

3M™ Versaflo™ Powered and Supplied Air Respirator Systems



Work in a World of Comfort

ABN 21 060 672 979

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3M



DEDICATED TO WORKER PROTECTION

3M has a long history of applying its innovative materials to the challenges of worker protection. In 1972, 3M introduced the first US government approved filtering facepiece respirator.

Today, as one of the world's leading suppliers of respiratory protection, our goal is to ensure that we satisfy your needs through exceptional leadership, expertise, quality and service. Our success begins with our ability to apply our technologies – often in combination – to an endless array of real-world customer needs, such as worker protection systems.



Credibility & Leadership

3M produces thousands of imaginative products, and we are a leader in scores of markets, including the global respiratory protection industry. With sales in nearly 200 countries, 3M has 76,000 employees worldwide. Our specialized distribution networks can help your workforce in the careful selection of, and training in, respiratory equipment.

Proven Solutions

Workers want respiratory protection equipment that is comfortable, lightweight and convenient. 3M delivers protection products that are high quality, high comfort, professional grade equipment, advanced over years of research and development, customer feedback, and customer success.



And Now: 3M™ Versaflo™ respirator systems

The new 3M Versaflo respirator systems represents an enormous effort by 3M to accomplish three major goals:

- simplify the equipment selection process
- increase system versatility
- improve user comfort every step of the way



INTRODUCING A HIGHLY VERSATILE RANGE OF RESPIRATOR SYSTEMS

Many users of half and full facepiece respirators are taking a second look at powered and supplied air systems for reasons that go beyond mere compliance.

3M™ Versaflo™ Respirator Systems are a comprehensive approach to worker protection systems based on comfortable-to-wear modules.



Integrated Protection

Safety managers can configure modules and accessories to help protect users from a variety of combined hazards.

Flexibility

Each system has three easy-to-select modules – an air delivery unit, a headtop and a breathing tube—that can be combined into dozens of system configurations. It is the ultimate in flexibility for handling changing user environments, needs, and comfort preferences.

All-Day Comfort

With 3M Versaflo Respirator Systems, pressure on the face, breathing resistance, and heat build-up are all greatly reduced when compared to non-powered and supplied air tight-fitting facepieces, creating all-day comfort for the user.

Easier To Breathe

With 3M Versaflo Respirators, flowing air is provided to the user, reducing the additional breathing effort required for half

and full facepiece respirators. This increases user comfort at all times, but is especially important during periods of strenuous labour.

Excellent Airflow

3M™ Versaflo™ Headtops direct a comfortable stream of flowing air to where workers need it most: the head and face. The moving airflow can make hot environments more tolerable while greatly reducing visor fogging. And, when using the appropriate 3M™ Versaflo™ Supplied Air Regulator, the airflow can also be made cooler or warmer when working in hot or cold environments.

Easy x Three

Easy-to-select. Easy-to-use. Easy-to-maintain. For instance: most replacement parts can be installed by hand or with common tools (like a screwdriver) in a matter of moments.

New Levels of Simplicity

- Easy to select compatible modules.
- The 3M™ Versaflo™ TR-300 turbo unit is equipped with automatic flow control, low battery alarm, and low flow alarm.
- Most user interface/adjustment-points highlighted in blue for convenience.
- QRS (Quick Release Swivel) breathing tubes allow fast and easy connection.
- Easily removable parts allow simple cleaning, maintenance and replacement.
- Many common parts across the range.
- Accessories and options to suit different applications.



New Levels of Comfort

- Lightweight, compact and well-balanced designs.
- Breathable air is provided to the wearer; reducing the additional breathing effort required.
- Adjustable airflow feature distributes airflow where the user wants.
- Quiet system with reduced motor noise and air whistling.
- Soft face seals and inner collars.
- Multiple size adjustment options allow for a comfortable fit.
- Provides excellent peripheral and downward vision.

PROTECTION AGAINST MULTIPLE HAZARDS

Respiratory Protection



Eye, Face and Hearing Protection



Head Protection, Neck/Shoulder Coverage



Modular means versatile

3M™ VERSAFLO™ RESPIRATOR SYSTEMS ARE EASY TO SELECT

3M™ Versaflo™ S-Series Headtops



3M™ Versaflo™
S-133/333G
Integrated
Headcover



3M™ Versaflo™
S-433/533
Integrated
Hoods



3M™ Versaflo™
S655/657/757/855E
Reusable Suspension
Hoods

3M™ Versaflo™ M-Series Headtops



3M™ Versaflo™
M-106/107
Faceshields



3M™ Versaflo™
M-306/307
Helmets



3M™ Versaflo™
M-406/407
Helmets with
Shrouds

3M™ Versaflo™ BT-Series Breathing Tubes



3M™ Versaflo™ BT-20 S&L Breathing Tube

Lightweight breathing tube that comes in two lengths and is easy to wipe down.

