

## Magnesium Drive-in Anodes

Drive-in Magnesium anodes are made from an extruded magnesium rod assembled with a hexagonal nut, a threaded steel mounting clamp and 3 feet of #12 AWG TW solid wire.

The end of the anode is machined to a spike shape or a 45-degree clean cut for easy "drive-in" installation with no pre-digging. A stainless-steel clamp is an optional addition for an easy connection method with the protected structure.



## Applications

- Water / Gas Distribution Systems (Meter risers, Entrance Piping)
- Power transmission towers
- Other Buried Steel Structures



## Chemical Composition

Element	Grade ASTM B843 - M1C	Grade ASTM B843 - AZ63
	High Potential (HP, 1.75V)	Standard Potential (H-1, 1.55V)
Aluminum	0.01%	5.3 ~ 6.7%
Zinc	/	2.5 ~ 3.5%
Manganese	0.50 ~ 1.30%	0.15 ~ 0.70%
Silicon	0.05%	0.10%
Copper	0.02%	0.02%
Nickel	0.001%	0.002%
Iron	0.03%	0.003%
Other Each	0.05%	/
Others Total	0.30%	0.30%
Magnesium	Remainder	Remainder

## Electrochemical Properties

Anode Model	ASTM B843 – M1C	ASTM B843 – AZ63B
Open Circuit Potential (-V)	1.70 ~ 1.75	1.50 ~ 1.55
Close Circuit Potential (-V)	1.58 ~ 1.62	1.45 ~ 1.50
Current Capacity	500A.h/lbs (1100A.h/kg)	550A.h/lbs (1230A.h/kg)
Current Efficiency	50%	55%
Note	Open / Close Circuit Potential is with respect to a Saturated Calomel Reference Electrode	

## Specification

Anode Model	Anode Weight	Width Height
JA - MG - DR0.5	0.5lbs (0.23kg)	Dia. 0.840" × Length 12" (Dia.21.5 × Length 305mm)
JA - MG - DR1.0	1.0lbs (0.46kg)	Dia. 1.315" × Length 12" (Dia.33.5 × Length 305mm)
JA - MG - DR1.5	1.5lbs (0.69kg)	Dia. 1.315" × Length 18" (Dia.21.3 × Length 458mm)

## Packing

Anode Model	Unit	Packing Detail			
		Nos. of Anodes per Crate/Pallet	Crate/ Pallet Size	Net Weight	Gross Weight
JA - MG - DR0.5	EA	500	25" × 14" × 22" (630 × 350 × 570mm)	276lbs (125kg)	309lbs (140kg)
JA - MG - DR1.0		500	24" × 35" × 18" (620 × 880 × 450mm)	661lbs (300kg)	728lbs (330kg)
JA - MG - DR1.5		500	35" × 35" × 18" (880 × 880 × 450mm)	838lbs (380kg)	893lbs (405kg)