

Welding Helmets / Auto-Darkening Filters

Speedglas™ Helmets and Auto-Darkening Filters (ADFs)

- Safety products that help increase welding performance
- Constant UV/IR protection
- Welding helmets that breathe
- Helmet option with side windows to improve visibility, safety and comfort
- Ideal for weld prep/grinding



The Speedglas™ SideWindows

Speedglas™ SideWindows helmets from 3M™ allow for peripheral vision. The two shade 5 side filters increase the peripheral viewing area by over 100%. The two side filters are designed solely for peripheral vision; the welder continues to view his own arc through the center (auto-darkening) filter.



The Speedglas™ ProTop System

3M™ has an exclusive pivot mechanism that “nests” the welding helmet down low over the hardhat, in a balanced, secure position. The lower center-of-gravity helps reduce neck strain.



The Speedglas™ FlexView System

Available from 3M™, these helmets have a big 4.7 in. x 3.6 in. (120mm x 90mm) clear polycarbonate faceshield that's ideal for precision weld preparation work under a variety of lighting conditions. The user simply lifts up the spring-mounted Speedglas™ filter assembly for weld prep. The faceshield meets the ANSI Z87.1-2003 industrial eye and face protection standard.



Specification Chart for Speedglas™ Helmets

	9002X	9002V	9000XF	9002D	Utility
	<ul style="list-style-type: none"> • Variable Shade • Shades 9 to 13 • MIG, Stick, TIG • Large Viewing Area • 4 Sensitivity Adjustments • 3 Delay Settings • Solar Panel 	<ul style="list-style-type: none"> • Variable Shade • Shades 9 to 13 • MIG, Stick, TIG • 4 Sensitivity Settings • 3 Delay Settings 	<ul style="list-style-type: none"> • Fixed Shade • Available in Shades 10, 11, or 12 • MIG, Stick, some TIG • Large Viewing Area • Sensitivity Adjustment • Solar Panel 	<ul style="list-style-type: none"> • Dual Shades 10 and 11 • MIG, Stick, some TIG 	<ul style="list-style-type: none"> • Fixed Shade • Available in Shades 10 or 11 • MIG and Stick
Helmet System(s)	9002X	9002V	9000XF	9002D	Utility
Standard	04-0012-21	04-0012-31	04-0012-10	04-0012-15	04-0014-10U
SideWindows	04-0012-21SW	04-0012-31SW	04-0012-10XSW	04-0012-15SW	N/A
ProTop	04-0015-21	04-0015-31	04-0015-10X	04-0015-15	N/A
ProTop + SideWindows	04-0015-21SW	04-0015-31SW	04-0015-10XSW	04-0015-15SW	N/A
FlexView	04-0016-21	04-0016-31	04-0016-10X	04-0016-15	N/A
FlexView + SideWindows	04-0016-21SW	04-0016-31SW	04-0016-10XSW	04-0016-15SW	N/A
FlexView + ProTop	04-1516-21	04-1516-31	04-1516-10X	04-1516-15	N/A
FlexView + ProTop + SideWindows	04-1516-21SW	04-1516-31SW	04-1516-10XSW	04-1516-15SW	N/A

Speedglas™ Replacement Lenses

The inner lens of the filter assembly provides the same continuous UV/IR protection as a traditional shade 13 filter plate (as regulated by USA and Canadian welding safety standards). Note: Because faceshields and welding shields can be raised from the normal position, ANSI Z87.1-2003 states that safety glasses must be used in conjunction with these helmets.



Helmet Model	Outer Lens	Inner Lens (filter)
AT, APC & *APC-V	02-0270-00	02-0280-00
XL	03-0270-00	03-0280-00
Utility & 9000 series		
9000X & XF	04-0270-00	04-0280-00
9000F & V		04-0290-00

* Discontinued Helmet Model

Speedglas™ SL Welding Helmet

- State-of-the-art liquid crystal design.
- Superior optics for visual clarity and weld pool control.
- Light state of shade 3, dark shade range 8-12.
- 4 sensitivity levels for all welding processes, even extreme low amp TIG.
- Patented auto On/Off technology.
- New headband with fast-adjusting, flexible, multiple position headband.
- Factory equipped hard-coated outside protection for abrasion and spatter resistance.
- Replaceable batteries.
- Fully ANSI Z87.1-2003 compliant.

Headgear Design

- 2-size front portion of suspension fits more head sizes and face shapes.
- 4-position, back/forth slide adjustment.
- Adjustment in rear, for easy one-hand tightening and push-button adjustment.



Part No.	Description
05-0013-00	SL helmet (helmet only – does not include headband)
05-0013-41	SL helmet with auto-darkening filter, shade 8-12
05-0000-41	Auto-darkening filter, shade 8-12

Replacement Parts and Accessories for 3M™ Speedglas™ Filters and SL Helmet



Part No.	Description	Case Qty
Protection Plates		
05-0250-00	Outside protection plate	5 per case
05-0250-01	Outside protection plate (hard-coated and painted)	5 per case
Miscellaneous Parts/Accessories		
05-0370-00	Battery holder	2 per case
05-0650-00	Headband and mounting hardware	1 per case
05-0660-00	Headband assembly kit	10 per case

Air-Purification Systems

3M™ Speedglas™ with Adflo™ System

- Lightweight, compact, all-in-one system.
- Exclusive “stackable” configuration allows the Adflo™ high efficiency (HE) particulate filter to be combined with a chemical cartridge for additional protection.
- Designed for comfort within exhausting and hard-to-breathe environments which can help lead to more productive work time.



