

Specialized Coatings Purpose-Built for Your Industry

Clean Armor Technology manufactures a series of revolutionary, UV-cured resin and coating products purpose-built for the aerospace, marine, automotive, commercial wood, composite, and industrial metal markets.

All of our coatings are engineered to be Cleaner, Stronger, and Faster and are low energy UVA cured, VOC-free, built to last, and offer superior resistance to temperature, humidity, cracking, yellowing, scratch, impact and abrasion.

Designed for high-throughput applications, Clean Armor[®] coatings provide immediate on-demand curing, superior performance and longevity, and deep, luxurious finishes in a fraction of the time demanded by older-technology coating systems currently in use.

Lower Labor Cost

Traditional Coatings: Solvent-based coatings shrink during cure, requiring more spraying-curing-sanding steps, and associated labor, to achieve desired mil-thicknesses.

Clean Armor[®] Resins and Coatings: 100%-solids formulations that provide non-shrinking, quicker builds requiring fewer spraying-curing-sanding steps to achieve desired mil thicknesses.

Reduced Process Time

Traditional Coatings: Shrinkage produces the need for more spraying-curing-sanding steps to achieve desired mil thicknesses, and much longer curing times...multiplied by the number of extra application steps required...unnecessarily adds hours/days to the traditional coatings process. The short POT life of traditional coatings also dictates that spray equipment must be immediately purged/cleaned after each spraying to avoid equipment damage/clogging. Clean up with hazardous solvents, and contaminated spray-booth consumables, require expensive and time-consuming containment and regulated hazardous waste disposal.

Clean Armor[®] Coatings: Process time is greatly reduced because of non-shrinking, high-build formulations requiring fewer spraying-sanding-curing steps, and on-demand curing. Open POT life eliminates the need to purge/clean equipment after each application.

Faster Order Fulfillment

Traditional Coatings: Shrinkage of each sprayed layer during the cure of traditional coatings results in the need for a higher number of spraying-curing-sanding steps; and curing, alone, often requires many hours/days per individual application. Order fulfillment time is unnecessarily prolonged by the use of traditional, old-technology coatings. Completed work requires a post finish cure period to prevent shipping or customer damage from soft material and for quality observation of finish changes due to shrinking.

Clean Armor[®] Coatings: Greatly reduced process time described above translates into much faster order fulfillment. Fewer spraying-curing-sanding steps, and faster on-demand curing, can both speed up order fulfillment by a factor of days. Finished work can be shipped immediately without concern for continued curing needs.

Faster Set-Up

Traditional Coatings: When using traditional coatings, cleaning of spray equipment, and removal of unused product from spray systems, often must occur between each spray application to avoid equipment fouling; and such too-frequent cleanings often utilize hazardous solvents requiring enhanced hazardous waste-disposal methods. There is little/no flexibility as to the choice of spraying locations when specialty pollution controls are typically required, and the mixing of hardening/other additives is often necessary prior to spraying traditional coatings.

Clean Armor[®] Coatings: In between successive applications required to achieve desired mil thicknesses, our product can safely remain in the spray system because it contains no hardening catalysts that severely limit POT life. All Clean Armor[®] coatings can be applied almost anywhere, including outside of controlled environments, and even natural sunlight can be used for ultra-fast curing. Our single-stage formulas require no extra mixing/prep time. Quick clean-up occurs using IPA.

Less Plant/Shop Space

Traditional Coatings: Long curing times (hours/days) are required for curing each spray application; more spraying steps are needed to get proper thicknesses, owing to shrinkage; and both of those translate into the need for large storage areas dedicated to the curing and off-gassing of traditional coatings.

Clean Armor[®] Coatings: Two-minute UV curing times completely eliminate space requirements traditionally needed to separate and off-gas multiple sprayed items during production curing. Mobile UV light arrays can be rolled in and out of spray booths for a two-minute in place cure, or, more commonly, static curing arrays can be constructed inside of spray booths. Apply and cure in the booth and then, when desired mil spec is achieved, immediately store, install, or ship finished parts directly out of the spray booth. Completely eliminated are the space/equipment requirements associated with traditional heat curing. Capture that floorspace adjacent to your finish shop that lacks specialized climate control.

