

Zinc Corrosion Caps *Sacrificial Zinc Anodes*

Zinc Caps offer cathodic protection to underground and submerged threads, bolts and nuts on glands, flanges and mechanical fittings. They are designed to be used on buried pipelines, in water treatments plants, weirs, lock gates and any other structures with exposed metallic threads.

How Zinc Caps Work

Corrosion is an electrochemical process in which dissimilar metal parts form a galvanic cell when they are in contact with moisture. Using the common battery as an example, moisture becomes the electrolyte while the different metals in the system (such as bolts, nuts, fittings etc.) become the positive and negative ends of the battery. The "more negative" component loses material thru corrosion while protecting the "positive" component, which becomes shielded. Zinc being much more negative than most other materials, the protected component is essentially immune to corrosion as long as there is Zinc remaining to consume. Zinc Anode Caps offer protection for other system components made of steel, cast iron, ductile iron, brass and copper. The quantity of Zinc Anode Caps used determines the service life of the protected component.



Zinc Anode Caps are made from "Special High Grade" Zinc that conforms to the highest industry standards that meet or exceed all MIL-A-18001J and ASTM B418-80 specifications. Zinc Caps should be installed on all exposed bolts of pipeline fittings depending on soil conditions.

Material	MIL-A-18001J	ASTM B418-80
Aluminum	0.10 - 0.50%	0.10 - 0.4%
Cadmium	0.025 - 0.15%	0.03 - 0.10%
Iron (Maximum)	0.005%	0.005%
Lead (Maximum)	0.006%	--
Copper (Maximum)	0.005%	--
Silicon (Maximum)	0.125%	
Zinc (Pure)	Remainder	Remainder



SIGMA offers Zinc Anode Caps in two sizes:

Description	SIGMA Item #
5/8" Zinc Caps Large	ZC58L
3/4" Zinc Caps Large	ZC34L

Zinc Cap - 6 oz Hexagon

A	Dimensions			Weight
	B	C	D	Lbs
	Inches	Inches	Inches	
5/8" X 11 UNC	1.5	0.98	1.69	.04
3/4" X 10 UNC	1.5	0.98	1.69	.04

These anodes are suitable for:

- Pipeline installers and manufacturers
- Pipeline flange manufacturers and suppliers
- Dredging companies
- Submersible pump manufacturers and suppliers
- Water boards and Utility providers
- Councils, water and sewerage departments
- Corrosion engineering
- Wharf and jetty construction companies