Adflo™ System	9002X	9002V	9000XF	9002D
(HE) with 9000 HWR Helmet	15-1101-21	15-1101-31	15-1101-10X	15-1101-15
(HE) with 9000 HWR Helmet SideWindows	15-1101-21SW	15-1101-31SW	15-1101-10SW	15-1101-15SW
(HE) with FlexView System Helmet	16-1101-21	16-1101-31	16-1101-10X	16-1101-15
(HE) with FlexView System Helmet SideWindows	16-1101-21SW	16-1101-31SW	16-1101-10SW	16-1101-15SW
(HE + OV/SD/CL/HC) with 9000 HWR Helmet	15-3301-21	15-3301-31	15-3301-10X	15-3301-15
(HE + OV/SD/CL/HC) with 9000 HWR Helmet SideWindows	15-3301-21SW	15-3301-31SW	15-3301-10SW	15-3301-15SW
(HE + OV/SD/CL/HC) with FlexView System Helmet	16-3301-21	16-3301-31	16-3301-10X	16-3301-15
(HE + OV/SD/CL/HC) with FlexView System Helmet SideWindows	16-3301-21SW	16-3301-31SW	16-3301-10SW	16-3301-15SW

NOTE: Not for paint spraying of flammable substances, or where intrinsic safety is required.

Because faceshields and welding shields can be raised from the normal position, ANSI Z87.1-2003 states that safety glasses must be used in conjunction with these respirators.

3M™ Fresh-air II Supplied Air System

- The NIOSH-approved supplied air (SA) 9000 system provides respiratory protection from airborne particulates and gases. The lightweight, belt-mounted valves permit the welder to adjust the temperature of the air entering the headpiece, making it ideal for very hot or strenuous jobs.
- Cool-air valve permits welder to lower the temperature of the supplied air by up to 45°F (25°C).
- Temp-air valve allows either cooling or warming of the supplied air ±45°F from the supplied air temperature.



Fresh-air II Supplied Air Systems	9002X	9002V	9000XF	9002D
Cool-air (CA) System with 9000 HWR Helmet	14-5701-21	14-5701-31	14-5701-10X	14-5701-15
Cool-air (CA) System with 9000 HWR Helmet and SideWindows	14-5701-21SW	14-5701-31SW	14-5701-10XSW	14-5701-15SW
Temp-air (TA) System with 9000 HWR Helmet	14-5801-21	14-5801-31	14-5801-10X	14-5801-15
Temp-air (TA) System with 9000 HWR Helmet and SideWindows	14-5801-21SW	14-5801-31SW	14-5801-10XSW	14-5801-15SW

NOTE: Final determination of respirator applicability and filter selection must be made by an on-site safety specialist or industrial hygienist.

Because faceshields and welding shields can be raised from the normal position, ANSI Z87.1-2003 states that safety glasses must be used in conjunction with these respirators.

Valve Model	CFM Required	CFM Delivered	Pressure Range (PSIG)	Max. # of Hoses/Length*
Cool-air	12-25	6-15	70-105	4 hoses/100'
Temp-air	12-25	6-15	85-110	4 hoses/100'**

*Indicates maximum number of hoses and maximum total length.

**Temp-air valve is approved for use with breather hose only.

Hardhat Systems for Supplied Air Cool-air and Temp-air Systems

Use the chart to the right to determine which parts are required in tailoring the hardhat air system to your specifications.



Part No.	Description
1. Helmet Assembly (choose one from the following)	
14-0099-35H	9000 HWR Helmet with Hardhat
14-0099-35HSW	9000 HWR Helmet with Hardhat and SideWindows
2. Breathing Tube, Supplied Air Control Air Valve	
18-0099-63	Breathing Tube
(plus, choose one from the following)	
18-0099-47	Cool-air Valve (CA)
18-0099-48	Temp-air Valve (TA)
3. Supplied Air Hoses (choose one from the following)	
18-0099-40	25' Breather Hose, with Couplings
18-0099-41	50' Breather Hose, with Couplings
18-0099-42	100' Breather Hose, with Couplings
18-0099-43*	25' NyCoil™ Hose, with Couplings
18-0099-44*	50' NyCoil™ Hose, with Couplings
18-0099-45*	100' NyCoil™ Hose, with Couplings
4. Belt	
18-0099-16	Comfort Belt
5. Appropriate 3M™ Speedglas™ Auto-Darkening Filter (choose one of the following)	
04-0000-15	9002D User Selectable Shades 10 and 11
04-0000-10X	9000XF Shade 10
04-0000-11X	9000XF Shade 11
04-0000-12X	9000XF Shade 12
04-0000-31	9002V Filter
04-0000-21	9002X Filter

*NyCoil™ hoses can only be used with Cool-Air valve Supplied Air (SA) Systems.

L-Series Headgear

3M™ L-Series Headgear



Part Nos. L-501



L-503



L-505



L-701



Part Nos. L-703



L-705



L-901



L-905

Part No.	Description	Applications
Bumpcap		
L-501	w/faceshield	Chipping; grinding; pharmaceutical and laboratory; welding; painting; sanding; buffing; soldering; brazing; cutting; chemical processing or mixing; plasma cutting.
L-503	w/welding shield	
L-505	w/welding and face shield	
Hardhat		
L-701	w/faceshield	Chipping; grinding; welding; sanding; buffing; soldering; brazing; cutting; chemical processing or mixing; plasma cutting.
L-703	w/welding shield	
L-705	w/welding and face shield	
Helmet		
L-901	w/welding and face shield	Chipping; grinding; welding; sanding; buffing; soldering; brazing; plasma cutting
L-905	w/welding and face shield	

L-Series Headgear

3M™ L-Series Headgear



Part Nos. L-501



L-503



L-505



L-701



Part Nos. L-703



L-705



L-901



L-905

Part No.	Description	Applications
Bumpcap		
L-501	w/faceshield	Chipping; grinding; pharmaceutical and laboratory; welding; painting; sanding; buffing; soldering; brazing; cutting; chemical processing or mixing; plasma cutting.
L-503	w/welding shield	
L-505	w/welding and face shield	
Hardhat		
L-701	w/faceshield	Chipping; grinding; welding; sanding; buffing; soldering; brazing; cutting; chemical processing or mixing; plasma cutting.
L-703	w/welding shield	
L-705	w/welding and face shield	
Helmet		
L-901	w/welding and face shield	Chipping; grinding; welding; sanding; buffing; soldering; brazing; plasma cutting
L-905	w/welding and face shield	

3M™ 1100/1110 Foam Ear Plugs

Comfortable, unobtrusive, easy-to-use ear plugs won't interfere with employee day-to-day job routines.

