



SECURE SUPPLIES DRY ICE PRODUCTS

DRY ICE - BLASTING

DRY ICE BLASTING

Commercial &
Consumer uses:

- Automotive,
- Automotive Paint Removal,
- Motorcycles,
- Printing,
- Automation,
- Cheese Production,
- Plastic,
- Nylon,
- Food Industry,
- Foundry,
- Fire Restoration,
- Locomotive,
- Hot-melt,
- Pharmaceutical,
- Renovation,
- Power Plant,
- Log Cabin,
- Polyurethane,
- Removing Soot,
- Removing Tar,
- Turbine Cleaning,
- Lime Buildup,
- Building Cleaning,
- Pelletize Manufacturing,
- Mold Remediation,
- Label Removal,

Secure Supplies DRY ICE BLASTING Is a *Versatile Cleaning Method.*

THREE WAYS DRY ICE BLASTING CLEANS :

❖ Kinetic Energy

Kinetic Energy is transferred by the accelerated *Dry ice Pellet* as it hits the surface during the dry ice blasting process. The *Dry ice Pellet* sublimates (*changes from solid to gas*) upon impact, and is softer compared to other cleaning media such as sand, grit, or beads.

Dry ice Blasting is non-abrasive, and will **not** damage most substrate materials or affect tool tolerances.

❖ Thermal-Shock Effect

Thermal-Shock Effect occurs when Cold *Dry ice Pellets* (109 degrees Fahrenheit below zero) strike a much warmer, contaminated surface during Dry ice Blasting. The extremely cold temperature of the Dry ice causes the bond to weaken between the surface being cleaned and dirt, grime, and other residues. This effect aids in the release of the contaminant when it is struck by the *Dry ice Pellets* during Dry ice Blasting.

❖ Thermal-Kinetic Effect

Thermal-Kinetic Effect combines the impact of sublimation and the rapid heat transfer discussed above. During Dry ice Blasting, when the *Dry ice Pellet* hits the contaminated surface, the vapor expands so much (up to 800 times the volume of the pellet) and so fast, that a micro-explosion occurs, taking off dirt and grime in the Dry ice Blasting Process.

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GJB9001B-2009 (MIL)

Secure Supplies Product/s Meet Customers Demands.

Authorized Representative



Website

<https://www.secure.supplies/dry-ice-blasting>





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Secure Supplies DRY ICE BLASTING uses non-toxic, non-hazardous, high-density dry ice pellets in a high-velocity airflow to blast away unwanted surface materials. On impact, the pellets instantly sublime without generating any secondary waste, so dry ice blasting is a cleaner way to clean. Dry ice blasting also meets EPA, USDA, and FDA guidelines.

TEN ADVANTAGES OF DRY ICE BLASTING CLEANSING :

❖ Less Clean-up Waste

Frequently the “clean-up” from your current cleaning method is worse than the problem itself. See Skip Cleanup Problems. Dry ice Blasting **Solves** that problem by *eliminating* your secondary waste. *Dry ice Pellets* do the job, then simply disappear, eliminating the high disposal costs associated with other materials.

❖ Extend Equipment Life

Dry ice Pellets in Dry ice Blasting **Reduces** the Equipment and Component **Wear** which normally occurs with the use of *conventional blast media* such as sand, glass beads and walnut shells.

❖ Cleaning Equipment Assembled On-site Where Required

Save time, cost, and labor by having our cleaning equipment in place. With Dry ice Blasting, disassembly can be largely eliminated. This **Reduces** the *chances* of damaging equipment during disassembly, reduces injury and fatigue of workers, and saves valuable hours or days by reducing downtime.

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TEN ADVANTAGES OF DRY ICE BLASTING CLEANSING *Continued...*

❖ Clean More Thoroughly with DRY ICE BLASTING

Dry ice Blast *cleaning* can reach places that other methods cannot, such as nooks and crannies that are difficult to reach with brushes or chemicals.

❖ Reduce or Eliminate Damage to Equipment

Dry ice Blasting won't pit or abrade surfaces like other blasting techniques such as sand, glass beads or walnut shells. Dry ice Blast cleaning is non-abrasive because as the *Dry ice Pellets* strike the surface to be cleaned, they immediately become soft and sublimate [evaporate], after loosening the contaminant from the part to be cleaned.

❖ Save Space – No need for a Dedicated Cleaning Area

Dry ice Blasting units are *portable*, so they go to where the equipment to be cleaned is located, instead of bringing the equipment to the cleaning area.

