# **3M<sup>™</sup> Reusable Respirators**







### 3M™ Ultimate FX Full Facepiece Reusable Respirator FF-400 Series

FF 401 (Small) FF 402 (Medium) FF 403 (Large)

Comfortable, durable protection for demanding, X-treme conditions

The lightweight Ultimate FX FF-400 was developed to provide maximum comfort and durability with unique features that make it the optimal choice for a variety of industrial applications:



### 3M Reusable Respirators **Technology Innovations Over the Years**



1977

3M offers the first reusable "Maintenance-Free" Half Facepiece Respirator

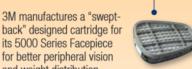




3M designs and develops the "bayonet-style" cartridge connection



3M develops first disc filters with loaded web filter media—the first non-woven, non-fiberglass filters



3M develops and incorporates a new integral filter technology in its 4000 Series Facepiece, creating a lighter weight respirator



3M launches its 6000 Series Full Facepiece Respirator offering best-in-class field of view and lightweight characteristics

1992

buildup for cool, dry comfort



1996

back" designed cartridge for its 5000 Series Facepiece for better peripheral vision and weight distribution

1989

### 3M™ Full Facepiece Reusable Respirator 6000 Series

### Reliable, convenient, compatible protection

- Unique center adapter directs exhaled breath and moisture downward, and helps reduce debris from depositing in the valve. Smooth surface allows for quick and easy cleaning
- · Large lens provides wide field of view and excellent visibility
- 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve helps provide cool, dry comfort
- Meets requirements of ANSI Z87.1-2010 for high impact (Z87+)
- Lightweight, well-balanced design with silicone faceseal for enhanced comfort and durability
- · Available in air purifying respirator (APR), supplied air and powered air purifying respirator (PAPR) modes







### 3M™ Full Facepiece Reusable Respirator 7800S Series

7800S-S (Small) 7800S-M (Medium) 7800S-L (Large)

### Designed for durability and protection

- · Silicone facepiece enhances fit and improves durability
- Double-flange faceseal and six adjustable straps help provide a secure fit
- Can be used with a passive or electronic clip-on welding lens
- Available in air purifying respirator (APR), supplied air and powered air purifying respirator (PAPR) modes
- FR-7800B (First Responder) version available
  - Butyl rubber seal to minimize permeation
  - CBRN approved with FR-15-CBRN



3M develops first rectangular filter with unique seal-check capabilities



3M develops first HF P100 nuisance OV filter. Offers lowest breathing resistance on the market



3M develops first Full Facepiece Respirator with Scotchgard™ coating, overmolded gaskets, and comfort head cradle

2002

2002

2007

2009

2010

2013

3M develops easier breathing, longer

disc filters



3M introduces the 6500 Half Facepiece Respirator, our lightest silicone half facepiece



3M introduces Cool Flow™ Valve for reduced heat and moisture in the 7500 Half Facepiece Respirator





### 3M™ Half Facepiece Reusable Respirator 7500 Series

7501 (Small) 7502 (Medium) 7503 (Large)

Easy breathing, comfort and durability

#### **Soft Seal Design**

- Advanced silicone material provides a softer feel on the face
- Unique adjustment design helps reduce tension and pressure points on the face for unsurpassed comfort



#### **Adjustable Head Cradle**

 Allows wearer to adjust for optimum fit and comfort

#### **Dual-mode Head Harness**

 Adjusts easily so user has the option of wearing respirator in either traditional or drop-down mode

#### **Unique Exhalation Valve Cover**

- Directs exhaled breath and moisture downward
- Smooth surface allows for quick and easy cleaning
- Helps reduce debris from depositing in valve area

### Cool Flow™ Valve

- Valve design helps make breathing easier
- Helps reduce heat and moisture buildup for cool, dry comfort

### 3M™ Rugged Comfort Half Facepiece Reusable Respirator 6500 Series

Rugged comfort, durability, and slim profile design

6501 (Small) 6502 (Medium) 6503 (Large)

6501QL (Small) 6502QL (Medium) 6503QL (Large)



#### Adjustable Head Harness Assembly

- Optimum fit and comfort with threesize adjustable head cradle
- Long-lasting polyester/spandex straps

### 3M™ Bayonet Connection

 Compatible with all 3M<sup>™</sup> bayonet-style cartridges and filters



#### Silicone Faceseal

- Provides comfort and stability with a soft but firm faceseal
- Extended product life due to resilient silicone material
- Our lightest silicone facepiece
- Keeps its shape in high-heat environments

#### Quick Latch Drop-Down Mechanism\*

- Easy on and off as you move in and out of contaminated areas
- No need to remove your hard hat or faceshield when lowering or raising your respirator

\*Available on models 6501QL, 6502QL and 6503QL.