- Tapered design conforms to ear canal.
- Smooth, dirt-resistant surface stays clean for good hygiene.
- Can be used with other personal protection equipment.
- Hypoallergenic.
- NRR 29

Part No. 1100- packed 200 pair/box; 5 boxes/case

Part No. 1110- packed 100 pair/box; 5 boxes/case



Part No. 1100



Part No. 1110

3M™ 1260 Reusable Ear Plugs

Comfortable and dependable solution for hearing protection. Perfect for everyday use in a wide variety of industrial settings.

- Triple-flanged plugs fit securely into ear canal.
- Provides reliable hearing protection.
- Can be washed and reused protected and dust-free.
- NRR 25
- 1260 packed 100 pair/box; 5 boxes/case.

Part No. 1260



3M™ 1310/1311 Banded Hearing Protector

Great option for employees who need intermittent hearing protection when going in and out of loud work environments.

- Unique, flexible band design allows greater ease of use and low pressure over a wide range of head sizes.
- Pads fit softly into the ear.
- Pads are cost-effective and ensure better hygiene.
- 3M™ Replacement Pads #1311 available separately.
- NRR 21 when worn behind the head and 20 dB when worn under the chin.
- Packed 10 each/box; 5 boxes/case.

Part No. 1310



3M™ 1270/1271 Corded Reusable Ear Plugs

Reusable ear plugs that are almost impossible for employees to lose. They come connected to a soft, braided cord so employees can remove and reinsert them repeatedly during the work day.

- Triple-flanged plugs fit snugly into ear canal.
- Provides reliable hearing protection.
- Can be washed and reused.
- Cord will not twist or bind and reduces noise transmission.
- Also available with storage case (#1271) that keeps plugs clean, protected and dust-free.
- NRR 25

Part No. 1270- packed 100 pair/box; 5 boxes/case

Part No. 1271- packed 50 pair/box; 5 boxes/case



Part No. 1270



Part No. 1271

3M™ 1435 General Purpose Ear Muffs

Larger, more durable muffs provide reliable protection for everyday use. The lightweight design and flexible headband make them easy and comfortable for your employees to wear.

- Wide-forked headband provides better fit and consistent ear cup seal.
- Larger ear cups offer greater comfort and fit.
- Sealing cushions are soft and easy on ears.
- 3M™ Replacement Parts Kit 1437 available separately.
- NRR 23
- Packed 1 each/box; 20 boxes/case.

Part No. 1435



3M™ 1440 Padded Ear Muffs

Lightweight padded muffs feature a soft headband for extra comfort and a sliding adjustment for the best possible fit.

- Ear cushion fits snugly for maximum sound insulation.
- Sliding adjustment on headband assures a comfortable fit.
- Ear cups move in multiple positions for best possible noise reduction.
- NRR 24
- Packed 1 each/box; 20 boxes/case.

Part No. 1440



3M™ 1425 Low Profile Ear Muffs

Economical, dependable, lightweight ear muffs ideal for everyday use.

- Soft, foam contoured ear cups and sliding headband are easy to adjust for customized, comfortable fit.
- Rugged construction is durable for most work environments. Recommended for moderately high noise situations.
- NRR 22
- Packed 1 each/box; 20 boxes/case.

Part No. 1425



3M™ 1427 Three Position Ear Muffs

A combination of outstanding performance and remarkable versatility.

- Rotating, padded headband may be worn in three different positions (over the head, behind the head, under the chin) to enhance comfort and convenience.
- Ear cups are soft and foam-filled for comfort and a secure fit.
- Recommended for high noise situations.
- NRR 27
- Packed 1 each/box; 20 boxes/case.

Part No. 1427



3M™ 1450 Hard Hat Mounted Ear Muffs

Fits a variety of hard hats without additional adapters.

- Ear muffs conveniently flip up and lock when not in use.
- Ear cups move in multiple positions for best possible noise reduction.
- Lightweight (7.5 oz) design and ear cushion provide optimal comfort.
- NRR 23
- Packed 1 each/box; 20 boxes/case.

Part No. 1450 (hard hat not included)



Half and Full Face Respirators

5000 Series

The 5000 Series respirators are lightweight, well balanced, and come in three color coded sizes for quick identification. Respirators come pre-assembled, have no spare parts and require no maintenance. Designed for simplicity and ease of use while providing greater worker comfort.

Organic Vapor

Part No. 5101- Small
Part No. 5201- Medium
Part No. 5301- Large



Organic Vapor/Acid Gas

Part No. 5103- Small
Part No. 5203- Medium
Part No. 5303- Large



Paint Spray & Pesticide

Part No. 51P71- Small
Part No. 52P71- Medium
Part No. 53P71- Large



6000 Series

The lightweight and comfortable 3M™ 6000 Series low-maintenance respirators offer a cost-effective solution to reusable respirators. With limited spare parts, cleaning and care of the facepiece is fast and simple. Both half and full facepiece respirators are available in three sizes.

Half Face Respirator

Part No. 6100- Small
Part No. 6200- Medium
Part No. 6300- Large
For use with 6000 series cartridges and 2000 series filters.



Half Facepiece w/P100 Filters

Part No. 6191- Small
Part No. 6291- Medium
Part No. 6391- Large
With one pair of 2091 particulate filters, this respirator fits under Jackson Shadow Helmet.



Full Facepiece

Part No. 6700- Small
Part No. 6800- Medium
Part No. 6900- Large



6000 Drop Down Series

The 6000 Drop Down Series facepiece is the latest innovation in half facepiece design. The facepiece incorporates a unique drop down head harness system for workers who need to frequently communicate. It is designed for workers who wear hard hats with liftable face shields. With this system, the facepiece drops straight down onto the chest by removing the neck strap.