Material: Polyurethane.
Length: 735 mm (S), 965 mm (L).



3M™ Versaflo™ BT-30 Breathing Tube

Self-adjusting length for improved fit for all wearers and reduce risk of catching and snagging.

Material: Polyurethane.
Length: 525 - 850 mm.



3M™ Versaflo™ BT-40 Breathing Tube

Heavy-duty breathing tube.

Material: Neoprene.
Length: 840 mm.



Accessories

BT-922: Disposable breathing tube cover.

BT-926: Flame resistant breathing tube cover

3M™ Powered Air Respirators



3M™ Versaflo™ TR-300
Powered Air Respirator



3M™ Jupiter™
Powered Air Respirator

3M™ Versaflo™ Supplied Air Regulators



3M™ Cooling Vortex
Assembly V-100



3M™ Heating Vortex
Assembly V-200



3M™ Versaflo™ V-500E
Regulator

Four Steps to the Right Respirator:

1. Choose your Air Delivery Unit

2. Choose your Headtop

3. Choose the appropriate Breathing Tube

4. Choose your options and accessories

INTRODUCING 3M™ VERSAFLO™ TR-300 POWERED AIR RESPIRATOR

The all-new, lightweight 3M™ Versaflo™ TR-300 Powered Air Respirator is the key to an easy-to-use, versatile, respirator system for environments with hazardous particles.

Lighter & Smaller

- The turbo has a slim profile designed for use in tight spaces.
- The weight of the turbo is only 1 095 g (including particulate filter, high-capacity battery and standard belt). The curved design of the TR-300 means that it can be worn close to the user's back, reducing the leverage effect that can cause turbos to feel heavier.
- The compact shape and air inlet design helps make sitting possible without compromising the airflow intake.

Controlled Airflow

- Sophisticated electronics keep the factory-calibrated airflow at a nominal 190 l/min, eliminating the need for regular calibration by the user. Even as the battery discharges, or the filter becomes loaded with particulates, the unit delivers a steady flow of air.



Simple Yet Comprehensive Controls

- An audible and LED alarm both signal to the user when there is either low battery charge or low airflow – for example, due to a fully-loaded particle filter.
- LED lights on the battery itself indicate its charge status.

Intelligent Power

- The high-capacity battery runs for at least 10-12 hours (with new filter and fully charged battery). Recharging time is less than 3.5 hours.
- The lightweight lithium ion battery quickly charges and has no memory effect or heavy metals. It can be easily removed for charging.
- Intelligent chargers help maintain the optimum battery performance and are available in single-battery or four-battery stations.

Please see the data on the headtop used with the unit for information on protection factors.

Straightforward, Minimal Maintenance

- All maintenance can be done by hand. The battery, filter and pre-filter can all be changed quickly and easily by hand.
- The belt and turbo unit have smooth surfaces with facilitating fast wipe downs for easier cleaning.
- IP53 rating. Suitable for use in decontamination shower.
- A window on the turbo allows instant identification of the installed filter.
- Durable brushless motor for superior reliability.



Options For Diverse Environments

- Filters:
 - Pre filter
 - Particulate filter
 - Particulate filter that also reduces nuisance-level organic vapours.*
 - Particulate filter that also provides protection against hydrogen fluoride with performance up to 10 x the Exposure Standard value as well as offering nuisance-level acid gas performance*.
- For welding and grinding applications, a spark arrestor reduces the risk that sparks and other hot materials will come in contact with the filter and motor.
- Belts:
 - Standard webbing belt
 - Coated, easy-clean belt
 - Spark-resistant, leather belt for heavy-duty applications
 - Braces and a backpack are also available.
- High-Capacity battery.
- Single Charger and 4-Station Battery Charger kit.



*Nuisance level" refers to concentrations below the occupational exposure limit (OEL).

3M™ Versaflo™ TR-302E Turbo Unit

The 3M Versaflo TR-302E Turbo Unit comes with a filter cover and an airflow indicator only.

3M™ Versaflo™ TR-315E Starter Kit

This 3M Versaflo TR-315E Starter Kit (photo) includes the TR-300 turbo unit, particulate filter, pre-filter, standard belt, high capacity battery pack, battery charger kit (not shown), self-adjusting breathing tube and airflow indicator.

3M™ Powered and Supplied Air Delivery Units



3M™ JUPITER™ POWERED AIR RESPIRATOR

Protection from particulates and/or gases and vapours

The existing 3M™ Jupiter™ Powered Air Respirator is fully compatible with all 3M™ Versaflo™ Headtops and Breathing Tubes. The 3M Jupiter Respirator provides respiratory protection against particulate and gaseous contaminants (particulate only and combined particulate/gas and vapour filters are available).

