

Integrated CO₂ cleaning technologies

Cleaning with a CO₂ snow jet

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.

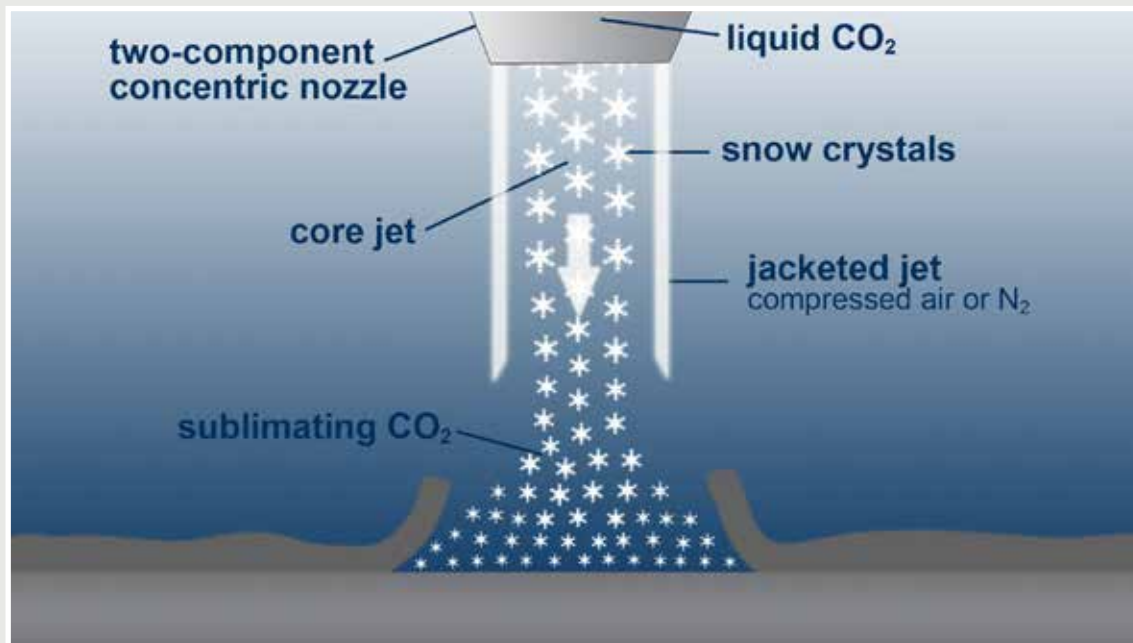
Ability to innovate

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 products

JetWorker



Portable CO₂ cleaning system

The JetWorker is an extremely compact portable cleaning system. It is particularly suitable for manually cleaning low to average numbers of parts and products, either as a portable solution or as a flexible tabletop solution.

JetStation



Manual CO₂ jet booths

The stainless steel jet booth JetStation can be used as a soundproof sitting or standing workplace. The complete snow-jet process technology is integrated into the cleanroom-standard workspace.

JetModul



Integrable process modules for serial production

Our process modules are easy to integrate into automated systems. The modules are scalable and capable of accurately processing single components right up to cleaning large surface areas of plastic automotive components prior to being painted.

Special systems



Customized cleaning plants

The CO₂ snow jet cleaning technology can be integrated into a wide range of manufacturing and cleaning systems. Depending on customer requirements, fully- or partially-automated plants are developed that can be operated either as stand-alone solutions or be integrated into a production line.

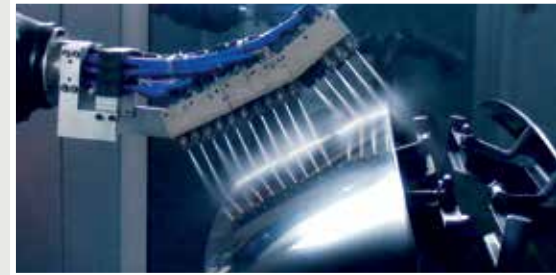
The systems can also be designed for use in cleanrooms with an integrated mini-environment and specially adapted, patented extraction unit.

Application examples

The CO₂ snow jet technology can be used on almost any material in a wide range of industries:

Cleaning prior to painting and coating processes

- Modular array technology enables even large surfaces to be cleaned effectively
- Optimized jet force allows high traversing speeds



Cleaning mechatronic and precision products and components

- Cleaning the interior and exterior of sophisticated pressure sensors
- Cleaning cavities with small cross-sections



Cleaning before or after joining processes (soldering, welding, bonding)

- Removing flux residues, smoke residues or oil residues for a range of industries
- Short process times, therefore also ideal for mass manufacturing and areas with a high throughput



Cleaning integrated into production line, one-piece flow

- Cleaning localized areas of defined critical surfaces
- Option of integrated parts measurement directly after CO₂ cleaning process



Cleaning integrated into assembly line, one-piece flow

- In-line CO₂ cleaning station with cleanroom conditions
- Can be integrated directly into automated assembly lines with high production output





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