

Mixed Metal Oxide

Probe Anodes

Rugged And Easy To Install

Mixed-metal-oxide anodes have very low consumption rates (under 1.0 mg/amp-yr.), and can be operated at high current densities (approximately 10 amps/ft.² in freshwater and over 50 amps/ft.² in saltwater). Because of these impressive performance capabilities, Corrpro manufactures mixed-metal-oxide probe anodes for use in heater treaters, condenser water boxes, and pressure vessels. The anodes are composed of titanium rods, which are covered with a mixed-metal-oxide coating. The titanium is inherently resilient and stable, allowing the probe anodes to withstand water turbulence without damage. Because the titanium does not discharge current, electrical current transfer is accomplished through the mixed-metal-oxide coating. The coating is immune to abrupt current reversals, and may be exposed to high-current overloads for initial structure polarization without causing harm to the anode.

Unlike sacrificial anodes, which must be installed within tanks or other vessels, Corrpro probe anodes are designed for mounting and replacement through the wall of the vessel. The anodes are attached to a threaded stainless steel pipe, which is filled with a watertight sealant. To provide a high-pressure connection, the



anodes are bonded with G-10 fiberglass, and pressure tested prior to shipping. The fiberglass restricts water flow and lends extra support to the anode. Lead wire connections are made in a cast metal junction box. The box attaches to the stainless steel threaded pipe once the anode is securely in place. The anodes are also adaptable for mounting while the pressure vessel is in service.

Typical Applications

Probe anodes are designed for use in heater treaters, pressure vessels, condenser water boxes, and other process tanks. The anodes deliver superior protection in fresh, brackish, or saltwater. They have been found to be resistant to acid attack, and can withstand temperatures up to 347°F. The anodes should not be used in electrolytes containing barium or cadmium.

CHEMICAL COMPOSITION

Substrate	Catalyst
ASTM B-348 Grade 1 Titanium	Mixed Metal Oxide



Corrpro Companies Europe Limited

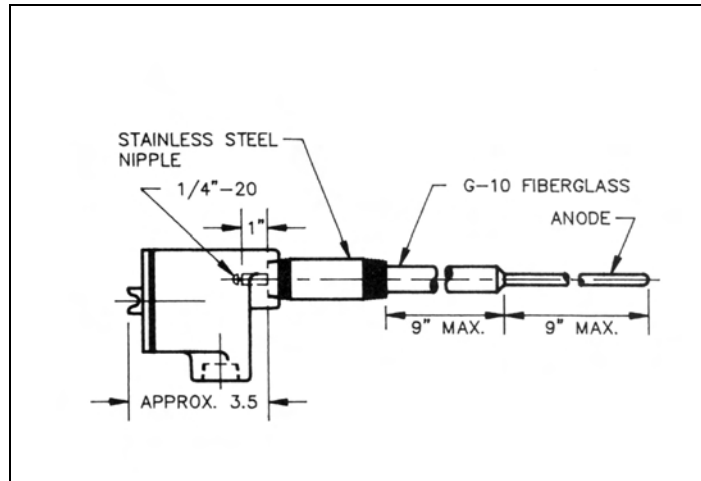
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Mixed Metal Oxide Probe Anodes

Ordering Procedure

Corrpro probe anodes are custom made to the customer's specifications. To order the required anode for your structure, indicate that you need a mixed-metal-oxide probe anode, and specify the quantity desired, the anode dimensions, the fitting diameter and length, and the length of G-10 fiberglass. An example is provided to help illustrate this process.

Ordering Procedure Example	
ITEM	EXAMPLE
Quantity	10
Anode Material	Mixed-Metal-Oxide Probe
Anode Dimensions: Diameter	0.5 in.
Length	18 in.
Fitting O.D.	1 in.
Fitting Length	3 in.
G-10 Length	9 in.



Standard Dimensions*

ANODE		PIPE NIPPLE N.P.T.		STAINLESS STEEL FITTING LENGTH	
in.	(mm)	in.	(mm)	in.	(mm)
0.25	(6.4)	1.0	(25.4)	3.0	(76.2)
0.50	(12.7)	1.0	(25.4)	3.0	(76.2)
0.75	(19.1)	1.0	(25.4)	3.0	(76.2)

*Anodes may be made with any combination of the options listed above, or custom made to specifications.



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