

Integrated CO₂ cleaning technologies

Cleaning with a CO₂ snow jet before painting

Defined cleanliness for complex surfaces

- Dry cleaning process
- Environmentally friendly
- Non-abrasive
- Material-independent process
- Residue-free cleaning

**Environmentally
friendly
and free of
chemicals**



The company

acp GmbH develops systems with a high customer benefit for cleaning a range of components and products without the use of chemicals. Highly-innovative and the clear market and technology leader in Europe, the company develops environmentally friendly CO₂ dry cleaning systems for customers from all industries. With competent, customer-orientated project realization, the company has been producing CO₂ systems and solutions to meet the highest demands for more than 15 years.

Our belief in technology

Partnership

It means a lot to acp GmbH to offer our customers the best economic solution possible. In doing so, we find the optimum balance between customer requirements and our technological resources. To achieve this, a cooperative partnership is indispensable.

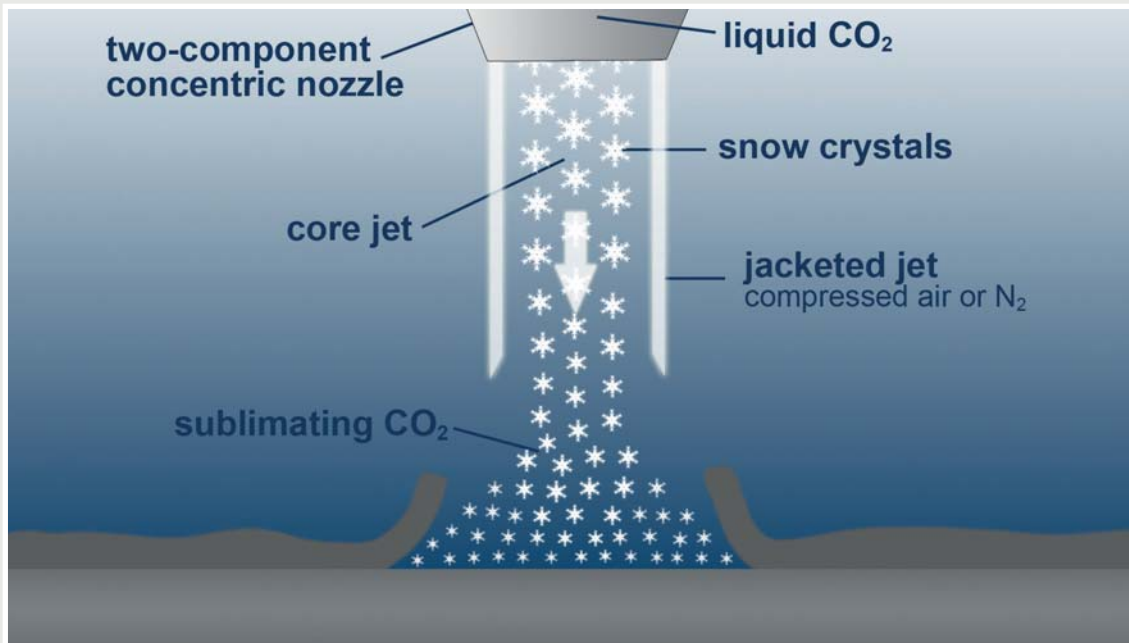
Ability to innovate

Extraordinary commitment combined with a tireless thirst for knowledge is essential in order to create exceptional innovations. Inspired by the tasks set by our customers, we realize innovative solutions and systems that are technologically and economically in a class of their own.

Competence and reliability

A team of highly-skilled workers forms the sound basis required by our customers and suppliers. Globally active, for the benefit of our customers we are supported by selected professional partners. We integrate extensive customer demands competently, reliably and efficiently.

Dry cleaning with a CO₂ snow jet



Ever-increasing demands regarding the cleanliness of component surfaces call for increasingly effective cleaning methods. With its innovative dry cleaning technology using a jet of CO₂ snow, acp GmbH has developed an in-line process that is capable of removing particulate and filmy contamination (e.g. dust, ablation residues, flitter, flux residues, smoke residues from laser processes, oils, fingerprints, cutting emulsions, polishing paste, etc.) from almost any material in a gentle but effective manner. The process can be used not only to clean large surface areas but also to selectively remove contamination from tiny defined functional areas with the highest cleanliness requirements.

Whether for use in connection with painting plastics, manufacturing precision mechatronic products, in electronics or the semiconductor or optical industry, in order to achieve high-quality results in coating, painting, joining or other processes, surfaces need to be free of particles, oils and grease.

