

Calibration of Partial Factors 05-Aug-19		Rev A	Displ UK Values for R4 With ULS/SLS	Repl UK Values for R4 No ULS/SLS	Displ	Med Displ	Repl	Displ	Med Displ	Repl	France Values for DC1	Germany Values for DC1	
					New values for DC3 With ULS/SLS			New values for DC3 No ULS/SLS					
Permanent	$\gamma_G$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.35	1.35	
Variable	$\gamma_Q$	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.50	1.50	
Split	80:20	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.38	1.38	
Permanent	50:50	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.43	1.43	
to Variable	20:80	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.47	1.47	
Shaft	$\gamma_s$	1.30	1.40	1.50	1.60	1.50	1.55	1.60	1.50	1.55	1.60	1.10	1.40
End Bearing	$\gamma_b$	1.50	1.70	1.70	2.00	1.70	1.85	2.00	1.70	1.85	2.00	1.10	1.40
100% Shaft Friction	$\gamma_{average}$	1.30	1.40	1.50	1.60	1.50	1.55	1.60	1.50	1.55	1.60	1.10	1.40
50% Shaft & 50% End Bearing	$\gamma_{average}$	1.40	1.55	1.60	1.80	1.60	1.70	1.80	1.60	1.70	1.80	1.10	1.40
100% End Bearing	$\gamma_{average}$	1.50	1.70	1.70	2.00	1.70	1.85	2.00	1.70	1.85	2.00	1.10	1.40
UK Model Factor - No Tests	$\gamma_{Rd} = 1.40$	1.20	1.20	1.40	1.40	0.99	0.99	0.99	1.32	1.32	1.32		
UK Model Factor - ULS Tests	$\gamma_{Rd} = 1.20$												
Ground parameters	$\gamma_{Rd;1} = 1.20$					1.20	1.20	1.20	1.20	1.20	1.20	1.20	
Geotechnical Ground Model	$\gamma_{Rd;2} = 1.10$					1.10	1.10	1.10	1.10	1.10	1.10	1.10	
Control & Investigation Tests	$\zeta = 0.75$					0.75	0.75	0.75	1.00	1.00	1.00		
Investigation Tests Only	$\zeta = 0.85$												
Control Tests Only	$\zeta = 0.90$												
No Validation Tests	$\zeta = 1.00$												
Equivalent	80:20	1.65	1.78	2.23	2.37	1.57	1.63	1.68	2.10	2.17	2.24	2.00	1.93
Lumped FoS	50:50	1.79	1.93	2.42	2.58	1.71	1.76	1.82	2.28	2.35	2.43	2.07	2.00
100% Shaft Friction	20:80	1.93	2.08	2.60	2.78	1.84	1.90	1.96	2.46	2.54	2.62	2.13	2.06
Equivalent	80:20	1.78	1.97	2.37	2.67	1.68	1.78	1.89	2.24	2.38	2.52	2.00	1.93
Lumped FoS	50:50	1.93	2.14	2.58	2.90	1.82	1.94	2.05	2.43	2.58	2.73	2.07	2.00
50% Shaft & 50% End Bearing	20:80	2.08	2.31	2.78	3.12	1.96	2.09	2.21	2.62	2.78	2.95	2.13	2.06
Equivalent	80:20	1.91	2.16	2.52	2.97	1.78	1.94	2.10	2.38	2.59	2.80	2.00	1.93
Lumped FoS	50:50	2.07	2.35	2.74	3.22	1.94	2.11	2.28	2.58	2.81	3.04	2.07	2.00
100% End Bearing	20:80	2.23	2.53	2.95	3.47	2.09	2.27	2.46	2.78	3.03	3.27	2.13	2.06