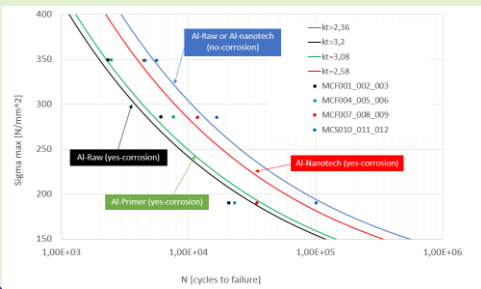


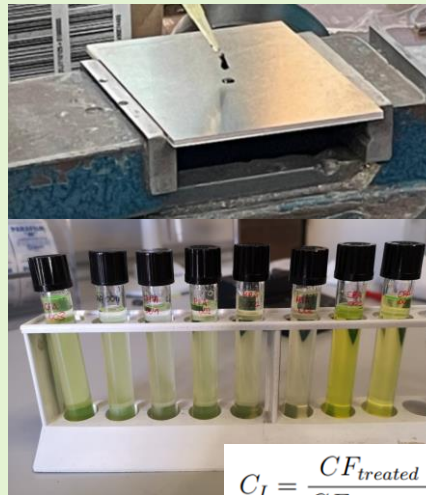
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Abstract: Our geopolitical current situation has considerably increased the industrial and infrastructural demand for innovative and more performing products or materials in order to face the 5 dimensions of the current geopolitical chessboard in a safe and lasting way: terrestrial, maritime/underwater, air, space and cybernetic. The collaboration between Politecnico di Torino and 4WardResearch aims to study and verify the effectiveness of a process of superficial protection based on nanotechnologies produced by 4Ward360 and specifically developed for aerospace and maritime applications on metallic and composite materials. Some main areas of investigation were identified as main interest for Aerospace and Defence applications: 1). Anticorrosive protection and fatigue life extension, 2). Antifouling or easy of cleaning, 3). Reduction in skin friction drag 4). Reduction of “greenhouse effect”. The proposed approach has the target to acquire data on samples, confirm the effectiveness by laboratory tests to subsequently evaluate the effect in a real operative environment. The speech will focus on the results obtained, quantitative evaluation of the possible effectiveness of the treatment in the selected fields of application together with pertinent conclusions.

Anticorrosive protection & Life Extension



Antifouling or easy of cleaning



$$C_I = \frac{CF_{treated}}{CF_{untreated}}$$

Thermal protection

