	(0.1992)
LTOW							−0.8760*	−0.8760**	−1.0339*	−1.0339*		
							(0.2499)	(0.2900)	(0.2486)	(0. 2171)		
O2		−0.0006		−0.0006		−0.0006		−0.0006		−0.0006		−0.0006
		(0.0453)		(0.0613)		(0.0441)		(0.0441)		(0.0439)		(0.0439)
O3		−0.0825**		−0.0824		−0.0824***		−0.0824**		−0.0824***		−0.0824***
		(0.0453)		(0.0613)		(0.0441)		(0.0441)		(0.0439)		(0.0439)
O4		−0.0548		−0.0548		−0.0548		−0.0548		−0.0548		−0.0548
		(0.0453)		(0.0613)		(0.0441)		(0.0441)		(0.0441)		(0.0441)
O5		−0.0777***		−0.0776		−0.0776***		−0.0776**		−0.0776***		−0.0776***
		(0.0453)		(0.0613)		(0.0441)		(0.0441)		(0.0439)		(0.0439)
O6		−0.0341		−0.0341		−0.0341		−0.0341		−0.0341		−0.0341
		(0.0453)		(0.0613)		(0.0441)		(0.0441)		(0.0439)		(0.0439)
O7		−0.1615*		−0.1615**		−0.1615*		−0.1615*		−0.1615*		−0.1615*
		(0.0453)		(0.0613)		(0.0441)		(0.0441)		(0.0439)		(0.0439)
O8		−0.0297		−0.0297		−0.0297		−0.0297		−0.0297		−0.0297
		(0.0453)		(0.0613)		(0.0441)		(0.0441)		(0.0439)		(0.0439)
$\overline{R}^2$	0.9194	0.9363	0.8745	0.8832	0.9211	0.9397	0.9210	0.9396	0.9215	0.9401	0.9214	0.9401
N	48	48	48	48	48	48	48	48	48	48	48	48

Notes: Standard errors are given within brackets below the corresponding estimated coefficients.

* Significant at 1% level. ** Significant at 5% level. *** Significant at 10% level.