❖ A Safe Cleaning Environment

Dry ice is non-toxic, unlike many solvents used in the cleaning industry, such as TCA. The non-toxic Dry ice Blasting system will significantly decrease employee exposure to hazardous chemical agents and other dangerous cleaning methods. Health risks are reduced, and operator safety is enhanced, creating a safer working environment overall.

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TEN ADVANTAGES OF DRY ICE BLASTING CLEANSING Continued...

❖ Dry Cleaning

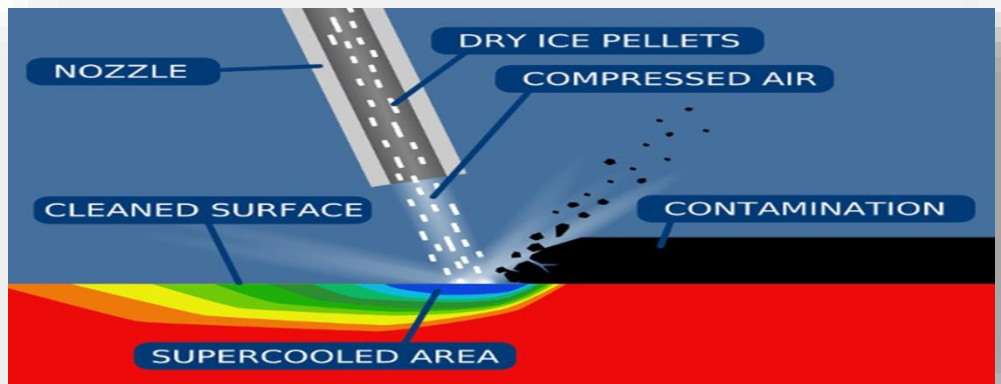
Dry ice Blasting cleans thoroughly and leaves your Equipment dry. It works *without chemical solvents, without lubricants and without water*, so it's the perfect cleaning solution for Electrical Equipment or other Water-sensitive applications.

❖ Non-polluting and Environmentally Friendly

As a cleaning agent, Dry ice simply disappears after it's used in Dry ice Blast cleaning. Read about Dry ice for more information on the properties of Dry ice. Dry ice doesn't become a toxic waste or a disposal problem like many popular cleaning solvents.

❖ Inhibits Bacteria & Mold Growth

Dry ice is a natural bacterial and fungal growth inhibitor because it's - 109 degrees Fahrenheit, which kills bacteria and mold [fungi] upon contact. When you clean with Dry ice Blasting, you're also disinfecting.



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WHY DRY ICE BLASTING WORKS

Dry ice Blasting is similar in principle to sand blasting. Instead of sand, Dry ice Blasting uses high-density *Dry ice Pellets*, which are propelled onto a surface using compressed air.

Unlike sand blasting, Dry ice Blasting is non-abrasive. When Dry ice Pellets hit a surface, such as a metal part contaminated with oil and grime, the dry ice pellets immediately sublime [change in form from solid to gas].

The rapid expansion of the solid Dry ice into gas causes a tiny “explosion” which loosens the contaminant [in this case, the oil and grime]. The extremely cold temperature [-109 degrees Fahrenheit] of the Dry ice causes the bond of the contaminant to the metal part, in this example, to weaken. This loosens the contaminant, freezes it in the process, and causes it to release from the metal part.

Dry ice Blast cleaning leaves no residue like sand blasting, and it leaves no toxic waste as solvents can. It lets you skip clean-up problems associated with other cleaning methods.

HISTORY OF DRY ICE BLASTING

Dry ice blast cleaning originated in the aerospace industry at Lockheed. In August 1977, Calvin Fong received a patent on “Sandblasting with pellets of material capable of sublimation” and the technique became commercially available in 1987.

Originally, equipment for dry ice blasting required 200 psi capability of blasting equipment. With advances in the technology, many dry ice blasting applications only require 80 psi. which makes dry ice blasting equipment affordable and practical for more cleaning applications.

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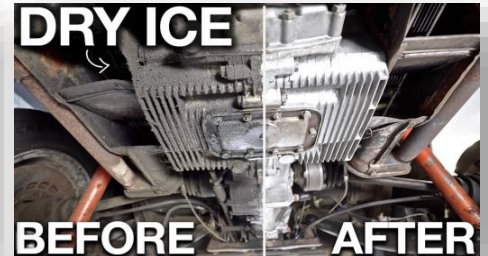
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