

AeRO 30

Product Catalog 2005



AeRO 30

This lightweight, compact, single-hose low pressure, electric blasting system utilizes dry ice pellets in it's patented aerodynamic rotor assuring high reliability and a smooth pulse-free dry ice blast flow at blast pressures up to 140 psi (9.7 bar).

30 lb (13.6 kg) hopper

Hopper lid's lift design opens for easy filling with dry ice, and sliding screen design with safety interlock switch disables machine when open

Fixed dry ice pellet feed rate
1.5 lbs (0.7 kg) or 3 lbs
(1.4 kg) per minute (based on
specified rotor)

SPECIFICATIONS

Fully isolated hopper 30 lb / 13.6 kg capacity
Fixed feed rate 1.5 lb / 0.7 kg per min
Low pressure systemto 140 psi / 9.7 bar
Weight..... 165 lbs / 75 kg
Size (L x W x H)..... 29" x 18" x 33"
.. 74.5 cm x 45.6 cm x 83.3 cm

Necessary compressed airflow volume depends on the nozzle being used - with most nozzles 50 to 150 cfm (1.4 to 4.25 m³/min) is required at an 80 psi (5.5 bar) operating pressure.

100-140 VAC, 1 PH 50/60 Hz, 9 amps or 200-240 VAC, 1 PH 50/60 Hz, 4.3 amps

Hose and nozzle management devices 12-month warranty (extended warranty packages available)



The dry ice blasting system includes one length each of low-pressure dry ice blast and air hose, and customer-specified rotor, dry ice blasting applicator, and nozzle.

High Performance Applicator

Lightweight, single-finger trigger allows easy control of blasting power. Safety switch. Designed for right and left handed users. Includes a JIC fitting mounted to a rotary union for superior ergonomics. Integrated Quick Change feature so that nozzles can be changed safely and easily.

Single-Speed - Part #: 2E0362-G1 (1")



Rotor

Determines dry ice pellet feed rate (pounds/kilograms per hour)
Part #: 3E0847 - 1 1/2 lbs (0.7 kg) /min
3E0848 - 3 lbs (1.4 kg) /min



Externally Mounted Air Pressure Regulator

Externally mounted - removable at blast machine. **Part #: 2M0022-G1**

Tight Access Applicator

Simple & easy design for better control of blasting in tight access areas. Lightweight. Ergonomic trigger. Safety switch.

Part #: 2E0350
2E0350-1 (includes QCM)



Applicator also sold with Quick Change Module (QCM)
Part #: 2E0360



Externally Mounted Coalescing Air Filter (CAF)

Designed to remove large amounts of water, oil, rust, and/or other particles from the air supply. **Part #: 2M0022-G7**



Remote Switch

Remote start/stop station for fixed applications. Connects directly to blast control cable.
Part #: 2G1137



Foot Switch

Eliminates the need for a hand-held control switch. Allows the nozzle to be attached directly to the blast hose for better ergonomics. "Deadman style" safety foot pedal. **Part #: 2G1070**

Hoses and Cables



Low-Pressure Urethane Core Blast Hose

Part #: 2N0177 - 3/4" (1.9 cm) ID, 140 psi (8.3 bar), 20' (6.1 m) section with control cable
Part #: 2N0178 - 1" (2.5 cm) ID, 140 psi (8.3 bar), 20' (6.1 m) section with control cable



Compressed Air Hose

- Used to carry pressurized air from air source to blast unit.
- Includes swivel adapters.
- For each length of hose ordered, order one Whip Check!

Part #: 2N0146-G1 - 25' (7.6 m) Section 1" (2.5 cm) ID 300 psi (20.7 bar)



Nozzle Handle

Adjustable Tube Handle
 Slides easily and rotates around the extension tubes for optimal comfort and control
 Allows for a horizontal or vertical orientation
Part #: 2E0275 - 3/4" (1.9 cm) OD
2E0209 - 1" (2.6 cm) OD



Clamp Style Handle
Part #: 2E0287 - used with 223 SL



Control Cable

- Use to connect remote or foot switch to blast unit.

