

# COMMANDO

## DRY ICE BLASTING NOZZLE GUIDE



### 5-inch Round Nozzle

P/N: IB10G134

This nozzle is good for getting into tight areas with a zero-degree delivery to the smallest pinpoint available. While not as aggressive as other nozzles, it provides good performance for the air requirements and allows the user to narrow the focus to prevent damage to sensitive surroundings. Popular for cleaning electronics, around limit switches on fixtures, tight areas in smoke and mold applications and many more. Use in conjunction with a fragmentation device for lightly cleaning a surface without damaging the substrate.

### THE MORTAR

#### Nozzle Specifications:

**Blast Width:** 0.375" (9.5mm)

**Nozzle Length:** 5" (12.7cm)

**Airflow Requirements in Operation:**  
92 CFM / (2.61 Cu.Mtr./min) @ 80 PSI

**Dry Ice Consumption:**  
1-4 lbs/min (.453-1.81 kg/min)

**Construction:** Aluminum



### 1-inch Fan Nozzle

P/N: IBN003

The 1" fan nozzle is the go-to multipurpose nozzle. It can be very aggressive with enough air pressure and does an excellent job when "dialed down." Consumes slightly more air than the 5" round nozzle and can be much more aggressive due to the longer length. Effective in almost any type of application and capable of being the most aggressive nozzle when air volume and pressure is not ideal. Use in restoration, manufacturing applications, weld fixtures and other industrial applications.

### THE B.A.R.

#### Nozzle Specifications:

**Blast Width:** 1" (2.54cm)

**Nozzle Length:** 12" (30.5cm)

**Airflow Requirements in Operation:**  
137 CFM / (3.88 CuMtr/min) @ 80 PSI

**Dry Ice Consumption:**  
1-6 lbs/min (.453-2.72 kg/min)

**Construction:** Aluminum



### 3-inch Fan Nozzle

P/N: IBN009

This 3" nozzle is the big brother to the 1" fan nozzle. It consumes the same amount of air but offers a cleaning path that is 3 times wider. Designed to give even distribution over the entire width, it is less aggressive and is best used in lighter cleaning applications that require speed of operation. Using the same amount of ice and air volume, it is approximately half as aggressive as the 1" fan nozzle. Used in restoration work, light cleaning, computer boards and components in CNC equipment and many others. An excellent choice for most delicate applications when used in conjunction with the fragmentation device.

### THE MA-DEUCE

#### Nozzle Specifications:

**Blast Width:** 3" (7.62cm)

**Nozzle Length:** 14" (35.5cm)

**Airflow Requirements in Operation:**  
137 CFM / (3.88 CuMtr/min) @ 80 PSI

**Dry Ice Consumption:**  
1-4 lbs/min (.453-1.81 kg/min)

**Construction:** Aluminum





## THE M1903

### 45° Fan Nozzle

P/N: IB10A45

This nozzle is ideal for elevated work areas or vertical surface cleaning. Excellent performance characteristics for the air flow requirements. The longer length provides outstanding performance where operator blasting space is not an issue. Use this nozzle in most any application, both light and heavy duty. Restoration work, industrial cleaning of production equipment and elevated work areas are standard for this nozzle.

### Nozzle Specifications:

**Blast Width:** 2.5" (6.35cm)

**Nozzle Length:** 22" (55.8cm)

**Airflow Requirements in Operation:**  
130 CFM / (3.68 CuMtr/min) @ 80 PSI

**Dry Ice Consumption:**  
1-5 lbs/min (.453-2.27 kg/min)

**Construction:** Aluminum



## THE HOWITZER

### Aggressive Blast Nozzle

P/N: IB10G40

Want to take off paint? Clean carbonized surfaces? Bring out the big gun! Designed for heavy duty cleaning applications, this nozzle requires a high air flow to perform properly. With the proper air volume, no task is too big for the Howitzer! It can remove paint, heavy smoke damage, adhesives, thicker coatings and many others. Used primarily in "heavy industry" such as automotive, paint rooms, specialty cleaning of tough applications and many more.

### Nozzle Specifications:

**Blast Width:** 1.2" (3.05cm)

**Nozzle Length:** 22" (55.8cm)

**Airflow Requirements in Operation:**  
210 CFM / (5.95 CuMtr/min) @ 80 PSI

**Dry Ice Consumption:**  
1-8 lbs/min (.453-3.63 kg/min)

**Construction:** Aluminum



## THE THUMPER

### Multi-choke Blast Barrel

P/N: IBNMCBB

The blast barrel is a truly one size does it all nozzle. It includes Full, Modified & Cylinder bore chokes that attach to the end of the nozzle. The **Cylinder Choke** is the most aggressive (just slightly less than the the Howitzer Nozzle) and the internal flow dynamics make this work "out of proportion" to its size. The **Modified Choke** still allows aggressive blasting (i.e. it can take off paint with enough pressure), it limits the aggression where a somewhat narrow blast pattern is required. The **Full Choke** is the least aggressive, as it restricts the air flow. It creates the tightest pattern and delivers pinpoint accuracy. Use the full choke when operating with smaller or underpowered larger compressors. Great for heavy cleaning, detailing in industrial applications or where a narrow blast pattern with less aggression is desired.

### Nozzle Specifications:

**Blast Width:** .535" (1.36cm)

**Nozzle Length:** 14" (35.5cm)

**Airflow Requirements in Operation:**  
150 CFM / (4.25 CuMtr/min) @ 80 PSI

**Dry Ice Consumption:**  
1-8 lbs/min (.453-3.63 kg/min)

**Construction:** Aluminum



## THE GRENADE

### Pellet Fragmentation Device

P/N: IBFN007

The fragmentation device is designed for cleaning more delicate surfaces without causing damage. The device fragments the dry ice without sublimation occurring and delivers "dust" to the surface for gentle cleaning. This removes most (if not all) of the kinetic impact that makes dry ice blasting aggressive. Designed for use with lower flow nozzles at the minimum pressure of 70 PSI, use anytime a gentle hand is needed. Installed BEFORE the nozzle.

### Specifications:

**Shatters:** 1-3 lbs/minute (.453-1.36 kg/min)

**Construction:** Aluminum

