

High Silicon Cast Iron Anodes from Anotec...the Industry Leader

Anotec manufactures anodes, used world-wide as components in impressed current cathodic protection systems for corrosion control of metal structures.

Direct current from properly designed impressed current CP systems prevent natural corrosion reactions. Typically a CP rectifier converts AC current to lower voltage DC, which is delivered through cables to anodes bedded in the ground or in natural waters. The current leaves the anodes and passes through the earth toward the structure to be protected.

Cathodic Protection engineering is an applied science and technology which is well established.

Anotec's goal is to be the world wide manufacturer of choice for High Silicon Cast Iron Anodes for impressed current cathodic protection.

Although most Anotec anodes are catalogue items to ASTM A518 Grade 3 chemistry and established industry dimensions, Anotec's anodes are not ordinary.

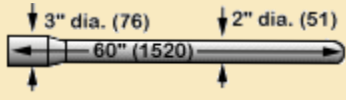
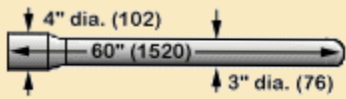
Why are Anotec anodes superior performers?

Anotec anodes are manufactured by a proprietary "Chill Casting" process which dramatically enhances both anode consumption (grams consumed per ampere year of current) and resistance to breakage compared to conventional sand cast anodes.

- **Better metallurgy.**
- **Beneficial design.**
- **ISO 9002 Quality System.**

Anotec's [User List](#) section attests to the wide acceptance and reliability of Anotec anodes, and to



Anotec Type	Nominal Dimensions Inches (mm)	Nominal Weight lb.(kg.)	Nominal Area sq. ft.(m ²)	Shipping Information		
				Anodes per crate	Gross Weight	
					Lbs	Kgs
EHA		44 (20 kg)	2.6 (.24)	50	2355	1068
EHR		110 (50 kg)	2.0 (.37)	24	2770	1256

A: Large 84" crate dimensions, nominal: 32"W x 87"L x 22"H inches = 35.4Ft³
(81W x 221L x 56cm = 1.0 cbm)

B: Small 60" crate dimensions, nominal: 32W x 62L x 22H inches · 25.2 Ft³
(81W x 157L x 56 cm = 0.71M³)

SOLID CHILL CAST ANODES for Impressed Current Cathodic Protection

Product Description

Composition: (Weight %) ASTM A 518 Grade 3

Silicon	14.20 - 14.75%	Manganese	1.50% max.
Chromium	3.25 - 5.00%	Copper	0.50% max.
Carbon	0.70 - 1.10%	Molybdenum	0.20% max.

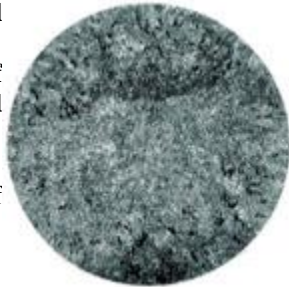
"Chill Cast" in Metal Molds

- Assures consistent weight, greater density, less flake graphite grain boundary, and lower chemical segregation than Sand Cast Anodes.
- The ANOTEC Chill Cast structure is similar to "Centrifugal Cast" Tubular Anodes

Grain Structure Makes a Difference

A typical cross section of a sand cast anode:

Skin of non-porous equiaxial grains. Remaining section relatively porous from interdendritic shrinkage and porosity. Predominantly flake graphite with larger boundary areas than equivalent spheroidal graphite.



A typical ANOTEC anode cross section:

A dense skin of minute columnar grains and a dense core of equiaxial grains. Occasionally, very fine interdendritic porosity at center. Predominantly spheroidal shaped graphite. Similar to the structure of vacuum refined High Silicon Iron.



Special Features

More than Twice as Strong

- Independent laboratory tests confirm that Anotec Anodes withstand drop impact tests to more than twice the height of Sand Cast Anodes.

Quality Control

- ISO 9002 Quality Control assures:

Chemistry (by spectrometer)
impact strength
production lot traceability.

Performance

- Accelerated corrosion tests confirm that Anotec Chill Cast Anodes perform significantly better (up to 19%) than sand cast anodes in chloride and sulphate environments.
Test reports available on request.

Spherical Tip

- Prevents hang-up when lowering into deep wells.

información adicional

MEDIDAS DE SEGURIDAD

Durante la manipulación del ánodo es recomendable el uso de guantes y botas con punta de acero.

En caso de incendio o explosiones, tenga presente que las limaduras de magnesio son extremadamente inflamables.

PROTECCIÓN DEL MEDIO AMBIENTE

En caso de derrame prevenir que ingrese en el desagüe, cursos de agua, etc. ; realice el recojo del material con pala en lugar de barrer para evitar la dispersión del polvo.

Se debe realizar la disposición de los residuos según la legislación vigente, ya que es dañina para los animales.