CORRELATIONS IN WEATHERING RESULTS

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Abstract

Due to increasing competitive pressure in the field of weathering, the demand for practice correlation of artificial weathering tests gets louder. However, for artificial weathering tests the dilemma is the same as for outdoor tests, where, due to the different climates as well as to the bad repeatability of weather periods, a kind of general practice correlation cannot exist.

The current situation in artificial weathering is unsatisfying, as lots of specific tests exist, which, due to sometimes very small experimental differences, lead to different results. Frequently, the different weathering laboratories claim their tests to be the best, pointing to specific correlation results. However, the correlations are basically limited to the investigated sample set and property, as well as to the specific outdoor exposure. Nevertheless, in the interest of the customer, the situation must be improved.

As it is done for outdoor testing, it could be a useful proposal to establish artificial standard tests aiming at specific outdoor standard weathering conditions like tropical or desert climate. These would include extremely different climatic conditions varying from high relative humidity including water spray to (controlled) dry conditions including wetting periods. Examples with correlation studies will be given.