Half Facepiece

Part No. 6100DD- Small
Part No. 6200DD- Medium
Part No. 6300DD- Large



7000 Series

The 7000 Series feature interchangeable cartridges and filters for variety of applications, two facepiece styles to comfortably fit varying facial features, and a low-profile design of facepieces and cartridges/prefilters.

Ultra-Reusable Half Facepiece

Part No. 7500S- Small
Part No. 7500M- Medium
Part No. 7500L- Large



Full Face-Silicone

Part No. 7800S-S- Small
Part No. 7800S-M- Medium
Part No. 7800S-L- Large



5000 and 6000 Series Parts Breakdown

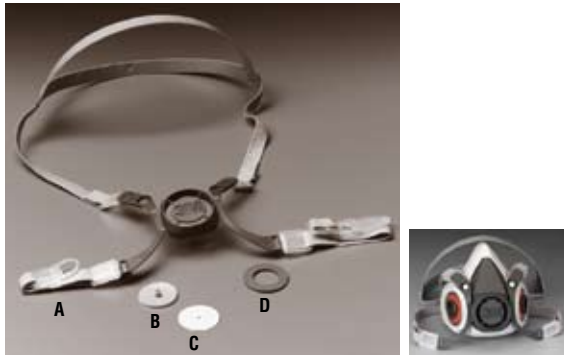
Respirator Replacement Parts

3M™ 5000 Series

No Accessories or Spare Parts Needed for 5000 Series

3M™ 6000 Series Half Facepiece

Part No. 6100 — 6300



Item	Part No.	Description
A	6281	Head harness assembly
B	6889	Exhalation valve
C	6893	Inhalation valve
D	6895	Inhalation gasket

3M™ 6000 Series Full Facepiece

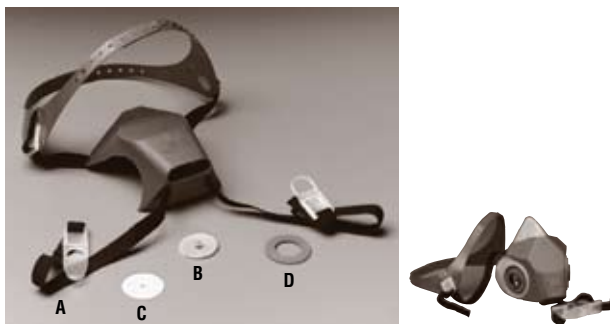
Part No. 6700 — 6900



Item	Part No.	Description
A	6878	Spectacle kit
B	6885	Face shield covers
C	6886	Tinted lens cover
D	6889	Exhalation valve
E	6892	Center adapter assembly
F	6893	Inhalation valve
G	6894	Nose cup
H	6895	Inhalation gasket
I	6896	Adapter gasket
J	6897	Head harness
K	6898	Lens assembly
L	6899	Frame kit
M	6883	Neck strap

3M™ 6000 Drop Down Series Half Facepiece

Part No. 6100DD — 6300DD

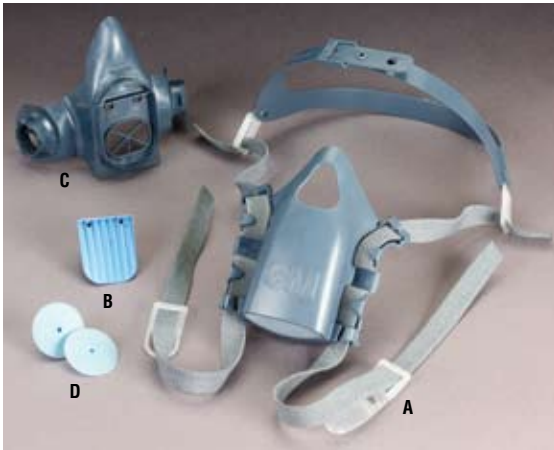


Item	Part No.	Description
A	6282	Head harness
B	6889	Exhalation valve
C	6893	Inhalation valve
D	6895	Inhalation gasket

7000 Series Parts Breakdown

3M™ 7500 Series Half Facepiece

Part No. 6100DD — 6300DD



Item	Part No.	Description
A	7581	Head harness assembly
B	7583	Exhalation valve
C	7586	Cartridge/filter holder
D	7582	Inhalation gasket

3M™ 7800 Series



Item	Part No.	Description
A	0601	Quantitative fit test adapter
B	6895	Inhalation gasket
C	0701	Cartridge/filter adapter
D	7282	Inhalation valve
E	7283	Exhalation valve
F	7881S	Nose cup assembly, silicone
G	7882	Nose cup valve assembly
H	7883	Neck strap assembly
I	7884	Lens
J	7885	Lens frame kit
K	7886	Removable DIN connector
L	7887	Inhalation valve gasket
M	7890	Full facepiece plug
N	7893	Head strap assembly, silicone
O	7894	Eyeglass frame and mount
P	7895	Speaking diaphragm kit
Q	7899	25- lens cover (25 pack)
R	7899	100- lens cover (100 pack)
S	7914	Band clamp
T	7915	5- Tyvek® shroud
U	7916	5- Breathing room assembly
V	7918	Exhalation valve cover
W	7925	Spectacle kit
X	7981S	Small nose cup assembly-silicone
Y	7986	Tinted lens cover
Z	7989	Full facepiece button
AA	7990	Clip-on welding faceshield kit
BB	7991	Electronic lens assembly
CC	7992	Electronic lens gasket
DD	7993	Welder's shroud
EE	7999	Air inlet gasket

Particulates w/Nuisance Odors

Particles with Nuisance Odor

3M™ research indicates that in environments with particulate hazards, 65% of those environments may also have problems with nuisance odor. Our product line includes a wide range of respirators which remove particles while reducing odors. For dusty work conditions with nuisance levels of organic vapors or acid gases below OSHA permissible exposure levels (PEL), carbon loaded 3M™ respirators help reduce worker complaints and raise productivity. (For organic vapors and acid/or gases above the PEL, use an appropriate 3M™ NIOSH approved respirator.)