Lower Material Cost

Traditional Coatings: Shrinkage during cure results in less coverage per gallon. Short pot life forces waste of unused, catalyzed product. Pot life is measured in minutes/hours for traditional coatings, and unused product must often be disposed of as costly hazardous waste.

Clean Armor[®] Coatings: Our non-shrinking formulations yield a per-gallon coverage of 1,608 square feet per 1 mil. The pot life of all Clean Armor[®] coatings equates to that of the unopened product's normal shelf life, and immediate purging and cleaning of equipment are unnecessary between applications. VOC-/HAPs-free formulations eliminate costs associated with hazardous-waste disposal.

Environmental Benefits

Traditional Coatings: Most formulations contain environmentally harmful solvents, VOCs, HAPs, and other hazardous wastes.

Clean Armor[®] Coatings: Our entire product line has effectively won the race to zero VOCs in the coatings industry and our products are designed to be safe for human exposure. It all amounts to the elimination of an entire class of harmful pollutants/health hazards from a full line of indispensable industrial materials daily utilized in enormous quantities. Hazardous waste disposal is eliminated for overspray sheeting and other spray-booth consumables which can now be UV cured and subsequently recycled/introduced into non-hazardous waste streams.

Less Material Waste

Traditional Coatings: 2 component coating systems have a short pot life which leads to waste of unused material and require more frequent equipment cleaning cycles with an increased use of associated VOC solvents.

Clean Armor Technology, LLC
7222 Commerce Center Drive, Suite 220
Colorado Springs, CO 80919
(719) 600-2270
Info@CleanArmor.com



Clean Armor® Coatings: Pot life equates to shelf life... simply return to storage any unused product because curing is on-demand and does not proceed without deliberate exposure to UV light. Lower atomization pressures are facilitated and equate to less transfer loss of material into the air.

Lower Cost of Manufacturing

Traditional Coatings: Require heated curing spaces and dedicated staging areas for curing between coats. Time to completion is extended by long curing time and quality of finish issues.

Clean Armor® Coatings: Using our low energy UVA LED light curing capability offers an immediate on-demand cure, ready for next coat preparation or final surface finishing, leading to dramatic reductions of labor, space requirements, and time-to-completion.

Previous Generation UV Systems

Traditional UV Coatings: Require expensive to maintain high energy, high voltage, curing systems with specialized equipment and dangerous human exposure risks. UV solvent based formulations continue to contribute to shrinking, poor quality and performance issues.

Clean Armor® Coatings: We offer a new generation of UV curable coating systems that provide immediate on-demand curing using low energy UVA LED light and with a 100% solids based composition.

CLEANER - STRONGER - FASTER

Real High Performance Coatings Built by Finishers for Finishers

Improved Product Features

Clean Armor[®] Coatings:

- VOC-/HAPs-/solvent-free formulations;
- 100%-solids, shrink-free coatings;
- Self-leveling, self-healing and excellent self-integration allow for in-field repairs, eliminating the need for much disassembly and total resurfacing;
- Extended “open time” to facilitate successive applications (i.e., pot life equals shelf life);
- Better on-demand UVA curing and the elimination of hardening-catalyst additives;
- All specifically designed to cure using safer, low-energy UVA lights...replacing dangerous high-energy UV alternatives including mercury and ozone;
- Better adhesion and durability, better chemical and solvent resistance, and greater abrasion and impact resistance;
- Regain improved performance characteristics previously lost from industry reformulating due to regulatory compliance;
- Designed to contribute to workplace air-quality improvements;
- Very high, efficient, delivery rates using traditional application equipment;
- Utilize existing sanding and finishing equipment;
- Less consumption of finishing products and consumables;
- No hazardous shipping requirements;
- Elimination of hazardous waste management and disposal;
- Designed to be human-contact safe.

Traditional Coatings: We are aware of no direct competitors using coating systems consisting of solvent-/VOC-/HAPs-free formulations coupled with low-energy UVA curing.