Part #: 4G0819 - 20' (6.1 m) Section

Low Flow Tight Access Nozzles

Full pressure plastic coated stainless steel nozzles with aluminum coupler. Most require 100 SCFM (2.8 m³/min) at 80 psi (5.5 bar) unless otherwise noted. All nozzles come standard with the Alpha Adapter Part #: 3E0729 (as shown).

45° Access*

Horizontal blast swath

Blast swath 0.75" (1.9 cm)
Axial length 7.7" (19.6 cm)
Minimum cavity opening 3.5" (8.9 cm)
Part #: 2E0324 (MS-045)



Blast swath 1" (2.5 cm)
Axial length 7.3" (18.5 cm)
Minimum cavity opening 5" (12.7 cm)
Part #: 2E0349 (MS-171)



Vertical blast swath

Blast swath 0.75" (1.9 cm)
Axial length 7.8" (19.8 cm)
Minimum cavity opening 3.5" (8.9 cm)
Part #: 2E0325 (MS-046)

*Recommended use with 3/4" (1.9 cm) Tube style handle. **Part #: 2E0275**

160° Access

Blast swath is 0.25" (0.6 cm).
Requires 70 SCFM (1.96 m³/min) to operate at 80 psi (5.5 bar).
Blast shield is clear enabling user to see area cleaning.
Part #: 2E0361 ("J" Hook)

Low Straight Flow

Powerful cleaning capabilities with low air consumption, maximizing cleaning ability without jeopardizing other compressed air operations. Requires 50 SCFM (1.4 m³/min) at 80 psi (5.5 bar).

Blast swath 0.6" (1.3 cm)
Length 10" (25.4 cm)
Part #: 2E0341 (510 SLF)

Blast swath 0.7" (1.8 cm)
Length 23" (58.4 cm)
Part #: 5E0179 (523 SLF)

Recommended use with 1" (2.5 cm) Tube style handle. **Part #: 2E0209**



510 SLF 523 SLF

90° Access*

Horizontal blast swath

Blast swath 0.75" (1.9 cm)
Axial length 7" (17.8 cm)
Minimum cavity opening 5.3" (13.5 cm)
Part #: 2E0326 (MS-047)



Blast swath 1" (2.5 cm)
Axial length 16.6" (42.2 cm)
Minimum cavity opening 3.4" (8.6 cm)
Part #: 2E0327 (MS-136)

Vertical blast swath

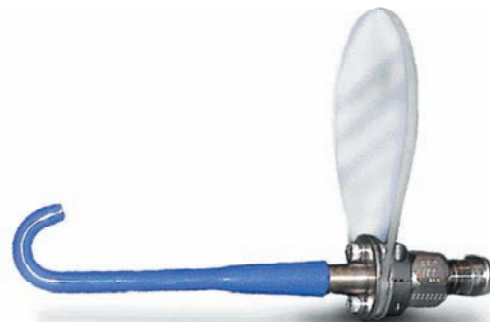
Blast swath 1" (2.5 cm)
Axial length 7.3" (18.6 cm)
Minimum cavity opening 7" (17.8 cm)
Part #: 2E0329 (MS-071)



135° Access

Vertical blast swath

Blast swath 0.75" (1.9 cm)
Axial length 7.3" (18.6 cm)
Minimum cavity opening 6.3" (16 cm)
Part #: 2E0328 (MS-050)



Ideal for cleaning deep cavity molds. The longer length 10" (25.4 cm) allows for more flexibility and smaller diameter (blast swath 0.25" (0.6 cm) allows the blast stream to escape the cavity being cleaned).

Part #: 5E0183 (TN 183)

Alpha adapter required for this nozzle.



Part #: 3E0729

Blast swath 0.5" (1.3 cm)
Length 14" (35.6 cm)
Part #: 2E0314 (TN 312)



Medium Flow Tight Access Nozzles

Full pressure nozzles with the maximum amount of aggression available for tight access.