8577 P95

3M™ 8577 P95 with 3M™ recommended nuisance level (below OSHA PEL) organic vapor relief. Commonly used in either oil or non-oil environments where particulate contaminants are found with low levels (below OSHA PEL) of organic vapors. Applications would include boat manufacturing, undercoating, food processing and petrochemical operations.

- Advanced Electret Media
- Cool Flow Exhalation Valve
- M-Noseclip
- Odor-Removing Filter Material
- P95
- 10 ea/box

Part No. 8577



8576 P95

3M™ 8576 P95 with 3M™ recommended nuisance level (below OSHA PEL) acid gas relief. For use in aluminum reduction, petrochemical manufacturing, and glass etching applications in either oil or non-oil environments where particulates and nuisance levels of hydrogen fluoride, sulfur dioxide and/or chlorine are present.

- Advanced Electret Media
- Cool Flow Exhalation Valve
- M-Noseclip
- Odor-Removing Filter Material
- P95
- 10 ea/box

Part No. 8576



8247 R95

3M™ 8247 R95 with 3M™ recommended nuisance level organic vapor relief. For use in applications such as foundries, undercoating, petrochemical operations and agricultural situations where particles are present with concentrations of organic vapors below the OSHA PEL.

The respirator filter is NIOSH certified to provide at least 95% efficiency against solid and liquid particles, including oils. Time use restrictions may apply.

- Advanced Electret Media
- Odor-Removing Filter Material
- R95
- 20 ea/box

Part No. 8247



Welding

Heat, sparks, odor, and harmful particles are some of the many factors to consider when selecting respirators for welding, brazing, soldering and metal pouring. 3M™ respirators are compatible with welding hoods and goggles, and include innovations such as cake-resistant filter media and durable shells for better performance in welding environments. From maintenance-free to conventional respirators, you'll find the right one for your application.

8212 N95

The 8212 N95 respirator is for use when welding, torch cutting, soldering, brazing and working with molten metals. Helps provide protection when welding on galvanized and stainless steel. Fits easily under a welding hood. The respirator filter is NIOSH certified to provide at least 95% efficiency at removing solid and liquid particles (excluding those containing oil).

- Advanced Electret Media
- Adjustable Straps
- Cake-Resistant Filter Media
- Cool Flow Exhalation Valve
- Faceseal
- N95
- 10 ea/box

Part No. 8212

Part No. 8512 Same as 8212 without Faceseal



8214 N95

The 8214 N95 is NIOSH certified to provide at least 95% filter efficiency against non-oil particulate contaminants. It is designed for welding and metal fume applications with ozone or nuisance level odors (concentrations of organic vapors below the OSHA PEL). The 8214 is suited for maintenance, welding, torch cutting, brazing, soldering and metal pouring. Carbon layers trap nuisance level odors and ozone up to 10 times the OSHA PEL. Not for use above 10X PEL or express OSHA limitations.

- Advanced Electret Media
- Cake-Resistant Filter Media
- Cool Flow Exhalation Valve
- Faceseal
- N95
- 10 ea/box

Part No. 8214

Part No. 8514 Same as 8214 without Faceseal



8293 P100

For those who want maximum filter efficiency in a maintenance free respirator, 8293 P100 has been certified by NIOSH to provide at least 99.97% filter efficiency against solid and liquid particles in either oil or non-oil environments. This respirator can be used when grinding, welding, working with lead, or situations where arsenic or cadmium are present up to 10X the OSHA PEL.

- Adjustable Straps
- Advanced Electret Media
- Cool Flow Exhalation Valve
- Faceseal
- P100
- 1 ea/bag

Part No. 8293



8233 N100

For those who want maximum filter efficiency in a maintenance free respirator, the 3M™ 8233 N100 has been certified by NIOSH to provide at least 99.97% filter efficiency against solid and liquid particles (excluding those containing oil). This respirator can be used when grinding, welding, working with lead, or situations where arsenic or cadmium are present up to 10X the OSHA PEL.

- Adjustable Straps
- Advanced Electret Media
- Cool Flow Exhalation Valve
- Faceseal
- N100
- 1 ea/bag

Part No. 8233



Particulate Respirators

From woodworking to tobacco processing, workers in many industries require protection from airborne particles. Sweeping, grinding, sanding, and bagging create a unique set of demands, especially in environmental considerations such as heat, humidity and odor. At 3M™, safety and comfort innovations are standard issues. No one offers more solutions than 3M™, and now with our 42CFR84 approved products you have even more opportunities to enhance your respiratory program.

8000 N95

An Economical Solution for light duty or short duration applications. The basic features and lightweight construction of this style respirator make it an economical and effective choice for a variety of dusty applications over other respirators or masks.

- Two-strap design
- Adjustable nose clip
- Lightweight construction.
- Advanced Electret Media
- N95
- 20 ea/box

Part No. 8000



8110S N95

3M™ 8110S N95 has been certified by NIOSH as being at least 95% efficient at removing solid and liquid particles (excluding those containing oil). With a shell that is 20% smaller than the 3M™ 8210 respirator, the 8110S is designed to provide workers with small facial features quality, reliable protection when engaged in areas such as pharmaceutical manufacturing, sanding, textile processing, lab settings and other applications.

- Advanced Electret Media
- N95
- 20 ea/box

Part No. 8110S



8200 N95

An Economical Solution for Particulate Exposure. The basic features and lightweight construction of the 8200 make it an economical choice for a variety of applications where exposure to particles may be a concern..

- Two-strap design with dual point attachment.
- Adjustable nose clip reduces eye wear fogging and helps ensure a better seal and fit.
- Lightweight construction.
- Advanced Electret Media
- N95
- 20 ea/box

Part No. 8200



8210 N95

3M™ 8210 N95 has been certified by NIOSH as being at least 95% efficient at removing solid and liquid particles (excluding those containing oil).