Ergonomically designed to sit at the base of the user's back, the unit's low weight is carried mostly on the user's hips via the wide decontamination belt. As a result, the 3M Jupiter Respirator is comfortable enough to wear for entire work shift. Includes decontamination belt, airflow indicator and calibration tube.



User benefits:

- Modern, ergonomic design
- 3 filters for wide range of applications
- Decontamination belt for improved fitting and easy cleaning.
- IP53 rating. Can be worn during shower decontamination.
- 3M™ Jupiter™ Intrinsically Safe Kit option
- Optional braces
- Audible and visual alarms
- Intelligent battery charger, with 10-station charger available. Economy (4 hours) or High-Capacity (8 hours) batteries.
- Meets the performance standards of AS/NZS1716



3M™ Jupiter™ Powered Air Turbo Unit

3M Jupiter Starter Kit (see photo) includes a standard 3M Jupiter turbo including decontamination belt and clip, air flow indicator, calibration tube and Nickel Metal Hydride (NiMH) battery pack.

Please see the data on the headtop used with the unit for information on protection factors.



3M™ VERSAFLO™ V-SERIES SUPPLIED AIR REGULATORS

3M™ Versaflo™ V-500E Regulator

3M Versaflo V-500E Regulator ensures an individually-adjustable, consistently-controlled airflow. The regulator requires a working pressure of 3.5-8 bar and is extremely quiet due to the integrated silencer (<65 dBA). An integrated warning whistle warns the user of low airflow into the headtop.

- Complies with performance standard AS/NZS 1716:2003
- Airflow: 170-305 l/min
- Weight: 550 g



3M™ V-100 Cooling Vortex and V-200 Heating Vortex Air Regulators

3M V-100 and V-200 air regulators allow wearers to either cool (V-100) or heat (V-200) the air by as much as 28°, making them a good choice for workers exposed to either uncomfortably hot or cold temperatures.

- Regulator requires a working pressure of 4-6 bar.
- Complies with performance standard AS/NZS 1716:2003
- Airflow: 170-500 l/min
- Weight: 605 g (V-100), 499 g (V-200)



V-100 Cooling Vortex



V-200 Heating Vortex

Please see the data on the headtop used with the unit for information on protection factors.



Comfortably Worn By More Users

Based on a computer modeling of a worldwide sampling of head sizes, new 3M™ Versaflo™ S-Series Suspensions, through their sizing and adjustment options, will comfortably fit more users than previous models. Their loose-fitting designs can mean more comfort for the entire shift when compared to tight-fitting alternatives.



Improved Visibility

The visors have an excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare.

Their new design minimises the potential for visor creasing and visual distortion.

Improved Shape

The new designs of 3M Versaflo S-Series Headcovers and Hoods more closely profile the user's head for improved appearance compared to some designs that tend to "peak."

Excellent Airflow

All 3M™ Versaflo™ S-Series Headtop users benefit from excellent airflow distribution for improved comfort, lower noise and reduced fogging.

Added Protection

3M Versaflo S-Series Headcovers and Hoods meet the highest respiratory performance requirements for this type of product when used with specific 3M™ Air Delivery Units. In addition they also provide eye and face protection – liquid splash and low energy impact.

Integrated Suspension Headcovers and Hoods

Ready to use straight out of the box. Permits fast replacement of soiled hoods
Available in two adjustable sizes: Small (S) and Large (L)



3M™ Versaflo™ S-133 Headcover
General purpose, cost-effective fabric.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-333G Headcover
Soft, quiet, more durable low-linting fabric.

Fabric material: Polyurethane coated knitted polyamide.
Visor material: Coated polycarbonate. for increased chemical and scratch resistance.



3M™ Versaflo™ S-433 Hood
Includes neck and shoulder coverage.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



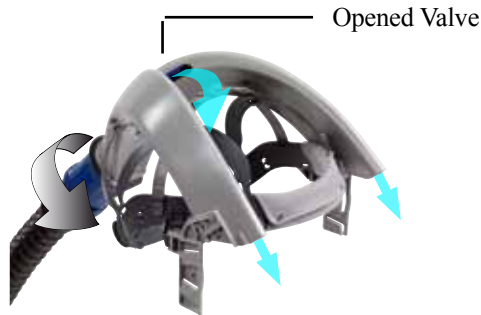
3M™ Versaflo™ S-533 Hood
Neck and shoulder coverage with soft, low-linting fabric that more readily drapes over user.

Fabric material: Polyurethane coated knitted polyamide.
Visor material: Coated polycarbonate for increased chemical and scratch resistance.



INNOVATIVE SUSPENSION WITH ADJUSTABLE AIRFLOW

* The externally adjustable collar allows wearers to control direction of airflow for personal comfort.



* Reusable suspension hoods only.



