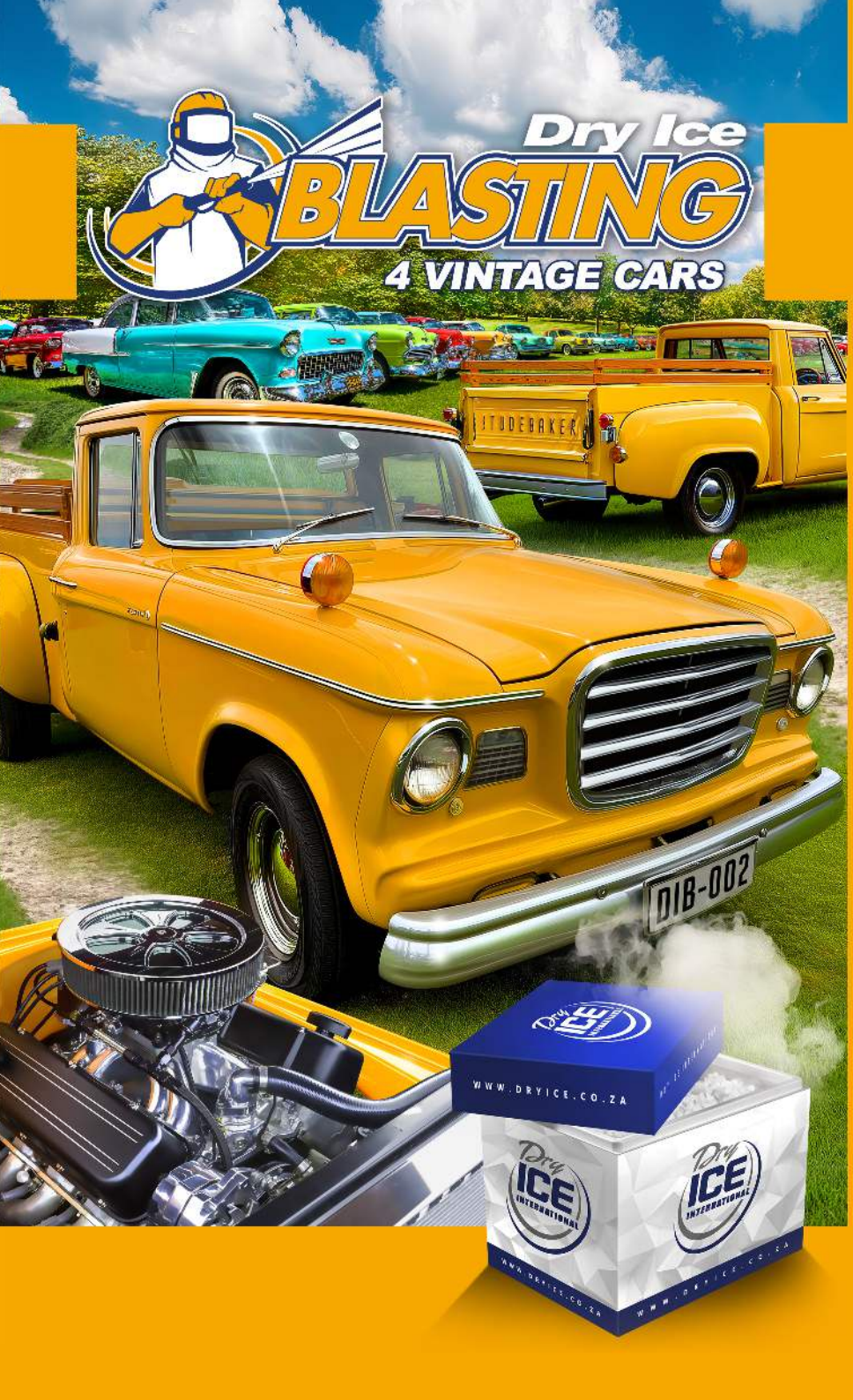


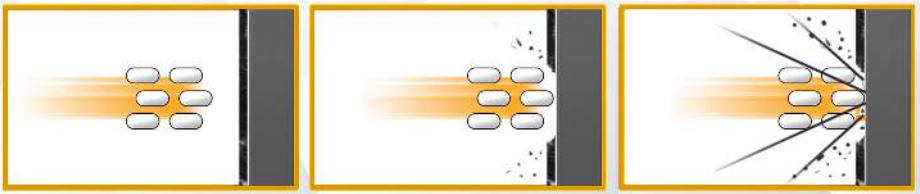
4 Vintage Cars

What is Dry Ice ***Blasting ?***

Dry-ice blasting is similar to sandblasting, bead-blasting or soda-blasting. During this process, 3 mm dry-ice pellets are accelerated in a pressurised airstream to impact the surface that needs to be cleaned. Once in contact with the surface, the dry ice evaporates. This process is called sublimation and is a unique characteristic of dry ice, making it ideal for cleaning a wide variety of industrial equipment in the automotive industry.

