

CLIMATIC AND ARTIFICIAL WEATHERING EFFECTS ON VARIOUS PRODUCTS

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Abstract

The current paper deals with climatic and artificial weathering experiences from testing of different industrial parts.

Investigations were done on the one hand with color fastness to artificial light testing at high temperatures and under climatic conditions (temperature, humidity, irradiation) on the other hand especially with following products:

- Automotive foils for interior and exterior applications
- Electric junction boxes built from aluminium and plastics
- Decorative plates for furniture
- Coatings from locomotive parts

The used climatic chamber was equipped with a metal halide lamps and the possibility for creating of temperature and humidity. The artificial devices were fitted with xenon arc lamps.

Evaluation of parts was done by tracking change of color, dimension stability, change of climate in junction boxes and conductivity of electronic components due to artificial weathering and climatic tests.

The results of these testing were very important for the improvement of the products and taking care about the planned product cycle to avoid claims.