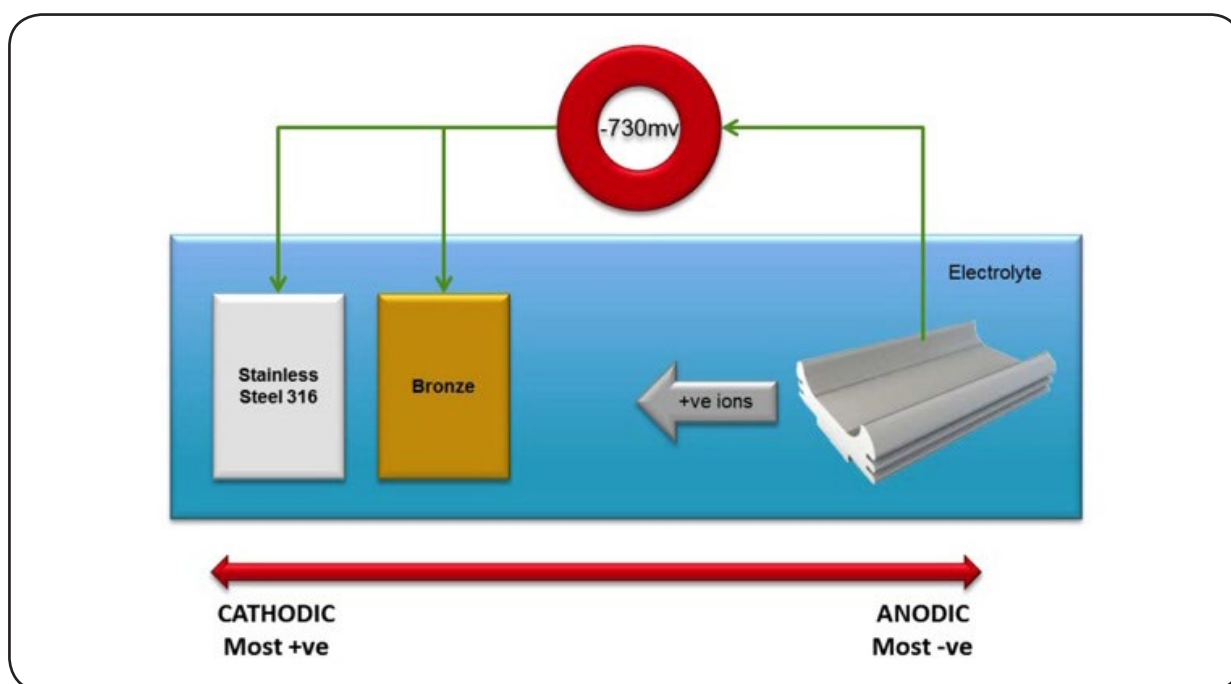


Galvanic Corrosion Explained

Galvanic Corrosion occurs when there are:

- Two or more dissimilar metals. There will be an anode which will sacrifice or give up metal ions and a cathode which will receive or attract metal ions. Thus the term “sacrificial anode”.
- A common electrical connection or conducting path.
- Electrolyte providing the means for ion migration where metal ions move from anode to cathode. In this instance the electrolyte is water.



All metal generate voltage in water. The metal gives up electrons resulting in positively charged ions, thus leaving electrons which give the metal a negative charge. The more negative the voltage, the more active the metal and therefore the higher the rate of corrosion.

When two metals are immersed in water and are electrically connected, a battery is formed where there is an anode (give up metal ions) and a cathode (receive metal ions). That is, the water provides the means for metal ions to move from the anode to the cathode.



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