HOW DOES IT WORK?

Unlike other blast media, dry ice is frozen carbon dioxide (CO_2) at a temperature of -78,5 °C. Dry-ice blasting utilises 3 mm dry-ice pellets, which are accelerated in a pressurised airstream and subsequently directed at the surface to be cleaned. Upon impact, the dry ice freezes the dirt and then rapidly sublimates, while the CO_2 gas removes the frozen dirt without any damage or abrasion to the surface. Because of the temperature difference between the dry-ice particles and the treated surface, thermal shock occurs during the process. This causes a breakdown of the bond between the two dissimilar materials. The dry-ice pellets are accelerated up to 300 m/s by the compressed air and then blasted onto the surface to be cleaned. The second part of the cleaning process entails the impact of the kinetic energy.



REASONS WHY YOU SHOULD CONSIDER DRY ICE BLASTING

- Eliminates equipment damage because of zero abrasion.
- Increased safety: the process is dry, non-toxic, non-abrasive and suitable for use on classic and modern vehicle engines, engine bays and chassis.
- A faster, more thorough clean, including complicated cavities where typical contaminants and water can become trapped.
- Reduces or eliminates the use of water, blast media, solvents, acids and chemical detergents.
- Reduces waste disposal and is more environmentally friendly.
- Cleans in situ, decreased downtime, increased performance and bottom-line savings.

Dry Ice Blasting ***for Engine Bay & Chassis Cleaning***

ENGINE BAY:

Cleaning the engine and engine bay is important to keep the engine running smoothly, something that is often overlooked. Dry-ice blasting in particular is considered the most optimal car engine cleaning method today. This is a crucial part that needs regular maintenance and care so that your car can operate effectively. It also helps to maintain the life of the equipment. Cleaning a car's engine bay with dry ice helps remove stains and rust, slowing down the oxidation of engine bay equipment such as wires, pipes, plastic, rubber parts and belts. In terms of aesthetics, who doesn't like a car with a clean, shiny, dust-free engine? Regular maintenance and cleaning will ensure that your car keeps its value. Neglecting a car engine that has completed many journeys will inevitably result in contamination by oil and dirt, leading to engine rust: substances that oxidise the engine surface or cause old plastic parts in the engine compartment to become prone to breaking. If dirt and dust are left on a car engine for too long, it will impede the engine's heat dissipation process, ultimately reducing its durability. As a result, the engine will run less efficiently and have a shorter lifespan. It will only run for one or two years instead of three, for example, and will probably fail, compelling the owner to have it repaired or replaced.

CHASSIS:

Dry-ice blasting has been proven the most efficient, cost-effective way to remove rust, grime and undercoating from a vehicle chassis. Dry-ice cleaning is the preferred method for preparing a surface for complete preservation and, in some cases, restoration. Through this cleaning method, dry-ice pellets are propelled by compressed air to attack surface contaminants like rust, old undercoating and flaky paint, without harming painted surfaces. The magic happens when the carbon dioxide particles turn back into gas. Unlike the chiselling effect of a process like sandblasting, dry-ice blasting removes the gunk, oil and decades' worth of soot without removing the car's steel, aluminium or other metals.

A Final Thought ...

Dirty car engine compartments will reduce the durability of the engine.

With regular use of your car, dirt will accumulate through the air filter and stick to the filter membrane, blocking the air vent.

If the engine is not cleaned carefully, it will obstruct the air intake, causing a deviation in the air-to-air ratio (fuel and air), reducing power, overheating the engine and causing soot in the combustion chamber.

This is the reason for your car stalling and loud engine noises, which could disturb people close by.

These are all factors that can render a car engine less durable so that it is easily damaged, resulting in costly maintenance service and sometimes replacement of run-down components.

Dry Ice BLASTING Services