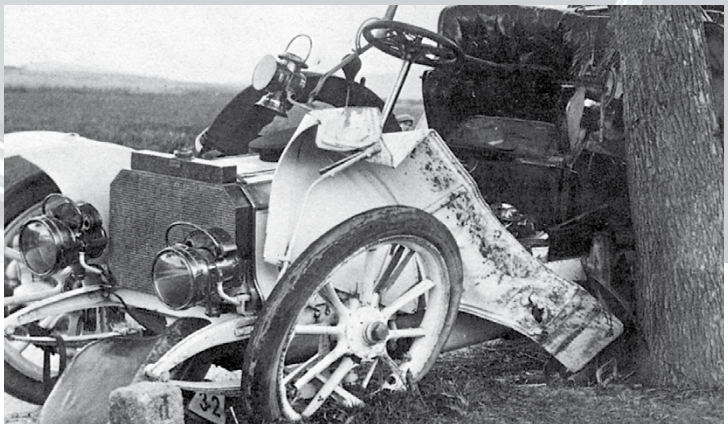

Nicer, faster, cleaner.

The history of automotive refinishing.

Refinishing paints have come a long way since they were invented more than a century ago. During this time the demands and expectations placed on refinishing paints have steadily increased, pushing the standards of technical quality, appearance, economy and ecology to ever new heights.

Automotive refinishing has been performed ever since the emergence of the automobile. And it has been a great challenge for the refinisher right from the beginning. After all, any damage needs to be invisible after the repair. A particular difficulty was caused by paints based on wood oil. Any damage required all the paint to be removed, given that it was impossible to match and apply colors only on part of a panel. The only answer was a complete repaint.

Restoring weather-resistant nitro paints was an equally tough challenge for the refinisher, who had to mix the right shade from his stock of primary colors in a complex process.

After the introduction of the nitro-combination paint, refinishers tended to use these products as they were easy to combine with the baking enamels used in OEM coating. Until the late 1960s, nitro-combination paints were used by bodyshops that did not have a combined spray booth and oven or "combi-oven".

An alternative to this was the 80 °C refinishing paint, which was particularly suitable for the multi-layer coatings that were popular in the 1950s because it dried quickly so that it could be recoated soon. They were applied in spray booths where fresh air was filtered, heated and supplied vertically. Gradually, alkyd melamine resin paints conquered the refinishing market, too.

In the late 1960s a fundamental change came up in the field of basic materials. 2K epoxide basic materials were used increasingly as primers, primer-surfacers and fillers, first in the commercial vehicle segment and later on in automotive refinishing.

Prestige and Classic Cars.

Whilst 70's OEM coats comprised four layers – zinc phosphate, primer, filler and topcoat. Refinishers usually applied a three-coat structure consisting of a primer containing phosphoric acid, a filler and a topcoat. In order to emulate the constantly growing number of colors for refinishing purposes, the paints industry developed mixing systems.

Current automotive refinishing is characterised by environment- and user-friendly systems allowing for reduced stock keeping while offering a higher yield and ensuring improved safety with regard to the environment and the people applying the product.

Due to the poor opacity of certain pigments and the development of new effects, many refinishing jobs required as many as three coats in the 1980s. A tinted filler, basecoat and (tinted) clearcoat needed to be coordinated precisely, resulting in a highly complex process. In the mid-1980s, pearlescent paints were introduced in the market and used in OEM coating. At least with regard to automotive shades, the 1980s and 1990s were decades which saw a rapid increase in the number of shades and effects used in automotive coating. This trend has continued to date.

Today, refinishers can choose among a wide range of low-solvent products, including the waterborne Standohyd Basecoat. High-solid paints and fast-drying UV paints, self-healing or dirt-repellent clearcoats are other systems that will determine the future of automotive refinishing.

Impressum
Published by: Standox GmbH
Photos: Audin Verlag, Standox GmbH