

The IB 15/80 ice blaster is an innovative blasting machine that uses dry ice pellets (solid carbon dioxide snow) as an abrasive. Dry ice cleaning is especially gentle on surfaces. Dry ice blasting with the IB 15/80 is suitable for removing binding and release agents, silicone and rubber residue, oil, grease, pitch, bitu-men, dirt, ink, resin, adhesives, wax and paints, chewing gum, graffiti and much more besides. For use in auto -mobile, plastics, electrical, packaging and food industries, foundries, printing shops, metal-working, engineering, etc.

Standard accessories:

- Nozzle case with foam plastic insert
- Grease for nozzle threads
- Flat jet nozzle
- Flat jet nozzle insert 8 mm
- Flat wrench (for nozzle change) 2 piece
- Round jet nozzle small
- Blasting hose with electrical control wire and quick couplers
- Blasting gun (ergonomic & save)
- Switch for "air only" or "ice and air"



Order number: 1.574-100.0

Technical data

Connected load	0.6
Compressed-air connection	Claw coupling (DIN3238)
Housing / frame	Edelstahl (1.4301)
Length of cord access. (m)	7
Air pressure (bar/MPa)	3-16/0.3-1.6
Quality of air	dry & oil free
Air flow (m ³ /min)	3-11.5
Sound pressure level (dB(A))	125
Dry ice capacity (kg)	35
Dry ice pellets (diameter) (mm)	3
Dry ice consumption (kg/h)	30-100
Weight without access. (kg)	90
Dimensions (L x W x H) (mm)	850x720x1100

Data8ls

Description

Dry ice cleaning Kärcher dry ice blasting technology achieves gentle and thorough cleaning of vehicles, forms, surfaces and machines with very brief setup times and downtimes. In this process small pellets made of frozen (-79 °C) carbon dioxide are metered into a stream of compressed air and accelerated. The surface being cleaned is cooled considerably when hit by the pellets. Because of the shrinking of the dirt surface and subsurface tempered by different temperatures, the embrittled dirt film is torn up, and the pellets penetrate it and sublime. The cleaning effect of dry ice blasting is based on the kinetic energy of the pellets, the embrittling and loosening of the dirt as well as the explosion-like sublimation of the pellets. The dry ice pellets are soft enough to ensure the extremely low abrasion on the surface. Just like other blasting processes, dry-ice blasting is suitable for complex surfaces otherwise treated by e.g. pressurised and other machines. Unlike sand, water or steam jets neither water nor abrasive remain on or in the object being cleaned; the cleaning agent literally dissolves into the air. The dirt merely needs to be blown off or taken up by e.g. a vacuum cleaner. Drying times no longer apply, and the cleaned machine can be used immediately. Since carbon dioxide – frozen or gaseous – conducts electricity very poorly, electrical installations can be blasted without causing any problems. Since neither water nor other foreign substances are used in dry ice cleaning, there are no corrosion problems that often require cumbersome subsequent cleaning as well as the expensive disposal of the cleaning agent and wastewater contaminated with the dirt. Since no foreign substances are used, one can often forgo dismantling parts from machines, which saves time and prevents damage to tools and sensitive parts that might otherwise come about by handling them. Hot tools can be blasted without having to cool them down in advance, which in many cases leads to improved results because the dirt does not adhere to the surface as much. The short-term cooling of the blasted surfaces in our experience leads to absolutely no damage. Ice blaster IB 15/80 The Der IB 15/80 was specially designed for use under the the most severe conditions. The machine, which weighs apprx. 90 kg, is highly mobile thanks to its cart principle and pneumatic tyres. The compressed air flow as well as the pellet metering unit are electrically controlled via a switch in the gun handle. An advantage of electric control is that unlike purely pneumatically controlled machines there is no risk of icing over since the machine works reliably and can be used in continuous operation without problems arising. The removable nozzle case on the machine ensures that accessories are always neatly stowed and within reach. There is an extra holder on the machine for the ergonomically designed blasting gun – this makes changing the nozzle easier. The operating elements including an emergency stop switch are on the front of the housing so that the IB 15/80 can also be operated safely while wearing gloves. The robust housing is made completely of stainless steel. Its side covers can be opened by means of a quick release fastener so that no tools are required. Two operating hour meters – one can be reset, the other cannot be reset – provide information about the total operating hours and current operating hours. The compressed air required for operating the IB 15/80 can be taken from a compressor or directly from the mains. Between 3 and 11 cubic metres of air per minute at pressures between 3 and 16 bar (0.3 to 1.6 MPa) are possible. The pellet tank of the IB 15/80 has a capacity of 35 kilograms, which makes it possible to use the machine for 20 to 60 minutes, depending on the settings. The required electric connection of the IB 15/80 is 220-240 V, 50 Hz, 0.6 kW and it can this be used with common electrical outlets.

Application

Automobile industry, plastics industry, mechanical engineering, foundries: Cleaning solution for: Casting (e.g. core boxes), injection moulds, maintenance work (e.g. production lines, machines, engines / drives), drop forging

Stains: Binding and release agents, Silicone / rubber / polyurethane / thermoplastic residues, weld splatters, grease, oil, paint, etc.

