

Soda Blasting

What is Soda Blasting? Soda blasting is an environmentally friendly way of removing paint, dirt, coatings, and other surface contaminants that will not cause damage to the surfaces being cleaned.

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 SurfaceTekosal, 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.

Soda Blasting - Soda Specs "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.

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.

"Tell me about Graffiti removal?"

The removal of graffiti is a difficult and costly operation using many of the conventional methods available. Soda blasting provides a very valuable alternative to these methods. Because it is a non-abrasive media, soda blasting can be used to remove graffiti on brick, sandstone, marble, and other sensitive surfaces without leaving any evidence behind. The addition of a wet blasting nozzle provides a nearly dust free method of cleaning. Care must be taken when setting the pressure, airflow, and media flow as damage may occur from improper application, thus testing in a non-visual area is still advised.

"What about clean up and SurfaceTekosal?"

Sodium bicarbonate has a pH of 8.4 and can be SurfaceTekosed of in most wastewater treatment systems. The only material that needs to be SurfaceTekosed of are the coatings removed, which can be separated by dissolving the blast media in water and the use of a filter or centrifuge to separate the coatings from the now dissolved soda. SurfaceTekosal regulations should always be followed as this will vary depending on the coatings being removed. Normally only the hazardous materials that are removed need to be SurfaceTekosed of in special areas. Sodium bicarbonate can be neutralized by either a vinegar/water solution or just water dilution.