#### Valve Cover Design

- Directs exhaled breath and moisture downward
- Easy positive pressure seal check

#### Cool Flow™ Valve

- Enhanced comfort by reducing heat and moisture
- Easier breathing with unique valve design

### 3M<sup>™</sup> Half Facepiece Reusable Respirator 6000 Series

### Compatible, convenient respiratory protection

- · Facepiece is made from soft, lightweight material
- Available with a standard or drop-down head harness option. Drop-down model allows wearers to lower the respirator without removing hard hat or faceshield
- Head harness assembly and spare parts are available



Standard

6100 (Small) 6200 (Medium) 6300 (Large)



Drop-down

6100DD (Small) 6200DD (Medium) 6300DD (Large)



## 3M<sup>™</sup> Half Facepiece Disposable Respirator 5000 Series

### Balanced design, disposable convenience

- · Easy to use and convenient
- Pre-assembled with permanently attached cartridges; no maintenance necessary
- · Facepiece is made from soft, lightweight material
- Ideally suited for:
  - Intermittent respirator use
  - Plant shutdowns and turnarounds
  - Dirty applications where respirators wear out or become difficult to clean in a short time



5101 Organic Vapor Respirator (Small) 5201 Organic Vapor Respirator (Medium) 5301 Organic Vapor Respirator (Large) 5103 Organic Vapor/Acid Gas Respirator (Small) 5203 Organic Vapor/Acid Gas Respirator (Medium) 5303 Organic Vapor/Acid Gas Respirator (Large) 51P71 P95 Paint Spray/Pesticide Assembly (Small) 52P71 P95 Paint Spray/Pesticide Assembly (Medium) 53P71 P95 Paint Spray/Pesticide Assembly (Large)



## **Identify the Hazards**

Applications and Industries	Potential Hazards	Cartridge/Filter Options*	
Spray Painting, Varnishing, Staining & Coating	Solvent-based	OV/P95	
	Water-based Latex	Nuisance 0V**/P95	
Sanding & Grinding	Particulate	N95	
Welding	Weld Fume	N95	
	Stainless Steel & Galvanized	Nuisance 0V**/P95	
Abatement	Lead & Asbestos	P100	
	Mold	N95 - P100/ Nuisance 0V**	
Cement Work	Silica/Dust	N95	
Cleaning & Janitorial	Bleach	AG/P95	
	Ammonia	AM/MA/P95	
	General Cleaning Products	OV/P95	
Agriculture	Pesticides & Insecticides	OV/AG/P95 - P100	
Construction	Particulate	N95	
Manufacturing	Solvents	OV	
	Particulate	N95	
Pharmaceutical Manufacturing	Particulate	N95/P100	
Chemical Manufacturing	Sulfur Dioxide, Chlorine	AG/P95	
	Ammonia	AM/MA/P95	

<sup>\*</sup>Respirator facepiece or system must be chosen based on the contaminant, airborne concentration and the necessary assigned protection factor.

If you are uncertain of the concentration levels of contaminants or recommended levels of respiratory protection, contact the 3M Technical Service Helpline at 1-800-243-4630.

This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and *User Instructions*. Before using any of these respirators, the wearer must read and understand the User Instructions for each product.















	- Comment	-					-
Select the Right Respirator	5000	6000 HF	6500	7500	6000 FF	FF-400	7800S
Enhanced Durability						•	
Maintenance Free							
Enhanced Comfort							
Drop-down Feature		*	**				
3M™ Cool Flow™ Valve							
Compatible with 3M <sup>™</sup> Supplied Air System							
Compatible with 3M™ PAPR Systems					•		
Eye Protection							
Speaking Diaphragm							
Accessories							
Spare Parts					•		
Six-point Head Harness							
Silicone Faceseal					•		
Compatible with Welding Shield							
Clip-on Welding Shield							

<sup>\*6000</sup>DD Version.

<sup>\*\*</sup>Nuisance level refers to concentrations below the Occupational Exposure Limit (OEL) or other applicable government regulations, whichever is lower.

<sup>\*\*6500</sup>QL Version.

### Find a Combination that Works Best for You



7800 Series

### 3M™ Particulate Filters and Gas/Vapor Cartridges

All 3M Particulate Filters and Gas/Vapor Cartridges can be used interchangeably with 3M™ Reusable Respirators 6000, 6500, 7000 and FF-400 Series.

