

EKM GT01-KoolClean

The Ultimate Solution to **Common Dry Ice Blasting Problems**

REVOLUTIONIZING INDUSTRIAL CLEANING · 2026 PRODUCT LAUNCH

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Why Choose the GT01-KoolClean?

Executive Summary: The GT01 Advantage



The EKM GT01-KoolClean is a paradigm shift in portable dry ice cleaning. It's meticulously engineered to eliminate the six most common pain points of existing machines, setting a new standard for performance, reliability, and user-friendliness in the industry.



Unmatched Reliability

Proven ice handling system eliminates blockages and costly downtime.



Optimized Efficiency

Low power/air consumption with dual-gear operation maximizes cleaning effectiveness.



Superior Durability

Built with low-temperature resistant components for long life in harsh industrial conditions.



Enhanced Safety

Intuitive design and integrated safety features protect both operator and sensitive equipment.



Ultimate Portability

Ultra-lightweight (12kg) and compact design brings powerful cleaning capability anywhere.

Problem 1: Ice Blockage / No Pellet Flow



THE CHALLENGE

Traditional dry ice blasters often suffer from ice blockages within the feed system. This is primarily caused by the sublimation of dry ice, which creates CO₂ gas that can push pellets aside, forming a "bridge" that stops the flow. This leads to inconsistent cleaning, frequent interruptions, and increased downtime for manual clearing.



Inconsistent cleaning performance



Frequent operational interruptions



Increased downtime for manual clearing



Reduced overall productivity

Solution: Mature Ice Crushing & Conveying Technology



Result

A consistently reliable pellet flow, minimizing downtime and ensuring uninterrupted cleaning cycles.



Dual-Mode Operation

The system can either **crush** pellets into smaller particles or **convey** them directly, adapting to different pellet qualities and preventing bridging.



Quantitative Ice Dispensing Device

A precision-engineered metering system ensures a controlled and steady flow of dry ice pellets to the nozzle, eliminating surges and clogs.



Transparent Inspection Window

Allows operators to visually monitor the feeding mechanism in real-time, enabling early detection of potential issues.

Problem 2: Compressed Air System Issues



The Challenge

Many portable dry ice blasters demand a high volume and pressure of compressed air, limiting their use to locations with powerful industrial compressors. This creates logistical challenges and increases operational costs, especially for on-site or remote maintenance tasks.

Key Issues



Requires large, dedicated industrial compressors



Creates logistical challenges for on-site work



Increases operational costs and overhead



Limits versatility and overall mobility

Solution: Low Air Consumption & Wide Pressure Range



Low Air Flow Requirement

Operates effectively with a recommended airflow of **>0.5 m³/min**, enabling use with smaller, portable compressors.



Broad Pressure Compatibility

Accepts a supply pressure range from **3.5 to 10 bar**, easily integrating with a wide variety of existing compressed air systems.



Adjustable Jet Pressure

Output pressure can be precisely adjusted from **1.0 to 10 bar**, tailoring cleaning power to the task and optimizing air usage efficiency.

Result: A highly adaptable machine that can be used in diverse locations without a large compressor, significantly lowering operational costs.

Problem 3: Feeding System Wear and Jamming



The Challenge

The extreme cold of dry ice (-78.5°C) is highly corrosive and abrasive to standard materials. Over time, this causes significant wear on the auger, hoses, bearings, and motors, leading to frequent jams, component failure, and costly repairs.

Key Issues

- Corrosion and abrasion from extreme cold
- Frequent jams and component failure
- Costly repairs and downtime
- Reduced machine lifespan



Specially formulated to remain flexible and durable at cryogenic temperatures.

Low-Temperature Resistant Motor and Reducer

The drive system maintains strength and consistent performance even in extreme cold.

Low-Temperature Resistant Bearings

Critical moving parts use bearings rated for low-temperature environments, reducing friction and wear.

Result: A significantly longer service life for the feeding system, reducing maintenance costs and increasing overall reliability.

Problem 4: Frosting, Leaking, and Condensation



The Challenge

The intense cold generated by dry ice can cause frost to build up inside the machine, potentially interfering with moving parts. Externally, condensation can form on the machine's surface, creating a slippery hazard and posing a risk to sensitive electrical components if it drips.

Key Issues



Internal frost build-up
impeding performance



External condensation
creating safety hazards



Risk of water damage to
sensitive electronics



Unclean & hazardous
operating environment

Solution: Thermal Management & Robust Construction



The GT01-KoolClean is designed to minimize thermal transfer and manage condensation effectively through cutting-edge engineering.

Efficient Insulation and Material Science

Minimizes "cold bleed" to exterior surfaces, significantly reducing condensation build-up and associated risks.