The 8210 is designed to provide quality, reliable worker protection in applications such as grinding, sanding, sawing, sweeping and bagging.

- Advanced Electret Media
- N95
- 20 ea/box

Part No. 8210



8211 N95

3M™ 8211 N95 is NIOSH certified to have at least 95% filter efficiency at removing solid and liquid particles (excluding those containing oil). Workers will appreciate the added comfort and durability found in this respirator.

- Advanced Electret Media
- Cool Flow Exhalation Valve
- Faceseal
- M-Noseclip
- N95
- 10 ea/box

Part No. 8211

Part No. 8511- Same as 8211 without Faceseal



8515 N95

3M™ 8515 N95 is designed to help provide comfortable, reliable worker protection for applications such as welding, soldering, cutting, grinding and sanding. This respirator offers a number of benefits to you and your workers.

- Advanced Electret Media
- M-Nose Clip
- Cool Flow™ Exhalation Valve
- 3M™ Welding Web
- N95
- 10 ea/box

Part No. 8515



8271 P95

3M™ 8271 P95 is NIOSH certified to have at least 95% filter efficiency against solid and liquid particles. Uses include grinding, sanding, sawing in either oil or non-oil environments.

- Advanced Electret Media
- Cool Flow Exhalation Valve
- Faceseal
- M-Noseclip
- P95
- 10 ea/box

Part No. 8271



9210 N95

3M™ 9210 N95 is a non-valved, three panel filtering facepiece respirator. An adjustable nose clip helps provide a custom fit and secure seal.

- Soft cover web on inner panel
- Adjustable Nose Clip
- Individually packaged
- Lightweight, collapse-resistant design
- N95
- 20 ea/box

Part No. 9210



9211 N95

3M™ 9211 N95 is a valved, three panel filtering facepiece respirator. An adjustable nose clip helps provide a custom fit and secure seal.

- Soft cover web on inner panel
- Adjustable Nose Clip
- Individually packaged
- Lightweight, collapse-resistant design
- N95
- 10 ea/box

Part No. 9211



Fit Test Kits / Respirator Systems Accessories

Fit Test Kits

3M's fit testing devices and procedures provide a simple and effective way of helping meet OSHA qualitative fit testing requirements. A fast, easy method for performing qualitative fit testing. Can be used with any particulate respirator or any gas and vapor respirator with particulate filter. Helps satisfy respiratory program requirements. Can be used during respirator training programs. Convenient, reliable and economical to use. Determines employee's taste threshold to fit solution. Allows exercises to be performed in a test atmosphere. Use to test the seal of any respirator with a particulate prefilter.

Quantitative Fit Test Apparatus, Sweet

This kit contains:

- Laminated instruction booklet (English/Spanish).
- Sensitivity solution FT-11.
- Fit test solution FT-12.
- Two nebulizers FT-13.
- One hood FT-14.
- One collar assembly FT-15.
- Two sets replacement nebulizer inserts.

Part No. FT-10



Quantitative Fit Test Apparatus, Sweet

This kit contains:

- Durable, molded black plastic case with inside hinge straps and wide top pocket for extra literature.
- Easy to carry and convenient to use.
- All FT-10 materials.
- 3M™ Universal Fitting Instruction video.
- All 3M™ respirator fitting posters.
- Administrative Respiratory Protection Guide.

Part No. FT-20



Quantitative Fit Test Apparatus, Bitter

This kit contains:

- Laminated instruction booklet (English/Spanish).
- Sensitivity solution FT-31.
- Fit test solution FT-32.
- Two nebulizers FT-13.
- One hood FT-14.
- One collar assembly FT-15.
- Two sets replacement nebulizer inserts.

Part No. FT-30



**3M™ Accessories
Respirator Cleaning Wipes**

Alcohol-free cleaning wipes, individually packaged.

- 100 pouches per carton dispenser.
- 5 cartons per case.

Part No. 0504



3M™ Respirator Systems Accessories

Part No.	Description
L-112-2	Chin strap
L-114-2	Chin strap, reinforced
L-115-10	Sweat pad
L-116-2	Head pad
L-121-5	Faceseal, Tychem®
L-123-2	Shroud, made of Tychem® QC fabric
L-126-2	Inner shroud
L-128-2	Shroud, made of Cordura® nylon fabric

Part No.	Description
L-131-10	Wide view lens
L-132-10	Wide view lens, high temperature
L-133-100	Lens cover
L-133-25	Lens cover
L-181	Flow meter adapter
L-182-2	Air deflector
L-183-2	Headgear cover
L-120-5	Faceseal, flame retardant, SoftGuard®

Part No.	Description
L-124-5	Faceseal, flame retardant
L-125-2	Shroud, flame retardant, Nomex®
L-127	Leather welding shroud
L-129-2	Flame retardant welding bib
L-152-5	Cover plate, 4-1/2" x 5-1/4"
L-156	Electronic lens and adapter
L-162-2	Safety plate, 4-1/2" x 5-1/4"

Respirator and Cartridge Selection Chart

3M™ Respirator Selection Chart

5000 Series

- Designed for simplicity and ease of use.



6000 Series















- 6000 series cartridges and 2000 series filters can be used with this respirator.



7000 Series








- Wide variety of interchangeable cartridge and filter styles.



