

STORAGE TANK - DESIGN GUIDE WITH SINGLE LENGTHS

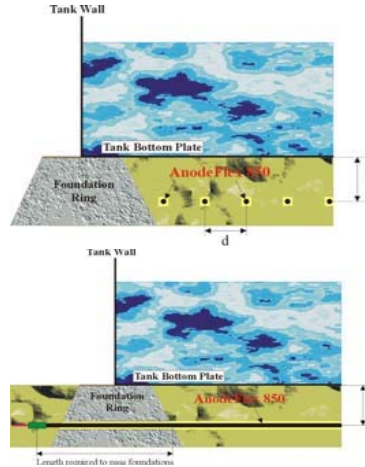
INPUT VALUES

Soil resistivity	5.00E+04 Ohm cm
Steel protective current density	10 mA/m ²
Percentage bare steel	100 %
Maximum AnodeFlex linear current	52 mA/m
Tank diameter	20 m
Depth AnodeFlex below tank plate	675 mm
Length required to pass foundations	0.3 m
Loop powered from one (:1) or both ends (:2)	1
Resistance of lead wires	1.50E-03 Ohm/m
Length of lead wires	100 m
Beta cathodic (0.12 = theory, 1 = much corrosion)	0.3 V/decade

OUTPUT VALUES

Number of anode single lengths	4
Spacing between single lengths	5.00 m
Calculated Voltage	46.8 V
Calculated Current	3.1 A
Voltage size of rectifier	50 V
Current size of rectifier	5 A
Effective anode linear current	46.1 mA/m
Total anode length	69 m

Single lengths id (#)	Lengths (m)	Number of lengths
0	20.0 x 2	
1	14.1 x 2	



Total bare steel surface (m ²)	314.16	control	1
Total cathodic protection current (A)	3.14		1
Rectifier Current (A)	5		2
Maximum spacing 1 (m)	5.2		
Voltage drop on AnodeFlex (V)	0.0312	results	1
Alpha (maximum ratio of linear cur.)	11.55		
Maximum spacing 2 (m)	4385.37		
Smallest value of spacing 1 and 2 (m)	5.20		
Number of anode single lengths	4		
Effective spacing between anode single lengths (m)	5.0000		
Tank radius (m)	10	Li Total length:	68.21
Check if single length number is even (2) or odd (1)	2	0	0
Total AnodeFlex length (m)	68.21	1	1
Resistance ground between anode & tank (Ohm m)	884.89	2	0
Resistance of Aflx to ground (Ohm m)	77.50	3	0
Total resistance between Aflx and tank (Ohm m)	962.39	4	0
Resistance lead wire (Ohm)	0.15	5	0
Average linear current density (mA/m)	46.06	6	0
Total calculated Voltage (V)	46.83	7	0
Rectifier Voltage (V)	50	8	0
		9	0
		10	0
		11	0
		12	0
		13	0
		14	0
		15	0
		16	0
		17	0
		18	0
		19	0
		20	0