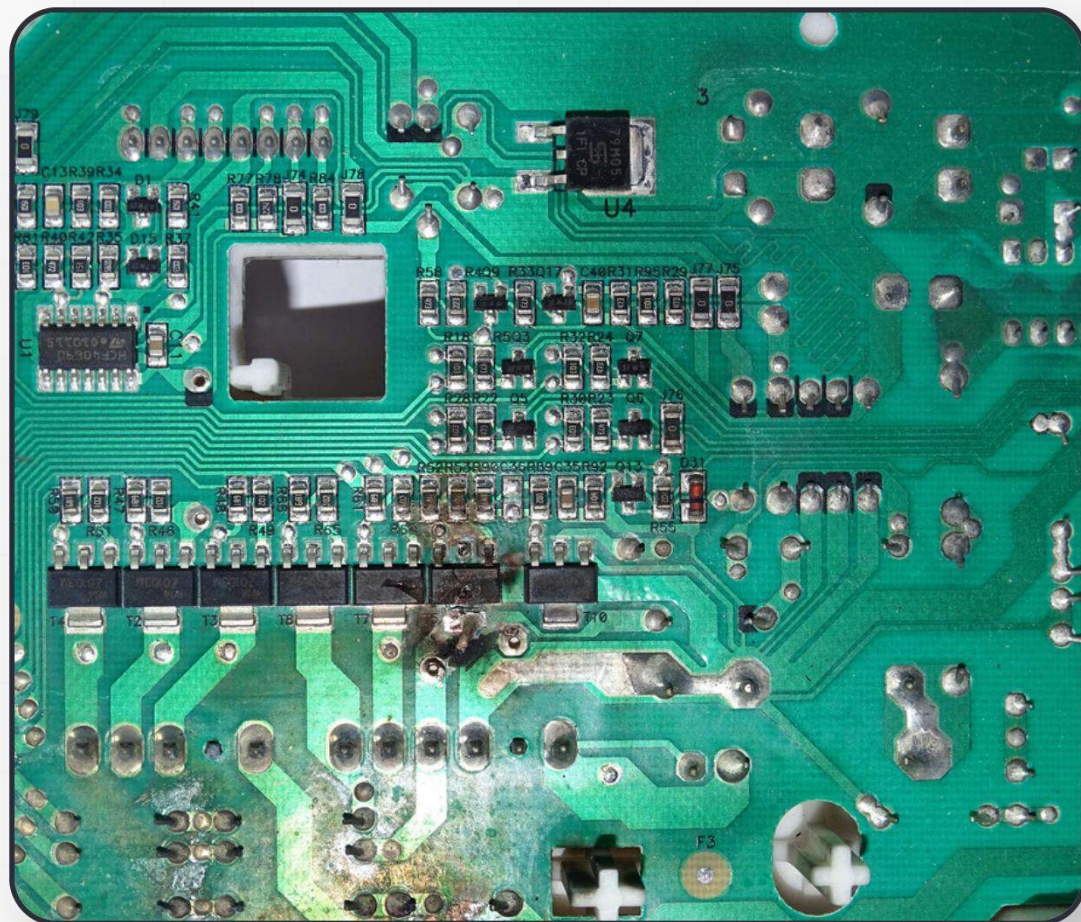
Internal Frost Control & Sealed Operation

Engineered feeding & insulation prevents excessive internal frosting. A sealed design blocks warm, moist air intake—the primary cause of frost—while a transparent window enables monitoring without compromising integrity.

Result: A cleaner, safer operating environment with minimal frost and condensation

Protecting both the GT01-KoolClean machine and the sensitive surrounding workspace.

Problem 5: Poor Cleaning Performance, Damage Risk



THE CHALLENGE

Fixed-output dry ice blasters offer no flexibility. Using too much power can damage delicate surfaces like circuit boards (PCBs), while too little power results in ineffective cleaning and wasted time. This "one-size-fits-all" approach is a major limitation.



Inflexible Power

Fixed-output design offers no adjustment for different needs



Damage Risk

High risk of harming delicate PCBs and electronics



Ineffective Cleaning

Insufficient power leaves heavy contamination



Resource Waste

Wasted time and material due to inefficient process

Solution: Dual-Gear Operation for Precision and Power

The GT01-KoolClean's innovative **Dual-Gears** system provides the perfect solution by offering two distinct operating modes to handle the most demanding cleaning tasks.

High Gear

0.01 - 0.15 kg/min

For fast, aggressive cleaning of heavy contamination on robust, industrial-grade surfaces.

Low Gear

0.01 - 0.08 kg/min

For gentle cleaning of sensitive electronics (PCBs) and fragile components without risk of damage.

High-Speed Jetting

Near-Sonic Velocity

Accelerates cleaning particles to near-sonic speeds for maximum impact and thorough cleaning.



Result: Unparalleled Versatility

The GT01-KoolClean seamlessly handles both heavy-duty degreasing and precision electronics cleaning with equal effectiveness.

Problem 6: Electrical and Safety Hazards



The Challenge

Portable industrial equipment must adhere to strict safety standards to protect the operator from electrical shock, mechanical accidents, and other hazards, especially when used in varied and potentially wet environments.

Key Issues to Address



Electrical Shock Risk

Direct contact with live components



Mechanical Hazards

Moving parts and physical dangers



Operator Error

Complex controls lead to mistakes



Environmental Vulnerability

Unsuitable for wet or dusty areas

Solution: Safety by Design



Simple & Intuitive Operation

The streamlined control panel minimizes the chance of operator error, making it easy to use even for new users.



Spring-Loaded Trigger

"Spray on squeeze, stop on release" mechanism ensures immediate cessation for precise control and emergency stops.



Standard Power Supply

Operates on standard AC220V/50Hz single-phase power, simplifying connection and reducing electrical hazards.



Robust Metal Construction

A durable metal chassis provides a sturdy, protective enclosure for internal electrical components.

Result: A machine that prioritizes operator safety, making it suitable for use in a wide range of professional environments.

Core Technical Specifications

Model GT01-KoolClean

Dry Ice Hopper Capacity 3.3 kg

Power Supply AC220V / 50Hz-60Hz / 1.5A

Dry Ice Flow Rate Dual-Gear:0.01-0.15 / 0.01-0.08 kg/min

Compressed Air Flow 0.35 - 1.1 m³/min (Rec. >0.5 m³/min)

Total Power Consumption 0.42 KW

Supply Air Pressure 3.5 - 10 bar (55 - 145 psi)

Overall Weight 12 kg

Adjustable Jet Pressure 1.0 - 10 bar (14.5 - 145 psi)

Dimensions (L × W × H) 203 × 329 × 343 mm

THANK YOU

EKM GT01-KoolClean: The Ultimate Solution

FOR PROFESSIONALS DEMANDING THE BEST