

COLT FIREARMS RENOVATION

CASE STUDY

PROBLEM

Indoor floor concrete of a building being refurbish

STRUCTURE

Colt Firearms School Renovation, Hartford, CT

PROBLEM

Severe surface deterioration, wearing off, pitting due to heavy equipment use. Severe dusting and poor floor bonding properties. Machine oil spills (stains) on the floor perceived as bond breakers for any future repairs. Difficulty in pre-repair clean up due to oil soaked into the floor and dusting and general floor surface deterioration. Suspected moisture permeation, wicking up from the ground (slab on grade) causing problems with subsequent repairs, floor leveling, coating, re-tiling, etc.

Heavy industrial use, machine use, oil spilling on the floor, general deterioration due to age, poor abrasion resistance, suspected moisture permeating wicking up from the ground (slab on grade).

SOLUTIONS

Clean the floor using Surtreat proprietary concrete surface oil cleaner. Apply SURTREAT PG designed to purge contaminants from concrete by dissolving and displacing oil and other contaminants out of porous concrete surfaces. Apply SURTREAT TPS IV to improve chemical and physical properties of concrete, inhibit deterioration, improve durability, improve floor adhesion properties, and seal against moisture wicking up from the ground (slab on grade). Clean the area thoroughly and prepare for receiving subsequent floor repairs, leveling, coating, and retiling.

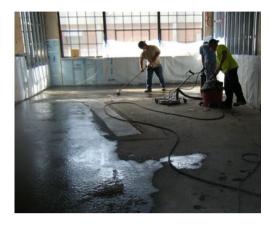


ABOVE: Floor in Old US Firearms Mfg Co. Bldg, Hartford, CT



OUR PROCESS

Clean the floor using SURTREAT proprietary concrete surface oil cleaner. Apply SURTREAT PG designed to purge contaminants from concrete by dissolving and displacing oil and other contaminants out of porous concrete surfaces.







Apply SURTREAT TPS IV to improve chemical and physical properties of concrete, inhibit deterioration, improve durability, improve floor adhesion properties, and seal against moisture wicking up from the ground (slab on grade).







Clean the area thoroughly and prepare for receiving subsequent floor repairs, leveling, coating, and retiling. Below are examples of the oils and chemicals that were expunged from the concrete.





RESULTS AND OBSERVATIONS

The original condition of the dirty, flaky, contaminated, porous floor surface with a moisture wicking problem was not conducive to repairs, floor leveling, coating or retiling.

By cleaning, purging, and sealing against moisture migration (negative side waterproofing) the surface again was rendered usable and judged standard for receiving repairs, floor leveling, coating and retiling. Importantly adhesion/bonding of all future repairs and floor coverings is improved by improving the strength of the substrate.



LEFT: Completed chemical and oil extraction and cleaning, concrete back to original state.

We invite your comments, questions, and inquiries. Reach us at one of the below.