Cartridge Type	NIOSH Approved For:	RESPIRATOR	RESPIRATOR/CARTRIDGES
		Non-replaceable cartridge style	Replaceable bayonet cartridge style
		5000 Series Half Facepiece (maintenance-free filter)	6000 Series Half Facepiece; Drop Down Half; Full Facepiece
			7000 Series 7500 Half Facepiece; 7800S Full Facepiece
OV Organic Vapor	Certain Organic Vapors	Part No. 5101- Small Part No. 5201- Medium Part No. 5301- Large	Part No. 6001 
OV/P100 Organic Vapor/P100	Certain Organic Vapors and Particulates	Part No. 51911- Small Part No. 52911- Medium Part No. 53911- Large	Part No. 60921 
AG Acid Gas	Chlorine, Hydrogen Chloride, and Sulfur Dioxide or Chlorine Dioxide or Hydrogen Sulfide (escape only)		Part No. 6002 
AG/P100 Acid Gas/P100	Chlorine, Hydrogen Chloride, and Sulfur Dioxide or Chlorine Dioxide or Hydrogen Sulfide (escape only) and Particulates		Part No. 60922 
OV/AG Organic Vapor/Acid Gas	Certain Organic Vapors, Chlorine, Hydrogen Chloride, and Sulfur Dioxide or Hydrogen Sulfide (escape only) or Hydrogen Fluoride	Part No. 5103- Small Part No. 5203- Medium Part No. 5303- Large	Part No. 6003 
OV/AG/P100 Organic Vapor/Acid Gas/P100	Certain Organic Vapors, Chlorine, Hydrogen Chloride, and Sulfur Dioxide or Hydrogen Sulfide (escape only) or Hydrogen Fluoride and Particulates	Part No. 51913- Small Part No. 52913- Medium Part No. 53913- Large	Part No. 60923 
AM/MA Ammonia/Methylamine	Ammonia and Methylamine		Part No. 6004 
AM/MA/P100 Ammonia/Methylamine/P100	Ammonia and Methylamine and Particulates		Part No. 60924 
FM/OV Formaldehyde/Organic Vapor	Formaldehyde/Certain Organic Vapors		Part No. 6005 
FM/OV/P100 Formaldehyde/Organic Vapor/P100	Formaldehyde and Certain Organic Vapors, and Particulates		Part No. 60925 
MG/V Multi-Gas/Vapor	Certain Organic Vapors, Chlorine, Hydrogen Chloride, Chlorine Dioxide, Sulfur Dioxide, Hydrogen Sulfide (escape only) Ammonia/ Methylamine, Formaldehyde or Hydrogen Fluoride	Part No. 5106- Small Part No. 5206- Medium Part No. 5306- Large	Part No. 6006 
MG/V/P100 Multi-Gas/Vapor/P100	Certain Organic Vapors, Chlorine, Hydrogen Chloride, Chlorine Dioxide, Sulfur Dioxide, Hydrogen Sulfide (escape only) Ammonia/ Methylamine, Formaldehyde or Hydrogen Fluoride and Particulates		Part No. 60926 
HG Mercury	Mercury Vapor or Chlorine		Part No. 6009 
HG/P100 Mercury/P100	Mercury Vapor or Chlorine and Particulates		Part No. 60929 

Filter Selection Chart

3M™ Filter Selection Chart

Filter Type	NIOSH Approved For:	RESPIRATOR	RESPIRATOR/CARTRIDGES
		Non-replaceable cartridge style	Replaceable bayonet cartridge style
		5000 Series Half Facepiece (maintenance-free filter)	6000 Series Half Facepiece; Drop Down Half; Full Facepiece
			7000 Series 7500 Half Facepiece; 7800S Full Facepiece
P95	Particulates		Part No. 2071 
P95 HF with nuisance level Acid Gas*	Hydrogen Fluoride and Particulates		Part No. 2076HF 
P95 with nuisance level Organic Vapor/Acid Gas*	Particulates		Part No. 2078 
P100	Particulates	To use these filters for the 5000 series refer to the <i>Retainers/Adapters for Pre-Filters</i> below.	Part No. 2091  Part No. 7093  Part No. 7093C
P100 with nuisance level Acid Gas*	Particulates		Part No. 2096 
P100 with nuisance level Organic Vapor*	Particulates		Part No. 2097 

*Nuisance level refers to concentrations below current OSHA PELs.

Retainers/Adapters for Pre-Filters

501 Filter Retainer

- For use on 5000 and 6000 series respirators.
- Holds filters 5N11 or 5P71 onto existing respirator cartridge (see chart below).

Part No. 0501



502 Filter Adapter

- For use on 5000 and 6000 series respirators.
- Attaches filters 2091 or 7093 onto existing respirator cartridge (see chart below).

Part No. 0502



Pre-Filters for Attachment to Cartridges

Filter Type	NIOSH Approved For:	5000, 6000, 7000 Series
N95	Non-Oil Particulates	Part No. 5N11 
P95	Particulates	Part No. 5P71 
P100	Particulates	Part No. 2091 
		Part No. 7093 

3M™ Supplied Air* Respirators — Product Matrix

Choose a headgear 1a

- Make your selection from the two categories of headgear:
 - 1a – Hood assemblies
 - 2a – Specialty hood



H-400 Series H-600 Series

Part No.	Description
	Hood-400 Series hood assembly
	Hood-600 Series seam-sealed, chemical resistance

2a



W-8100B

Part No.	Description
W-8100B	Abrasive/blasting hood

Choose a breathing tube 1b

- No choice here; only one option for each hood category:
 - 1a – 1b (W-5114)
 - 2a – 2b (W-8003)



W-5114

Part No.	Description
W-5114	Breathing tube

2b



W-8003

Part No.	Description
W-8003	Breathing tube for abrasive

Choose an air control device 3a

- Free to choose any assembly from 3a or 4a regardless of previous hood/tube selections.



W-3018

Part No.	Description
W-3018	Low pressure connector assembly

4a



W-2907

W-2862

W-2863

Part No.	Description
W-2907	Air regulating assembly
W-2862	Vortex cooling assembly
W-2863	Vortemp™ heating assembly

Choose a pressure hose 3b

- The hose selection will need to correspond with the air assembly:
 - 3b adapts 3a assembly
 - either 4b adapts any 4a assembly.



W-3020

Part No.	Description
W-3020	1/2" low pressure hose

4b



W-9435

W-2929

Part No.	Description
W-9435	3/8" high pressure hose
W-2929	3/8" high pressure hose

3M™ Portable Air Purification Panels

These panels are available to connect the respirator system of choice to a compressed air supply.



