



CORROSION CONTROL MATERIALS

High Potential Cast Magnesium Anodes



Delivering Superior Protection

Power in galvanic cathodic protection is generated at the anode. With Harco's Certified line of high-potential anodes you get the most powerful protection available today. Cast from high-purity magnesium, these anodes produce an open circuit potential of 1.75–1.77 volts, which is 20–30 percent greater than conventional magnesium anodes. This high driving voltage means greater protection can be delivered from fewer anodes. Efficiency of the anode is enhanced even further when installed in a backfill of 75% gypsum, 20% bentonite, and 5% sodium sulfate. This special mixture lowers anode-to-earth resistance and allows electrical current to flow more easily to the targeted structure.

Harco Certified high-potential anodes are manufactured according to strict quality control standards. Each production run of high-potential anodes is subjected to capacity, potential, and consumption analysis. This ensures the anodes you purchase will perform as specified.

Typical Applications

Highpotential anodes can be used to protect most buried metallic structures found in a range of soil resistivities. Because they produce a higher driving voltage than conventional magnesium anodes, they are ideally suited for structures buried in soils with resistivities in excess of 2,000 ohm-cm, or containing numerous corrosion "hot spots."

CHEMICAL COMPOSITION

Element	Content%
Al	0.010
Mn	0.50 to 1.30
Cu	0.02 Max
Ni	0.001 Max
Fe	0.03 Max
Other	0.05 each or 0.3 Max Total
Magnesium	Remainder

Ordering Procedure

Certified high potential anodes are manufactured in a variety of dimensions and weights. To order the required anode for your structure, indicate that you need high-potential magnesium anodes and specify the quantity desired, the anode type, and whether they should be packaged or bare. The anodes are shipped standard with 10 ft. #12 solid TW lead wire unless otherwise specified. An example is provided to help illustrate this process.

Ordering Procedure Example	
ITEM	EXAMPLE
Quantity	200
Anode Material	High Potential Magnesium
Anode Type	17S3
Packaging (Bare or Pkgd.)	Packaged
Wire: Length (10 ft=Standard)	10 ft.
Size: (#12 solid=Standard)	#12
Insulation (TW=Standard)	TW

