



Prepackaged Magnesium Anode

Brief Introduction

The Magnesium in a prepackaged anode type weighs from 1 pound to 50 pounds. The most commonly used anode is a 17 pound anode. With 28 pounds of powdered backfill packed around the magnesium. It usually comes with 10 feet or 15 feet of #12, insulated solid copper wire. The backfill consists of 75% powdered gypsum, 20% powdered bentonite clay and 5% sodium sulfate. A cotton bag holds the backfill around the inner metal bar. It decomposes over time in the ground. The anode is shipped in an outer disposable, plastic or paper bag to protect it from rain or snow.

Magnesium anodes come in two alloys. H-1 or AZ-63 is 90% Magnesium, 6% Aluminum and 3% Zinc. The Zinc and Aluminum lowers the cost of the anode but it also lowers the driving potential to about -1.55 volts referenced to a copper sulfate electrode. It will perform well in corrosive soil if the tank is well coated and will last longer than the high potential alloy.

The other alloy is 99% pure magnesium. It is called a "high potential" anode as its open circuit potential is as high as -1.80 volts. It works better than the H-1 alloy anode in dry or resistant earth or where more current is needed because of a poorly coated tank. The higher potential forces more current to flow than would from an H-1 alloy anode. It costs more per pound but in many cases it is worth the extra cost.

DEYUAN prepackaged anodes are made of recyclable materials or easily decomposable materials and the content of harmful elements in the backfill is lower than safety standards, which will not bring any pollution to the surrounding.

The available cables type (insulation/sheath) are: PVC/PVC, XLPE/PVC, HMWPE etc. with any required size.

Backfill Element	
Gypsum	75%
Bentonite	20%
Sodium Sulphate	5%
Harmful Elements	
Cadmium (Cd)	≤1ppm
Arsenicum (As)	≤1ppm
Mercury (Hg)	≤1ppm
Phosphorus (Pb)	≤10ppm



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