

# AbrasiBlast™ Respirators

[MSA Safety 486303 Abrasi-Blast Supplied Air Respirator Hood](#)



## Features

- ➔ Constant Flow Air-Line Respirator and Constant Flow Duo-Flow Respirator options
- ➔ Choice of Hypalon, duck cloth, or neoprene hood to meet various blasting applications.
- ➔ Vulcanized thread (elastomer to hood seam) on all new assemblies.
- ➔ Two to four easy-to-remove flat glass cover lenses mounted within special foam material on the lens cartridge.

## Description

Abrasi-Blast Respirators are air-line devices with tight-fitting facepieces and durable hoods that provide respiratory and upper body protection for workers engaged in abrasive blasting. Because blasting operations can vary widely in shipbuilding, construction, and utility industries, among others, the Abrasi-Blast Respirator can be modified through selection of different components or models to meet specific applications.

The respirator is available in Constant Flow Air-Line Respirator and Constant Flow Duo-Flo Respirator models, both of which can accommodate head protection products under the hood.

The constant flow model is a Type CE device as well and provides protection in abrasive blasting operations within lower contaminant levels (airborne lead concentrations less than 2,500 µg/m<sup>3</sup>).

Consisting of a hood, facepiece with lens housing, breathing tube, lens cartridge, flow-control device, air-supply hose, and support belt, the Abrasi-Blast Respirator is designed for diverse applications by varying individual components.

### 1. Flow-Control Device/Fittings-

the constant-flow model is approved for use in atmospheres not immediately dangerous to life or health and operates through an adjustable or non-adjustable control valve.

These versions incorporate the quick disconnect fitting with the flow-control device.

### Adjustable Control-Valve Connectors

feature a control knob that allows users to vary air flow within NIOSH-required flow rates (4 cfm minimum to 15 cfm maximum). The connectors are designed to deliver air at a fixed inlet pressure regardless of the approved hose length used. Low-pressure adjustable valve-connectors require inlet pressure between 10 and 15 psig with approved hose length of 8 to 50 feet.

High-pressure adjustable valve-connectors require inlet pressure between 35 and 40 psig with approved hose length of 8 to 300 feet.

### Non-adjustable Control-Valve

**Connectors** are available in both low-pressure and high-pressure versions and deliver required air flow to the facepiece at a fixed inlet pressure regardless of approved hose length used. (Inlet pressure and hose length comparable to adjustable valve requirements are listed previously.)

### Constant Flow Duo-Flo Option-

the Abrasi-Blast Respirator is also available in a constant flow duo-flo configuration. This configuration is designed to handle both air-supplied and air-purifying (particulate only) modes of operation.

Air-supplied mode of operation provides continuous flow of air into the facepiece and enables users to work for long periods of time in contaminated atmospheres without depleting the cartridge. Air-purifying mode of operation is designed for continuous use or when air supply is disconnected or not available. If air supply should fail, users are automatically protected by the air-purifying cartridge and can conveniently escape contaminated areas.

### 2. Lens Cartridge-

the cover lens cartridge assembly is an exclusive MSA design, allowing for lens changes without stopping work. Each removable lens (except for the last) has tabs which are pulled to remove cover lenses as abrasion occurs. The last lens has no pull tabs as it protects the facepiece's polycarbonate lens. Used lenses are stored in the hood's front pocket.

Five different lens cartridge types are available to match different blasting levels.

- For light abrasive blasting, MSA offers cartridges containing four 0.06-inch-thick glass lenses. Users can also choose regular glass or tempered lenses, which provide extra protection against breakage.
- For medium abrasive blasting, MSA offers cartridges containing three 0.09-inch-thick glass lenses. Users may select tempered or untempered lenses.
- For heavy abrasive blasting, cartridges containing two or three 0.12-inch-thick glass-laminated lenses are available.

### 3. Hood-

various hoods are available to meet different blasting applications:

- A Hypalon hood is available in both waist- and shoulder-length styles for general-purpose blasting.
- A lighter-weight duck cloth hood is available in waist- and chest-length styles to provide greater comfort during general-purpose blasting.
- Neoprene hoods in waist- and shoulder-length styles are available for close-in, heavy blasting operations.
- This Hypalon front, knit back hood is for use with blasting suits. This hood is offered in shoulder-length only.



**4. Facepiece-** the Abrasi-Blast Respirator uses a tight-fitting, full-face Ultravue® Facepiece together with the cover lens housing assembly.

Constant flow models feature a choice of dual (standard) or single exhalation valves.

**5. Breathing Tube-** the blow-molded breathing tube, which can be worn inside or outside of the hood, is available in standard and reinforced models.

**6. Air-Supply Hose-** three types of MSA air-supply hose are available in lengths of 8, 15, 25, 50 and 100 feet.

Neoprene is the most durable/chemical-resistant hose type. Polyvinyl chloride (PVC) is the most lightweight. Coiled nylon expands or contracts according to need.

MSA air-supply hoses must be used to maintain NIOSH approvals on the Abrasi-Blast Respirator.

**7. Belt-** two support belts are available: a standard web belt and a urethane belt for easier decontamination.

## Ordering Information

### Standard Constant Flow Abrasi-Blast Respirator Assemblies

(Includes Hypalon hood, medium facepiece with dual exhalation valve (**472666**), lens housing, one lens cartridge (four 0.06" untempered glass cover lenses per cartridge), breathing tube (**470734**), web belt (**9961**), and adjustable Snap-tite\* (AL) valve connector with socket assembly).

Hypalon Hood	Flow-Control Device	Complete Assembly
Waist	10-15	<b>468716</b>
	35-40	<b>468718</b>
Shoulder	10-15	<b>468720</b>
	35-40	<b>468722</b>

(Order air-supply hose separately).