45° Access



Blast swath 0.75" (1.9 cm)
 Axial length 8.9" (22.6 cm)
 Minimum cavity opening of 4" (10.16 cm)
 Low pressure
 Aluminum
Requires 120 SCFM (3.4 m³/min) at 80 psi (5.5 bar)
Part #: 5E0094 (307 BL)

80° Access



Blast swath 0.83" (2.1 cm)
 Axial length 8.3" (21 cm)
 Minimum cavity opening of 12.3" (31.2 cm)
 Aluminum with stainless steel tubing
Requires 155 SCFM (4.4 m³/min) at 80 psi (5.5 bar)
Part #: 2E0321 (205 BL)

*Shown with 1" (2.5 cm) OD Tube Style Handle
 Part #: 2E0209*

Medium Flow Straight Nozzles

Maximum performance for low-flow and low-pressure air systems. The longer the nozzle length, the more aggressive the blasting. The blast swath width determines the ice distribution onto the cleaning surface. Most require 100 SCFM (2.8 m³/min) at 80 psi (5.5 bar) unless noted.

Less than 1" (2.5 cm) Blast Swath 2" (5.1 cm) Blast Swath



Length is Customer Specified - up to 10"

Will not harm delicate tooling.

Blast swath 0.5" (1.3 cm)
 Length 3" (7.6 cm)
 Low pressure
Part #: 2E0331 (403 SL)

Blast swath 0.75" (1.9 cm)
 Length 8" (20.3 cm)
 Low pressure
Part #: 2E0323 (508 SL)

Suggested for use with 1" (2.5 cm) OD Tube Style Handle - Part #: 2E0209

Blast swath 3/8" (1 cm) OD
 Length 14" (34.8 cm)
 Full pressure
 Aluminum
Part #: 5E0936

Blast swath is 0.5" (1.3 cm)
 Length: Customer Specified - up to 10" (25.4 cm)
 Full pressure

Requires 150 SCFM (4.3 m³/min) at 80 psi (5.5 bar)
Part #: 2E0302-Length (TN-302)

Requires 150 SCFM (4.3 m³/min) at 80 psi (5.5 bar)

Blast swath 1.8" (4.6 cm)
 Length 12" (30.1 cm) long
 Low pressure
Part #: 5E0159 (413 SL)

Recommended for use with 1 3/16" (3 cm) OD Tube Style Handle - Part #: 2E0289

Length 23" (58.4 cm)
 Full pressure
Part #: 5E0176 (523 SF.2)

Length 7" (17.8 cm)
 Low pressure
Part #: 5E0141 (807 SL)

3" (7.6 cm) Blast Swath

Length 23" (58.4 cm)
 Low pressure

Requires 165 SCFM (4.7m³/min) at 80 psi (5.5 bar)
Part #: 5E0190 (223 SL)

Recommended for use with Clamp Style Handle - Part #: 2E0287

1" (2.5 cm) Blast Swath

Length 2" (5.1 cm)
 Low pressure
Part #: 5E0160 (402 SL)

Length 12" (30.5 cm)
 Low pressure
Part #: 5E0156 (412 SL)
Recommended for use with 1 3/16" (3 cm) OD Tube Style Handle Part #: 2E0289

Length 23" (58.4 cm)
 Full pressure
Part #: 5E0175 (523 SF)
Recommended for use with 1" (2.5 cm) OD Tube Style Handle Part #: 2E0209



402 SL 807 SL 412 SL 413 SL 523 SF 523 SF.2 223 SL

Nozzle Extension Tubes

Extension tubes are used to extend and/or turn nozzles. Minimum pressure loss. Connect directly to nozzle and applicator with proper fittings.