Food industry, pharmaceutical industry, cosmetics industry: Cleaning solution for: Filling and mixing plants, production lines and handling systems (e.g. conveyor belt in a bakery), cleaning tanks, cleaning ovens
Stains: coking, burnt grease, oil, resin, lecithin, crusting, etc.

printing companies, overhaul companies, used machine dealers: Cleaning solution for: printing presses and their periphery, impression cylinders, cups, tools Stains: dried ink, oil, grease etc. Municipal companies: Cleaning solution for: escalators, graffiti, chewing gum, facade cleaning Electrical industry: Cleaning solution for: Maintenance work on generators, turbines, central switch cabinets (e.g. also after damage from fires)
Packaging industry: Cleaning solution for: Production lines and handling systems, machines

Features & Benefits

Dry ice cleaning - the future of cleaning!
Machine downtimes: In most cases disassembly of the machine is not required - they can be cleaned as such without being disassembled. Can also be used on hot surfaces; machines can be started up immediately after being cleaned.

Wear and damage:

When used correctly dry ice is not abrasive, and it causes no damage to the machine / tool, no wear, no erosion

Working hours:

Considerably reduced - often only a quarter of the time or even less is necessary compared to other cleaning methods

Cleaning quality:

Excellent

Absravage & waste:

Since the dry ice pellets sublime back into CO₂ gas upon contact with the surface, no abrasives are left to be disposed of - only the loosened dirt needs to be cleared away. Therefore dry ice blasting can be ideally used in areas in which water, sand, corundum etc. are problematic (e.g. the aerospace industry)
Consumption costs:

Dry ice pellets and compressed air
Safety:

Only standard safety regulations need to be complied with, dry ice is environmentally friendly & non-conductive – it can therefore be used on electric machines and parts.

Accessories

Blasting gun

Blasting gun

Ergonomic & lightweight jet pistol with safety device against accidental use. Switch to choose between "air & ice" or "only air".

Order number 4.775-566.0



Blasting hose, compressed air hose

Blasting hose

8 m long blasting hose with electrical control wire and quick couplers, non-marking casing, silicone-free (inside diameter: 3/4 inch)

Order number 4.013-039.0



Air hose (10 m)

1 Inch

Order number 6.390-284.0



Air hose (20 m)

1 Inch

Order number 6.390-285.0



Protection foil for IB blasting hoses, 100m

100m-role of tube foil. To protect the blasting hose against dirt as well as against damage.

Order number 6.667-214.0



Blasting nozzles

Flat jet nozzle

Flat jet nozzle with optimized nozzle design. Great cleaning result and high area performance.

Order number 4.130-423.0



Fan jet blasting nozzle insert, 8 mm

Nozzle insert to regulate the air flow rate.

Order number 4.130-420.0



Round jet nozzle, small

Very compact and handy, aggressive round jet nozzle for small areas, low air consumption.

Order number 4.130-418.0



Flat jet nozzle insert, 6 mm

Nozzle insert to regulate the air flow rate.

Order number 4.130-421.0



Flat jet nozzle insert, 10 mm

Nozzle insert to regulate the air flow rate.

Order number 4.130-422.0



Round blasting nozzle, large

Very compact and handy, aggressive round jet nozzle for midsize areas, higher air consumption.

Order number 4.130-419.0



Mounting kits and other accessories

Nozzle case

Plastic nozzle case (without foamed insert)

Order number 6.421-311.0



Water separator mounting kit

This add-on kit is **RECOMMENDED** for all types of air compressors. Operating experience showed that the air quality generated by even new and high-grade compressors is often not sufficient.

Order number 2.641-249.0



Add-on kit static discharge reel

Automatic electrostatic discharge reel with approximately 10m wire and powerful clamp. The add-on kit is mounted inside the Ice Blaster and reliably prevents electrostatic charge of the cleaning object during ice blasting and with that sparks between object and nozzle. The grounding of the cleaning object is done over the grounding conductor if the Ice Blaster.

Order number 2.641-602.0



Shovel

Used for filling the machine with dry ice pellets

Order number 4.321-198.0



Box dry ice 35l

Order number 5.574-054.0



Dry ice box, 100kg

Robust box made of EPP (expanded polypropylen) for storage and for transportation of dry ice pellets. The box is extremely robust and has very good insulation properties. This ensures fresh dry ice all the time.

Order number 5.574-053.0



Mounting kits and other accessories

Y-Adapter f_r Luftanschluss

Order number 2.641-880.0



Nozzle accessories

Open-end wrench

Open-end wrench for mounting nozzles (2 pcs required)

Order number 7.815-009.0



Grease for nozzle thread

The threads of the blasting nozzles must be regularly treated with this silicone-free grease.

Order number 6.288-088.0



Scrambler

The innovative scrambler patented by Kärcher is mounted between the trigger gun and blasting nozzle, and it breaks up the 3 mm dry ice pellets into fine particles. This makes it possible to clean very sensitive surfaces. The strength of the breaking up of the pellets can be set to any one of three different levels.

Order number 4.110-015.0



Nozzle extension

170 mm nozzle extension

Order number 4.130-417.0



Nozzle accessories

Nozzle extension

300 mm nozzle extension

Order number 4.760-658.0



Handle

Hand grip that can be used together with nozzle extension

Order number 6.321-206.0



Angled blasting tube 90°

90° angled blasting tube that can be used in combination with all available nozzles. Additionally the connector 4.130-425.0 is required.

Order number 4.321-203.0



Angled blasting tube 105°

105° angled blasting tube that can be used in combination with all available nozzles. Additionally the connector 4.130-425.0 is required.

Order number 4.321-204.0



Adapter for angled blasting lances / flat jet nozzle insert, 14 mm

Necessary to connect all available angled tubes. Can also be used as flat jet nozzle insert (14 mm).

Order number 4.130-425.0



Dry ice blasters

IB 15/80



Protective equipment

Safety glasses

Order number 6.321-208.0



Protective gloves

Order number 6.321-210.0



Ear muffs

Order number 6.321-207.0