## Build Your Own Abrasi-Blast Respirator

To design your own respirator, purchase component parts separately by selecting part numbers from the following tables. You may also contact MSA Customer Service for assistance with building a configuration that best suits your needs. For all Duo-Flo Abrasi-Blast Respirator inquiries, call MSA Customer Service.

### 1. Fittings/Flow-Control Devices

For constant flow respirator versions, select one flow-control device; male fittings are already incorporated. If necessary, choose air-line hose fitting from female socket assemblies. For pressure-demand, make no selection.

#### High-Pressure (35-40 psig) Flow-Control Device

Quick Disconnect Male Fitting	Adjustable Control Valves w/ Plug less Socket Assembly	Non-Adjustable Control Valve w/ Plug less Socket Assembly
Snap-tite, aluminum	<b>474022</b>	<b>474001</b>
Snap-tite, brass	<b>474023</b>	<b>474005</b>
Snap-tite, stainless steel	<b>474024</b>	<b>474006</b>
Foster, steel	<b>474021</b>	<b>474002</b>
Foster, brass	<b>474027</b>	<b>474007</b>
Hansen, brass	<b>474026</b>	<b>474004</b>
Hansen, stainless steel	<b>474028</b>	<b>474008</b>
CEJN locking	<b>479093</b>	<b>479079</b>

#### Quick Disconnect Plugs & Female Socket Assemblies for use with all systems

Quick Disconnect Fittings	Male Plug w/ 1/4" NPTF	Female Socket Assembly
Snap-tite, aluminum	<b>66274</b>	<b>455019</b>
Snap-tite, brass	<b>630307</b>	<b>471777</b>
Snap-tite, stainless steel	<b>629672</b>	<b>471778</b>
Hansen brass	<b>630313</b>	<b>471501</b>
Hansen stainless steel	<b>628208</b>	<b>471779</b>
Foster/Schrader steel	<b>55716</b>	<b>467044</b>
Foster brass	<b>629981</b>	<b>470194</b>
CEJN locking	<b>479026</b>	<b>479001</b>

#### Low-Pressure (10-15 psig) Flow-Control Device

Quick Disconnect Male Fitting	Adjustable Control Valves with Plug less Socket Assembly	Non-Adjustable Control Valve with Plug less Socket Assembly
Snap-tite, aluminum	<b>474031</b>	<b>474010</b>
Snap-tite, brass	<b>474032</b>	<b>474014</b>
Snap-tite, stainless steel	<b>474033</b>	<b>474015</b>
Foster, brass	<b>474036</b>	<b>474016</b>
Foster, steel	<b>474034</b>	<b>474012</b>
Hansen, brass	<b>474035</b>	<b>474013</b>
Hansen, stainless steel	<b>474037</b>	<b>474017</b>
CEJN locking	<b>479100</b>	<b>479086</b>

## 2. Lens Cartridge

Cartridge Carton (12 per carton)	Lens Description	Recommended Use
473238	0.06" thick, untempered, 4 per carton	Light blasting
473240	0.06" thick, tempered, 4 per carton	Light blasting
473798	0.09" thick, untempered, 3 per carton	Medium blasting
473800	0.09" thick, tempered, 3 per carton	Medium blasting
473802	0.12" thick, untempered, laminated, 2 per carton	Heavy blasting
481742	0.12" thick, untempered, laminated, 3 per carton	Heavy blasting

## 3. Hood Options

Part No.	Description
468724	Hypalon waist
468725	Hypalon shoulder
480699	Duck cloth chest
480697	Duck cloth waist
486304	Neoprene shoulder
486303	Neoprene waist
486329	Knit back, Hypalon front, shoulder

## 4. Facepiece comes with glass laminated lens; complete with lens housing.

### Constant Flow Ultravue\*

Part No.	Exhalation Valve*	Size
472668	Dual	Small
473314	Single	Small
472666	Dual	Medium
473312	Single	Medium
472670	Dual	Large
473316	Single	Large

\* Duo-Flow Abrasi-Blasts Respirators are approved with only single exhalation valves.

## 5. Breathing Tube

Part Number	Description
470734	Standard breathing tube*
801758	Reinforced breathing tube*

\*Duo-Flo Abrasi-Blast Respirators are approved with only standard breathing tube.

## 6. Air-Supply Hose\*

Hose Material	Hose Coupling	100 ft.	50 ft.	25 ft.	15 ft.	8 ft.
Neoprene	Brass	—	455022	455021	455020	481071
	Stainless steel	—	481080	481079	481078	481077
PVC	Brass	484225	471513	471512	471511	481051
	Stainless steel	—	481060	481059	481058	481057
Coiled Nylon	Brass	—	474043*	491515*	491514*	491513*
Hose reel - 50 ft. of 3/8" neoprene hose P/N 455022						72444

\* Recommended usable length 4-25 ft.

## 7. Belt

Part Number	Description
9961	Standard web belt
492827	Urethane belt

### Parts & Accessories

Part Number	Description
10087006	Lens housing adapter, less lens cartridge
476089	Air-line filter-cartridge holder for use with GMA cartridge (464031, box of 10 each)
468705	Replacement zip-in collar assembly
454819	Spectacle Kit for prescription lenses

### Approvals & Standards

The Abrasi-Blast Respirator has the following NIOSH/MSHA approvals:

- Approval TC-19C-161 for Abrasi-Blast Respirator when used with 8 to 0 ft. of MSA air-supply hose at an inlet pressure of 10 to 15 psig.
- Approval TC-19C-162 for Abrasi-Blast Respirator when used with 8 to 300 ft. of MSA air-supply hose at an inlet pressure of 35 to 40 psig.
- Duo-Flow Abrasi-Blast Respirator - see NIOSH-approved matrix, PN 818148

**Note:** This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.