#### 3M™ Particulate Filters 2000 Series Part Number Description Lightweight and easy to 2071 Particulate Filter, P95 breathe through 2076HF Particulate Filter, Hydrogen Fluoride/P95, with Nuisance Level Acid Gas Relief\* · Assortment of filters available for a wide range of applications 2078 Particulate Filter, P95, with Nuisance Level Organic Vapor/Acid Gas Relief\* Easier breathing through new 2091 Particulate Filter, P100 3-layer advanced Electret Filter 2096 Particulate Filter, P100, with Nuisance Level Acid Gas Relief\* Media in 2200 Series Filters 2097 Particulate Filter, P100, with Nuisance Level Organic Vapor Relief\* 2291 Advanced Particulate Filter, P100 2296 Advanced Particulate Filter, P100, with Nuisance Level Acid Gas Relief\* 2297 Advanced Particulate Filter, P100, with Nuisance Level Organic Vapor Relief\* Particulate Filter 7093, P100 7093 Particulate Filter, P100 · Unique, spring-loaded filter cover design simplifies negative pressure user seal checks 7093B Particulate Filter, P100, Bulk Swept-back design provides enhanced field of view and greater comfort 7093C offers a lightweight, low profile design 7093C Cartridge/Filter, Hydrogen Fluoride, P100 with Nuisance Level Organic that combines P100 filtration with carbon-loaded Vapor and Acid Gas Relief\* features found in heavier combination cartridge products Gas/Vapor Cartridges 6000 Series 6001 Cartridge, Organic Vapor · Low-profile design helps 6002 Cartridge, Acid Gas\* maintain good field of vision 6003 Cartridge, Organic Vapor/Acid Gas\*\* Full range of cartridges to meet vour needs Cartridge, Ammonia/Methylamine 6004 Cartridge, Formaldehyde/Organic Vapor 6005 Cartridge, Multi Gas/Vapor\*\* 6006 6009 Cartridge, Mercury Vapor or Chlorine Combination Cartridges/P100 Particulate Filters 6000 Series 60921 Cartridge/Filter, Organic Vapor/P100 · Particulate filter is permanently 60922 Cartridge/Filter, Acid Gas/P100\*\* attached to cartridge for easy, one-step assembly 60923 Cartridge/Filter, Organic Vapor/Acid Gas/P100\*\* Unique design for enhanced 60924 Cartridge/Filter, Ammonia/Methylamine/P100 comfort and visibility 60925 Cartridge/Filter, Formaldehyde/Organic Vapor/P100 60926 Cartridge/Filter, Multi-Gas/Vapor/P100\*\*

- \* 3M recommended for relief against nuisance levels of organic vapors and acid gases. Nuisance level organic vapor and acid gas refers to concentrations not exceeding OSHA PEL or applicable government occupational exposure limits, whichever is lower. Do not use for respiratory protection against acid gases or organic vapors (except hydrogen fluoride).
- \*\* Reminder: These cartridges are approved for respiratory protection from hydrogen sulfide gas up to 10 times the permissible exposure limit (PEL) with half facepiece respirators and full facepiece respirators when qualitatively fit tested, or up to less than 300 parts per million (ppm) with full facepiece respirators when quantitatively fit tested or according to specific OSHA standards or applicable government regulations, whichever is lower. 300 ppm is the concentration considered Immediately Dangerous to Life or Health (IDLH) for hydrogen sulfide.
- <sup>†</sup>As recommended by the California Department of Pesticide Regulation No. 01-009-Methyl Bromide Field Fumigation. 3M recommended for use against radioiodine and methylbromide. Note: not NIOSH approved for methylbromide or radioiodine.

# For More Information In the United States, contact:

Technical Service Customer Service 1-800-243-4630 1-800-328-1667

www.3M.com/PPESafety

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In Canada, contact:

Technical Service 1-800-267-4414 3M Canada Customer Care 1-800-364-3577 Internet www.3M.ca/safety

For other 3M products:

Technical Service 1-800-3M-HELPS



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These respirators help protect against certain airborne contaminants. **Misuse may result in sickness or death.**For proper use, the wearer must read and understand *User* 

Instructions provided as a part of product packaging, see supervisor, or call 3M PSD Technical Service, 1-800-243-4630. Time use limitations may apply.

**Important** — Before using these respirators, you must determine the following:

Cartridge/Filter, Organic Vapor/Acid Gas/P100\*\*†

Cartridge/Filter, Mercury Vapor/Chlorine Gas/P100

- . The type of contaminant(s) for which the respirator is being selected.
- . The concentration level of contaminant(s)
- 3. Whether the respirator can be properly fitted on the wearer's face. All respirator instructions, warnings and use and time limitations must also be read and understood by the wearer before use. Before use of these respirators, a written respiratory protection program must be implemented, meeting all the requirements of OSHA 29 CFR 1910.134, including training and fit testing.