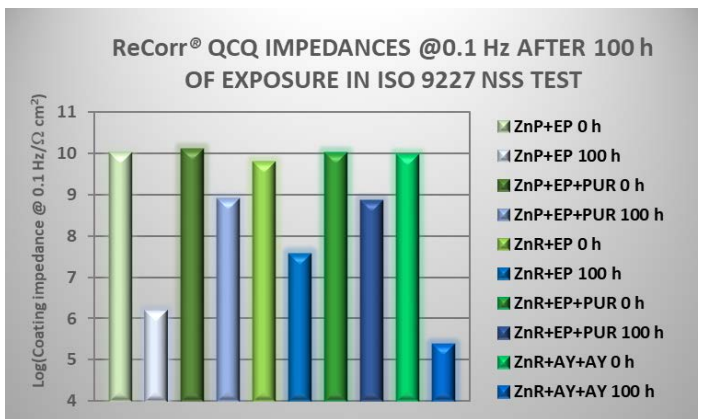
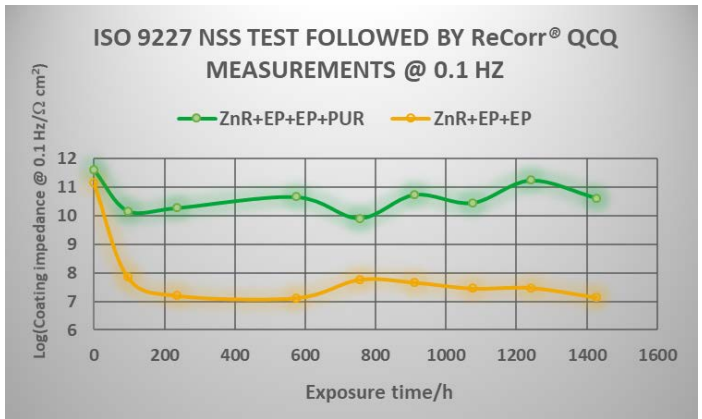


Signs of early coating degradation have been monitored by the ReCorr® QCQ during exposure of coated panels to neutral salt spray (NSS) in the ISO 9227 salt cabinet experiment that lasted for 1440 h. The tested systems were Zn (R) + EP + EP or Zn (R) + EP + EP +PUR, intended for the protection of the coastal and offshore constructions corresponding to C5 (H) and CX corrosivity categories in accordance with EN ISO 12944. EIS has been found to give a good estimation of long term coating behaviour within the first 100 h of accelerated exposure (upper figure right). Also, the difference in impedances of the two tested systems correlated to the pull-off adhesion test results (photographs below). The lower quality system shows a significant decrease in the pull-off adhesion due to exposure. Five other coating systems containing zinc phosphate - ZnP and zinc rich - Zn(R) primers, epoxide (EP), polyurethane (PU) and waterborne acrylic (AY) coats and having comparable DFTs, were then tested for 100 h in NSS (lower figure right). The order of coating quality deduced from the ReCorr® QCQ Test is Zn(R)+EP+PUR > ZnP+EP+PUR > Zn(R)+EP > ZnP+EP > Zn(R)+AY+AY showing the influence of the primers and the topcoats on the coating system quality. **It has been demonstrated that the ReCorr® QCQ Test gives an early indication of the quality of the coatings during the ISO 9227 NSS exposure.**



Zn (R) + EP + EP

BEFORE NSS

AFTER NSS



Zn (R) + EP + EP +PUR

BEFORE NSS

AFTER NSS