Bent Extension Tube

- 1" (2.5 cm) OD
- Flanged end fittings
- 80° turning angle

Part #: 2E0227

2E0259 - 11" (28 cm) extension after bend



 3/4" (1.9 cm) JICM Fitting recommended for the threaded end extension tube in order to connect to low flow tight access nozzles (P/N #: 12HTX-S)

Straight Extension Tube

- 1" (2.5 cm) OD
- Flanged end fittings
- Available in 2" (5.1 cm), 10" (25.4 cm), 20" (50.8 cm), and 30" (76.2 cm)

Part #: 2E0312 - Length
2E0226 - Length (includes coupler)

- 3/4" (1.9 cm) OD
- Internal threaded end fittings for low flow tight access nozzles
- Available in 10" (25.4 cm), 15" (38.1 cm), 20" (50.8 cm), and 30" (76.2 cm)

Part #: 3E0715 - Length



Accessories

JICF Quick Change Module



- Used on the Tight Access Applicator
- Enables quick and safe nozzle changes
- Can be used with all nozzles, with appropriate couplings and end fittings

Part #: 2E0360 - 3/4" (1.9 cm)

Alpha Series Adapter



- 1/2" (1.3 cm) to 1" (2.5 cm)
- Allows the 1" (2.5 cm) OD nozzle extension tube to be used with Applicators
- Aluminum

Part #: 2E0295

JIC Modular End Fittings



- Allows for custom configurations connecting hose to nozzle base (Part #: 2E0233).

Part #: 2N0060 - 1" (2.5 cm)
2N0064 - 3/4" (1.9 cm)

Nozzle Base



- Provides extension for nozzles in a 180° orientation beyond the exit of the blast applicator.

Part #: 2E0233

Deflector Plates



- Fits over blast end of nozzle to break up pellets
- Aluminum

Part #: 2E0367 - 1" (2.5 cm) to fit 523 SF and 412 SL
2E0352 - 2" (5.1 cm) to fit 807 SL
2E0409 - 2" (5.1 cm) to fit 523 SF.2
2E0386 - 3" (7.6 cm) to fit 223 SL

JICM Rotary Union



- Allows full rotation when a nozzle is attached to a blast hose, extension tube, or appropriate nozzle extension

• 3/4" (1.9 cm) JICF to 3/4" (1.9 cm) JICM

- Lightweight

- Hard-coat anodized Aluminum

Part #: 2N0163 - 3/4" (1.9 cm)

JICF to JICM Adapter



- Used to connect 1" (2.5 cm) hose to the blast machine

Part #: 2406-12-16 - 3/4" (1.9 cm) JICF to 1" (2.5 cm)

JICM Adapter

Alpha Series Coupler



- 3/4" (1.9 cm)

- Permits all low flow tight access nozzles to be used with Quick Change Module (QCM)

- Aluminum

Part #: 3E0729

JIC Blast Hose Fittings



Part #: 12HTX-S - 3/4" (1.9 cm) JICM

Part #: 16HTX-S - 1" (2.5 cm) JICM

Part #: 16-12HTX-S - 1" JICM (2.5 cm) to 3/4" (1.9 cm) JICM

Part #: 16-12TRBTX-S - 1" (2.5 cm) JICF to 3/4" (1.9 cm) JICM

Safety Kit

- Meets OSHA requirements for operator noise protection (with the use of properly rated and worn ear plugs)

- Kit includes the following:

100 sets of ear plugs

2 ear protectors

Eye protector shield

Gloves

Dry ice scoop

Part #: 2Z0001



Safety Accessories

Fire Sleeve



- Recommended if blast hose might be exposed to temperatures above 180° F (82.26° C)
- Allow 4' (1.2m) to 20' (6.1m) coverage for area of blast hose subject to high heat

Part #: 4N0094 - 3/4" (1.9 cm) OD
4N0152 - 1" (2.5 cm) OD
4N0153 - 1 1/4" (3.2 cm) OD

Whip Check



- Recommended for each length of air hose

Part #: 4Z0051

Spare Parts

Blast Unit

Part Number	Description	Qty
4G1150	Fuse, 2A	5
4G1040	Fuse, 160 mA	5
4G1224	Fuse, 6.3A	5
3E0815	Pad, lower	1
3E0816	Pad, upper	1
TBD	Rotor	1
4I0308	Element, filter	1

Single Mode Applicator

Part Number	Description	Qty
3G0062	Cable	1
4G1291	Switch, toggle	1
3G0063	Switch, toggle	1
4G1168	Boot, toggle	1
4G1264	Boot, seal toggle	1
4Z0185	O-ring	1