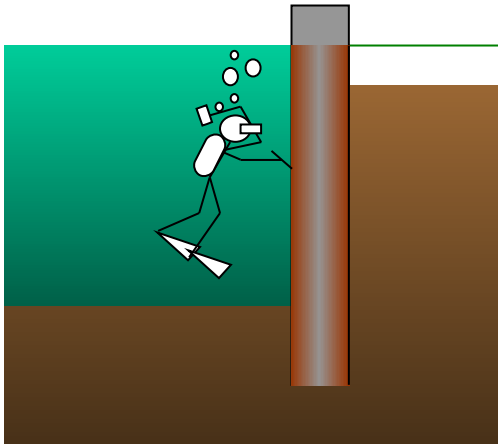
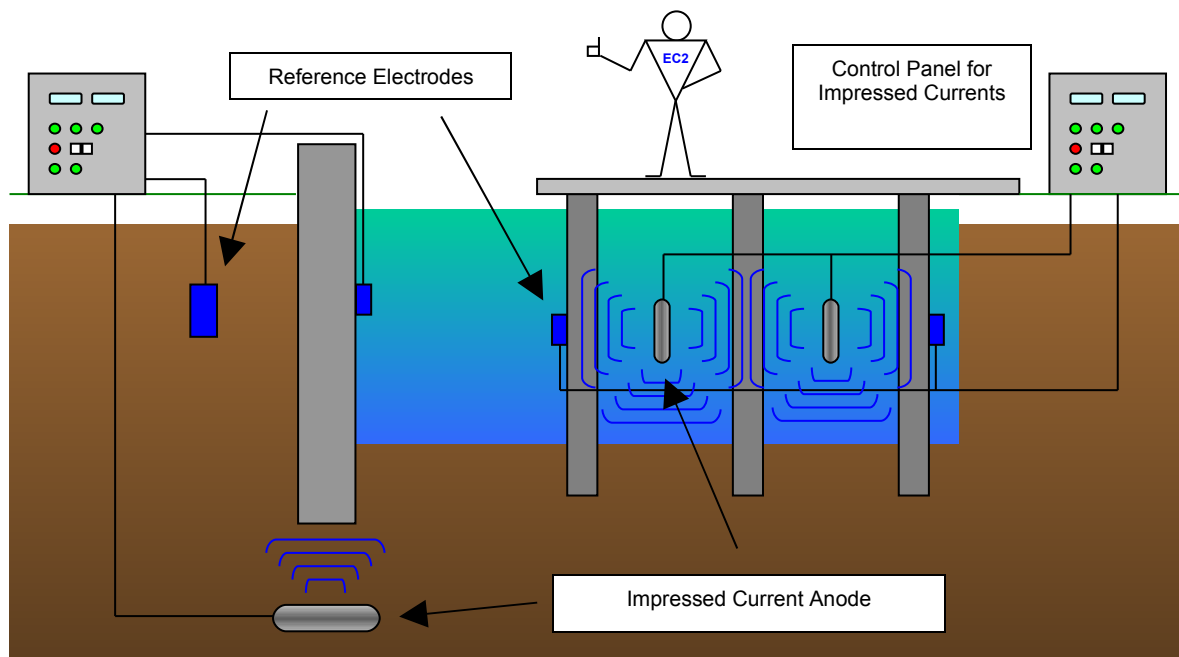


STEEL CORROSION IN SEA WATER



Submerged or semi-submerged structures as jetties, sheet piling, poles and buoys, are exposed to severe corrosion that induce engineers to design steel part with over dimensioned thickness to balance the loss of metal due to corrosion. Moreover the maintenance of these structures is complex and very expensive.



When designing corrosion protection of submerged or semi-submerged structures several parameters must be taken into account. Varying chemical/ physical properties in the surrounding environment can cause different areas of the same structure to be exposed to different electrolytic corrosion. Cathodic protection systems, as well as the monitoring systems, must be designed considering the exposure conditions, assuring good current distribution and accurate controls.