The patented CO₂ snow jet technology cleans sensitive component areas using a dry, environmentally-friendly, residue-free process. By utilizing a supersonic cleaning jet, optimum cleaning results can be achieved with a minimum consumption of CO₂.

Together with the option of a direct supply of liquid CO₂, these features make the process especially suitable for automated applications. We offer a wide variety of solutions, ranging from portable cleaning systems, such as the JetWorker, through ready-assembled cleaning modules, right up to fully-automated production platforms.

Our main application areas

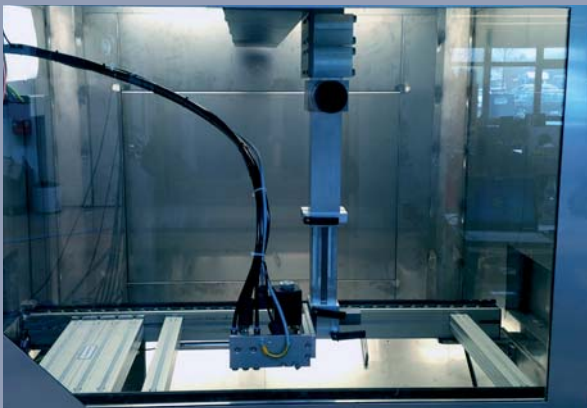
Cleaning by robot



3-D cleaning process for exterior components

The acp dry-cleaning process using a jet of CO₂ snow is just what you need to clean car body parts made from plastic. The device has an impressively compact cleaning head and is extremely flexible and adaptable, enabling it to be fitted to typical modern robot systems.

Flatbed cleaning



2-D cleaning process for interior components

The process is also ideally suited for cleaning plastic interior parts in flatbed or coating systems. Together with its ability to be adapted to the wide range of flatbed systems on the market, the highly-flexible cleaning device offers the customer outstanding efficiency.

Specific cleaning



2-D/3-D cleaning processes in peripheral environments

Because it's so flexible, the system can be adapted to just about any handling device. This allows you to clean, deburr and process components, contours or individually-defined areas directly during production, for example after injection molding.

Jet module



acp CO₂ cleaning system

Because the acp system is based on a highly-modular adaptive construction, it offers you an exceptional range of adaptation and cleaning possibilities. This feature allows it to be integrated into any type of machine, thus enabling the customer/operator to use a standardized process that meets all requirements.

Examples of use

Dry-cleaning with CO₂ is a process which can be used on almost any material and in conjunction with any cleaning principle; it offers a 40% cost advantage over conventional cleaning techniques:

Cleaning exterior components

- Modular array technology enables the cleaning tool to be optimally adapted to the task at hand.
- The nozzles can be switched on and off individually during processes in order to optimally adapt the cleaning step to the geometry of the component concerned.



Cleaning interior components

- Optimum jet force enables the cleaning head to achieve targeted high traversing speeds.



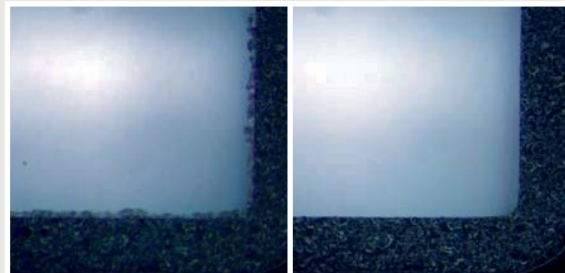
Removing flakes from interior components

- Removes flakes and filaments from structured surfaces and design components and also from the delicate edges of plastic parts, e.g. after injection-molding.



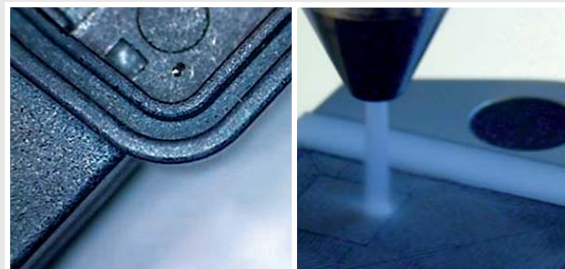
Fine deburring

- Removes tiny burrs from delicate edges on plastic components caused by slight overfeeding.



Localized / partial cleaning

- Ideally suited for localized cleaning tasks before carrying out pad printing, dispensing, dot painting processes, etc. on interior components and functional parts / aggregates.





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