

R+D Projects

Is there any «zink whisker free» corrosion protection coating?

Latest research project lead by VALDINOX compare all types of corrosion coatings for cable trays



VALDINOX started this research in 2019 after meeting for a project regarding Data Centres. That meeting inspired us to lead this pioneer research project in the aim of giving light to a phenomenon that concerns integrity of electronic equipment and matches our goals for innovation on cable trays.

This research is particularly relevant in this moment, when highest levels of Safety are a must on Data Centres, and low-cost alternative coatings to HDG are claiming to be "whisker free" coatings.

Although this phenomenon was only described from a theoretical point of view and there was no evidence neither about the risk of electronic failure caused by a Zink whisker nor any standardized methodology to measure such risk, we decided to start a research on this real phenomenon that concerns Data Centres and every installation with an ever-increasing presence of all sort of microelectronic equipment's.

VALDINOX lead the R&D group from the Technical School of Civil Engineers, Canals and Ports of Santander at the University of Cantabria who had previously worked on zinc coatings for structural steels. This research group is in charge of LADICIM, an accredited Laboratory of the Division of Materials Science and Engineering.

The full paper has been published as part of the Special Issue "Corrosion and Protection of Metallic Materials in Extreme Environments" at MDPI Scientific Open Access Journal: <u>https://www.mdpi.com/2075-4701/11/2/325</u>

<u>Click here to download our summary report of this Re</u>search Project.