256-02-00

256-02-01

W-2806

W-2808

Part No.	Description
256-02-00	(50 cfm) w/ CO filtration and monitor
256-02-01	(100 cfm) w/ CO monitor
W-2806	(50 cfm) w/o CO monitor
W-2808	CO monitor: retrofit for W2806

Note: Headgear, breathing tube, air control valve, and compressed air supply hose are required parts in a NIOSH-approved system.

Any NIOSH certification appearing on 3M components is strictly limited to use in an approved air system and only in full accordance with the specifications and limitations under said approval. NIOSH certifies complete assemblies only, not sub-assemblies.

*It is the employer's responsibility to ensure that the compressed air used with any supplied air system meets the requirements for at least Grade-D breathing air per the Compressed Gas Association Commodity Specification G-7.1-1997 in the U.S. In Canada refer to CSA Standard Z180.1 table for the quality of compressed breathing air.

Respirator Systems

**3M™ GVP-Series
Belt-Mounted Powered Air Purifying
Respirators – Product Matrix**

The GVP PAPR is a motorized blower unit worn at the waist that delivers filtered air into a hood, helmet or facepiece. The GVP allows the wearer to choose from a wide selection of filters that offer flexibility and freedom to work in a variety of industrial environments. These systems are compatible with many different styles of headgear ranging from lightweight hoods, bump caps, hard hats, helmets and full facepiece respirators.

- High levels of airflow.
- Contoured for maximum comfort.
- Eight hour battery.
- Inlet and outlet plugs to allow blower unit to be completely sealed for decontamination.
- Intrinsically safe.

Choose a headgear 1 **A**

- Make your selection from the three categories of headgear:
 - A – Hoods
 - B – Full facepieces
 - C – L-Series headgear

3M™ H-Series Hoods



H-400 Series H-600 Series H-900 Series

Part No.	Description
Hood-400 Series hood assembly	
H-411	w/ collar and cap suspension. Tychem® QC
H-412	w/ collar and hard hat. Tychem® QC
H-421	w/ inner shroud and cap suspension. Tychem® QC
H-422	w/ inner shroud and hard hat. Tychem® QC
Hood-600 Series seam-sealed hood assembly	
H-611	w/ collar and cap suspension. Tychem® SL
H-612	w/ collar and hard hat. Tychem® SL
Hood-900 Series grinding hood*	
H-910	w/ collar
H-920	w/ inner shroud

* Grinding hood assemblies (hard hat option only) may be built with the following parts: H-910-5 or H-920-5 grinding hoods, W-3258-5 hatshell, W-2878-2 suspension, H-114-2 chin strap and a W-3222-2 plastic squeeze clamp.

Choose a 3M™ breathing tube 2 **a**

- The breathing tube will need to correspond with the headgear:
 - a adapts any A headgear
 - b adapts any B headgear
 - c adapts any C headgear



H-115 GVP-122

Part No.	Description
H-115	Breathing tube assembly
GVP-122	Breathing tube

Choose a 3M™ PAPR assembly 3

- Select either GVP assembly from list 3.



GVP-1 GVP-CB

Part list w/ descriptions to the right (facing page).

Choose a 3M™ cartridge 4

- Complete the respirator selection with the appropriate cartridge/filter.

Part No.	Description
GVP-401	Organic vapor
GVP-402	Acid gas ¹
GVP-403	Organic vapor/acid gas
GVP-404	Ammonia
GVP-405	Formaldehyde
GVP-440	HEPA
GVP-441	Organic Vapor/HEPA
GVP-442	Acid Gas ¹ /HEPA
GVP-443	Organic vapor/acid gas ² /HEPA
GVP-444	Ammonia/HEPA
GVP-445	Formaldehyde/HEPA

Superscript details are identified to the right (facing page).

Respiratory Equipment

15

3M™ Full Facepieces

B



67,68,6900 DIN 7800S Series

Part No.	Description
Full Facepiece-6X00 Series	
6700DIN	w/ DIN connection, small
6800DIN	w/ DIN connection, medium
6900DIN	w/ DIN connection, large
Full Facepiece-7800 Series**	
7800S-S	Silicone, small
7800S-M	Silicone, medium
7800S-L	Silicone, large

** Clip-on welding shield also available.

3M™ L-Series Headgear

C



Part Nos. L-501 L-503 L-505 L-701



L-703 L-705 L-901 L-905

Part No.	Description	Applications
Bump Cap		
L-501	w/faceshield	Chipping; grinding; pharmaceutical and laboratory; welding; painting; sanding; buffing; soldering; brazing; cutting; chemical processing or mixing; plasma cutting.
L-503	w/welding shield	
L-505	w/welding and face shield	
Hard Hat		
L-701	w/faceshield	Chipping; grinding; welding; sanding; buffing; soldering; brazing; cutting; chemical processing or mixing; plasma cutting.
L-703	w/welding shield	
L-705	w/welding and face shield	
Helmet		
L-901	w/welding and face shield	Chipping; grinding; welding; sanding; buffing; soldering; brazing; plasma cutting
L-905	w/welding and face shield	

b



GVP-123

Part No.	Description
GVP-123	Breathing tube

C



L-122

Part No.	Description
L-122	Breathing tube

Part No.	Description
GVP-1	Belt assembly. Includes: motor blower, battery pack, charger, flow meter, flow meter adapter, power cord, blower plugs and web belt.
GVP-CB	Comfort belt-mounted assembly. Includes: same as GVP-1, but with a comfort belt instead of web belt. Indicate belt size: S-XXL.

NIOSH approval:	
OV	= certain organic vapors.
AG ¹	= NIOSH approval: chlorine, hydrogen chloride, sulfur dioxide, chlorine dioxide or hydrogen fluoride.
AG ²	= NIOSH approval: chlorine, hydrogen chloride, sulfur dioxide, chlorine dioxide, hydrogen fluoride or hydrogen sulfide (escape only).