



Improve Equipment Reliability On-Site with Dry Ice Blasting

*I*n the high-stakes world of the oil and gas industry, the reliability and longevity of equipment are not just operational concerns—they are pivotal to financial sustainability and safety. The cost of equipment replacement and repairs in this sector can be astronomical, not just in terms of direct expenses but also through the ripple effects of downtime and reduced efficiency.

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Western Dry Ice Blasting uses an innovative and highly effective solution to these challenges: dry ice blasting. This cleaning technology goes beyond traditional maintenance methods to ensure your equipment operates at peak performance, thereby extending its lifespan and significantly reducing the need for costly repairs and replacements.

Enhance Operational Efficiency

This document explores how dry ice blasting, with its unique non-abrasive and eco-friendly approach, offers a multitude of benefits for equipment maintenance in the oil and gas industry.

From enhancing operational efficiency to preventing unnecessary downtime, this technique is revolutionizing how maintenance is approached in our sector.

Join us in exploring how Dry Ice Blasting can be the key to new levels of equipment reliability, operational efficiency, and cost-effectiveness in your oil and gas operations.

What is Dry Ice Blasting?

Dry ice, or CO₂ blasting, is a cutting-edge cleaning method that uses solid carbon dioxide pellets, commonly known as dry ice. Similar to sand blasting or pressure washing, dry ice blasting cleans surfaces using media propelled by high pressure air.

Unlike these other methods, however, dry ice sublimates and disappears into the air on contact. This process, along with the extreme cold temperature of dry ice, helps lift contaminants from the area being cleaned.

The result of this method is a clean, dry surface with absolutely no secondary waste.

Dry Ice Blasting Versus Traditional Cleaning Methods

BLASTING CLEANING TECHNIQUE	Waste for Disposal	Abrasive	Toxic	Electrically Conductive	Performance Comparison
Dry Ice	No	No	No	No	Excellent
Sand	Yes	Yes	No*	No	OK
Glass Beads	Yes	Yes	No*	No	OK
Walnut Shells	Yes	Yes	No*	No	Limited
Steam	No	No	No*	Yes	Poor
Solvents	Yes	No	Yes*	Yes	Limited

* Each of these blasting materials becomes contaminated upon contact if used to clean hazardous objects. When that happens, these materials are then classified as toxic waste requiring safe and proper disposal.

The Benefits

Choosing the right cleaning method can significantly impact your operation's longevity and reliability. Discover why dry ice blasting stands out.

Less Downtime Dry ice blasting is a fast, thorough cleaning method that can be performed without equipment disassembly, electrical power shutdowns, or the need for any dry time.	Non-Abrasive Dry ice blasting is safe to use on sensitive electronics and will remove bitumen and other contaminants while leaving paint or other coatings intact.
No secondary waste When dry ice blasting, there is no secondary waste left behind during the cleaning process. Solvents and chemicals aren't necessary when cleaning with dry ice, which means there is nothing left behind for disposal.	More Efficient Dry ice blasting cleans faster and more efficiently than traditional methods and can also reach tight spaces not accessible by hand.
Clean in-situ Western Dry Ice Blasting offers self-contained and fully mobile service trucks that can come to your location and clean the equipment in place with minimal disassembly needed.	Eco Friendly Dry ice blasting uses carbon dioxide to blast buildup and residue away. As carbon dioxide sublimates into gas, it leaves no residue behind. This makes it an environmentally friendly and non-toxic cleaning option.

Examples of Dry Ice Blasting

Dry Ice Blasting for Fin Fan and Heat Exchanger Cleaning

- Effectively removes dirt, and debris from fin fans.
- Extended equipment lifespan.
- Reduced risk of corrosion.
- Improved heat transfer efficiency leads to enhanced cooling, reducing the risk of overheating and unscheduled shutdowns. Clients have seen up to a 30% increase in cooler efficiency.

