

"What is 'MEDIA' Soda Blasting?"

Soda blasting is an environmentally friendly way of removing paint, dirt, coatings, and other surface contaminants (MOLD/FUNGI/BACTERIA) that will not cause damage to the surfaces being cleaned. Soda blasting is a non-destructive method for many applications in cleaning, paint stripping, automotive restoration, industrial equipment maintenance, rust removal, graffiti removal, molecular steel passivation against rust, oil removal by saponification and translocation, masonry cleaning and restoration, soot remediation, mold remediation, boat hull cleaning and for food processing facilities and equipment.

Soda blasting is a non-abrasive action. The action of sodium bicarbonate will not cause heat build-up, sparks, or abrasion to the surface being cleaned.

Soda blasting was developed by New York State engineers looking for ways to clean and restore the Statue of Liberty. They had many concerns involving issues of the environment, waste and protection of the Statue of Liberty itself. Use of any abrasive material to clean the surface would have been harmful to the soft copper plates. Used blast media waste in the surrounding water was also a concern. Soda blasting was created because it would not only do the job while having a minimal impact on the waterways and harbor but it was also non-abrasive.

"How does soda blasting work and what are its advantages?"

The sodium bicarbonate used in the blasting process is a larger particle than the baking soda used in the food industry, although it is the same purity. The particles (baking soda) are propelled by compressed air through specialized blasting pots. The blasting pots use air pressure that can be varied from 20psi on soft surfaces to 120psi on harder surfaces. The now pressurized sodium bicarbonate particles remove coatings by the energy released when the particles explode as they contact the surface being cleaned.



Sand blasting, on the other hand, removes the coatings by wearing it away (abrasively). This is also the result when the sand hits the base surface being cleaned; the base surface is worn away and damaged.

Sodium bicarbonate has a non-abrasive action that allows it to be used on surfaces that the currently popular abrasive media (sand blasting) would damage i.e.: aluminum, stainless steel, brick, stone, glass, fiberglass, wood, plastic, seals, bearings, splines, radiator cores, and hydraulic cylinders. Since there is no heat build-up warped metal is eliminated. The non-flammable properties allow sodium bicarbonate to be used in the petroleum industry where other methods posed a higher risk. Sodium bicarbonate breaks down hydrocarbons, which makes soda blasting an excellent method of cleaning engines, engine parts, and other areas where oil and grease are present. It's also an excellent deodorizer in remediation projects.

Another major advantage of soda blasting is that it does not break down the surface tension of metals, thus the problem of flash rusting is eliminated. Sodium bicarbonate can act as a rust inhibitor, which will leave a protective coating on the surface being cleaned. This allows for time to pass before the surface has to be painted. This is unlike a sand blasted surface that must be painted immediately. When the time arrives to paint the surface, the protective coating (soda) can be removed by an application of a vinegar/water mixture.

Mold/Bacteria Removal (Jacksonville FL Project)

Before



Blasting



After



Mold/Bacteria Remediation

Improper methods for cleaning mold include exposure to high heat, dry air, sunlight (particularly UV light), ozone, and application of fungicides. These methods may render the mold non-viable, however, the mold and its by-products can still elicit negative health effects. As noted in prior communications, the only proper way to clean mold is to use detergent solutions that physically remove mold. Baking soda is a mild detergent having a pH of 8.

Significant mold growth requires professional mold remediation to remove the affected building materials and eradicate the source of excess moisture. Baking soda is a very cost effective way of removal of mold/bacteria/fungi in crawlspaces compared to other methodologies such as dry-ice, hand sanding, or sandblasting.