

STARGARD® Discrete Mesh Anodes

The **STARGARD® Discrete Mesh Anodes** compliments our existing ELGARD® and LIDA® anode product line for the Cathodic protection of steel reinforced concrete structures. It is composed of a precious metal oxide catalyst on an expanded titanium mesh substrate. The STARGARD™ Discrete Anode is available in 100 mm, 150 mm, 200 mm, 250 mm and 300 mm lengths that can be combined to meet specific requirements.

Dimension:

Dimensions	mm	in
Anode Diameter	19	0,75
Installation Hole Diameter	20,6	0,81
Lengths	Variabile ¹	Variabile ¹
Expanded Mesh Thickness	0,6	0,024
Diamond Dimensions	3x1,9	0,12x0,074
Strand Thickness	0,5	0,0196

(1) See Anode Performance Charts



Substrate:

Composition	Titanium, Grade 1 per ASTM B265
Coefficient of thermal expansion	8.7x10 ⁻⁵ /°K (0.0000048/in/in/°K)
Thermal conductivity at 20°C	15.6 W/m ² -°K (9.0 BTU/hr/ft ² /°F/ft)
Electrical resistivity	0.000056 ohm-cm (0.000022ohm-in)
Modulus of elasticity min.	105 Gpa (14.900.000 PSI)
Tensile strength min.	254 Mpa (35.000 PSI)
Yield strength min.	175 Mpa (25.000 PSI)
Elongation min.	24%

Stargard™ 19mm anode performance:

Maximum Current Density (CD) @ Anode	220 mA/m ²				
Mesh Length - mm (ft)	100 (0.328)	150 (0.492)	200 (0.656)	250 (0.820)	300 (0.984)
Anode Surface Area - mm ² (ft ²)	0.0163 (0.175)	0.0244 (0.263)	0.0326 (0.351)	0.0407 (0.438)	0.0489 (0.526)
Current Rating @ Max CD (mA)	3.59	5.37	7.17	8.95	10.76
Expected design life (years)	50				
Anode Coating	Iridium Oxide, Mixed Metal Oxide				
Substrate composition	ASTM B265 Titanium Grade 1				

ELECTROCHEMISTRY AT YOUR SERVICE™

SPECIALTIES & NEW APPLICATIONS

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