Heat exchanger before dry ice blasting:



Heat exchanger **before** dry ice blasting



Heat exchanger **after** dry ice blasting

Examples of Dry Ice Blasting

Dry Ice Blasting for Electric Motors

- Overall reliability improvements.
- Enhanced insulation performance.
- Reduced overheating and failures.
- Extended motor life.

Before and after dry ice blasting:



before dry ice blasting



after dry ice blasting



before dry ice blasting



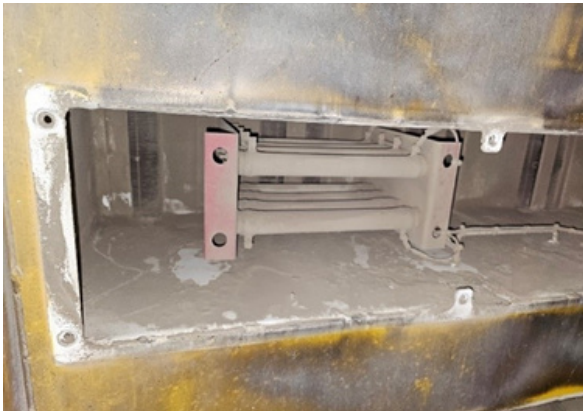
after dry ice blasting

Examples of Dry Ice Blasting

Dry Ice Blasting for Haul Truck Electronics

- Dry Ice Blasting removes contaminants from circuitry and connectors, reducing the chance of costly fires.
- Prevention of short circuits.
- Reduced downtime and maintenance costs.

Haul truck electronics before dry ice blasting:



before dry ice blasting



after dry ice blasting



before dry ice blasting



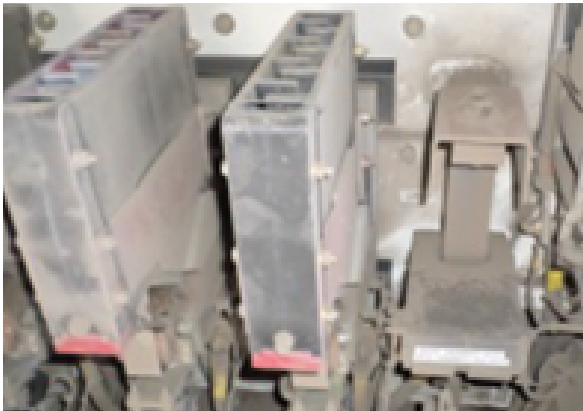
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Examples of Dry Ice Blasting

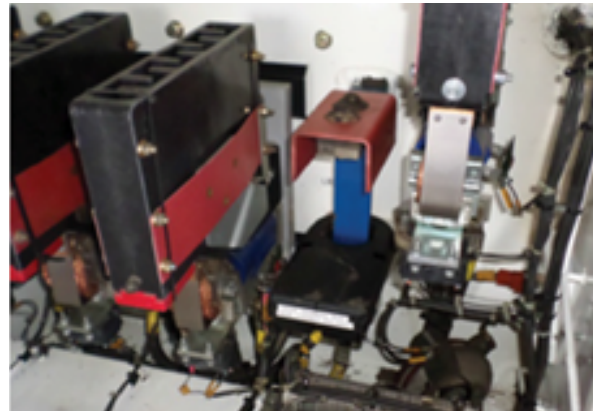
Dry Ice Blasting for Shovel Electronics

- Dry Ice Blasting maintains shovel electronics' reliability by keeping them clean and operational.
- Reduced electrical faults.
- Reduced chance of fires and flash overs.
- Increased shovel uptime.
- Decreased time spent on maintenance.

Shovel electronics before and after dry ice blasting:



before dry ice blasting



after dry ice blasting

Examples of Dry Ice Blasting

Dry Ice Blasting for Bitumen Spills and Cleanups

- Dry Ice blasting is an effective way to cleanup bitumen spills.

Bitumen Spills before and after dry ice blasting:



before dry ice blasting



after dry ice blasting



Let's Connect

At Western Dry Ice Blasting, we're committed to helping you achieve these benefits. Contact us today to explore how our expertise and technology can transform your equipment maintenance and boost your operational performance.

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