Pengamatan model pengendalian korosi pada media korosi air laut salinitas 35%o menggunakan anoda terumpun Zap Type S-3

Abstrak

Corrosion is one of some necessary field that must be concorned by maritime and ship industries in Indonesia. The phenomenon of corrosion should be more attended, because it makes much money lost unpredictly. Corrosion couldn,t be avoid because the process happens natyrally but corrosion must be controlled to minimize the negative effects, specially in economics technics and safety fields. One of some popular methods to control the corrosion process in cathodic protection methods, with sacrificial anode. This research observed the effectivity of znanode (type S-3) that is used to protect a kind of material as cathode. The cathode material is A grade of mild steels, a material that is commonly used for many sea water constructions espicially for ship building materials. The observation was taken in fluid laboratory, marine engineering departement, the faculty of marine engineering & science, Hang Tuah University Surabaya. The weigh of sacrificial anode and the cathode is 1:4. They are connected and immersed in a model vessel with 35%o salinity sea water as corrosion media. This research presents that the average weight lost of the sacrificial anode is 1.637% and the average weigh lost of the cathode is 0.170% in 16 weeks observation. The calculation predicted that the sacrificial anode will be lost 5.5% of the weight in a year.