



Less Is More

Conrad Nadeau, Union Specialties Inc., Massachusetts, USA

If one was to survey tanners globally, seeking to determine the one significant issue that has impacted the manufacturing of finished leathers worldwide, the majority of responses would categorically be hide quality. Over the past 10 years the quality of the hide surface has lessened dramatically and continues to present major challenges to the tanneries in finding methods to convert low-grade raw material into high-quality, natural-looking finished leather.

The upgrading of crust that has been damaged by hide defects such as scars, tick bites, and other imperfections—including poor grain enamel—remains the highest of priorities for finished leather manufacturers. Developing technologies that enable the manufacturers to improve the overall quality of finished leather has become a focus both of finished leather manufacturers and their supply chain partners.

Union Specialties Incorporated has recently developed and introduced a newly developed chemistry, specifically designed for upgrading low-grade crust. This is without adding costly steps to the manufacturers' current finishing systems. This is a unique approach that allows the manager of finished leather to upgrade crusts that have been damaged by poor grain enamel and healed scars, to convert low-grade materials into high-quality finished leather.

Known as Uniseal 9049, this product contains specialised components that combine the durability of Union's concentrated resin technology with the covering characteristics of cationic chemistry, which is the key to its success. This is a slightly cationic, resin-based product that when applied to either corrected-grain or full-grain type leathers, creates a barrier that covers both poor grain enamel while improving the levelness and consistency of subsequent finish applications.

When applied as an upgrade spraycoat, a crust surface is generated that exhibits very uniform surface properties across the entire area, that is, in both defect and non-defect areas. This is in contrast to traditional stucco, heavy pigmented coats or mechanical upgrade systems that typically result in a non-uniform crust surface. These forms of finish applications are known to produce often extremely erratic surface properties between defect and non-defect areas, or a base that is over-finished and susceptible to finish break.

If plated after application, this new approach to finishing prepares the surface for efficient and uniform application of subsequent basecoats and topcoats. Moreover, when applied as a single upgrade coat on crust leather, it has been shown that the surface can carry up to 10% more pigment loading for additional colour control and defect coverage. If preferred, it has also proved effective in upgrading poor enamel surfaces when incorporated into the first stain coat, or as part of

the primary basecoat system.

This is not a traditional film former, and due to its slightly cationic characteristic, remains mostly on the surface, thus offering a more level surface coat for subsequent finish steps to be applied. Due to its cationic nature, only a light application coat is required to mask defects and increase the overall value of the grain quality. The addition of either pigment or dye for advanced colour control generates further benefits: the leathers do not appear to be over finished, offering a more natural appearance for aniline type leathers.

It should be noted that although Uniseal 9049 is slightly cationic, its properties allow for complete compatibility within all water-based systems. It is especially effective as an upgrade when used as part of Union Specialties' full line of water-based polyurethane finishing products.

It is also harmonious with established finishing systems that include oils, water-based spray waxes, and hot-melt wax applications. The oils and waxes remain able to penetrate while maintaining the levelness of the coating. A level surface is produced, without impacting any pull-up effect targets.

This "Less is more" approach for upgrading damaged and poor enamel crusts offers an upgrade base system that allows for lesser amounts of finish to be used for covering grain deficiencies. Less finish produces a more natural-looking and -feeling leather, adding premium value for the end customer. ●



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