Respiratory protection standards - Versaflo S-Series Hoods & Headcovers

3M™ Air Delivery Unit	Standard	RMPF **
TR-300	AS/NZS1716	50 (Particles)
Jupiter	AS/NZS1716	50 (Particles) 10 (Gas/Vapour)
V Series	AS/NZS1716	100 (Particles) 100+ (Gas/Vapour)



reddot design award
winner 2010

** Required Minimum Protection Factor

Premium Hoods with Reusable Suspensions

Cost effective choice for some high disposal rate environments. Just the soiled hood fabric is replaced, while the suspension and air ducting can be reused. User control of airflow location and suspension adjustments for best comfort and custom fit.



3M™ Versaflo™ S-655 Hood
General purpose, with knitted inner collar that is shorter and thinner than previous models.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-657 Hood
Features a double-shroud design for its respiratory seal.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-757 Painters Hood
Fabric specifically intended to help capture paint overspray.

Fabric material: Polypropylene coated non-woven polypropylene.
Visor material: PETG.



3M™ Versaflo™ S-855E Hood
Sealed seam hood for liquid chemical splash environments.

Fabric material: Zytron® 200.
Visor material: Coated polycarbonate

Zytron® is a registered trademark of Kappler.

HIGHLY VERSATILE RIGID HEADTOPS

- All-new 3M™ Versaflo™ M-Series Headtops feature lightweight, compact and well-balanced faceshields and helmets that can offer integrated protection from a range of respiratory, head, eye and hearing hazards, with offerings for neck and shoulder coverage.
- The M-100 Faceshield and M-300 & M-400 Helmets, meet the highest standard of respiratory protection for this type of solution when integrated with the relevant 3M Air Respirator system.

Modern, Well Balanced Comfortable Design

- Lightweight, with excellent balance.
- Fully-adjustable suspension that includes textile straps for optimal fit and weight distribution.
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort.



Versatility

- To suit a wide range of needs, industries and applications, 3M Versaflo M-Series headtops offer faceseals and shrouds in various fabrics.
- Accessories include ear-muffs, peel-off's, head covers and a chin strap.

New Visor

- A new visor design combines excellent peripheral and downward vision with good optical clarity.
- Coated visors provide added chemical and scratch resistance.

Easy To Maintain

- Many parts are common to all 3M Versaflo M-Series headtops, meaning reduced inventories and downtime.
- Spare parts and accessories are quick and easy to replace; for example, visors easily slide into place and are secured by quickly snapping two buttons.



3M™ Versaflo™ M-100 Series Faceshields for respiratory, eye and face protection:

M-106 features a comfortable faceseal for dusts, spraying and chemical processing. Fabric material: polyurethane coated polyamide.

M-107 features a flame resistant faceseal for applications with hot particles. Fabric material: flame resistant polyester.



3M™ Versaflo™ M-300 Series Helmets for respiratory eye, face and head protection:

M-306 features a comfortable faceseal for construction, chemical applications and heavy industry. Fabric material: polyurethane coated polyamide.

M-307 features a flame resistant faceseal for applications with hot particles. Fabric material: flame resistant polyester



3M™ Versaflo™ M-400 Series Helmets with shrouds for respiratory, eye, face and head protection with additional neck and shoulder coverage:

M-406 features a highly durable shroud for construction applications and heavy industry. Fabric material: Cordura® nylon

M-407 features a flame resistant shroud for applications with hot particles. Fabric material: flame resistant Nomex®

3M™ Versaflo™ M-Series Faceshields and Helmets

FEATURED ACCESSORIES

Accessories	Part No.	Description	Accessories	Ordering No.	Description
	M-928	Peel-Off Visor Covers		M-958	Chin strap
	M-935 M-936 M-937	Standard face seal (white) Comfort face seal Flame resistant face seal		M-972	Flame Resistant Headtop Cover
	M-447 M-448	High-durability shroud Flame-resistant shroud		M-976	Head, Neck and Shoulder Cover, for M-100 and M-300 headtops.
	*H31P3AF 300	3M™ Peltor™ Hearing Protector Helmet Attachment, for M-100 and M-300			

* Contact 3M for full attenuation data including SLC80 value for the 3M Peltor H31 P3AF 300 Hearing Protector.

RESPIRATORY PROTECTION STANDARDS - 3M AIR DELIVERY UNITS

3M Air Delivery Unit	Standard	M-100 RMPF	M-300 RMPF	M-400 RMPF **
TR-300	AS/NZS1716	50 (Particles)	50 (Particles)	50 (Particles)
Jupiter	AS/NZS1716	50 (Particles) 10 (Gas/Vapours)	50 (Particles) 10 (Gas/Vapours)	50 (Particles) 10 (Gas/Vapours)
Versaflo V Series	AS/NZS1716	100 (Particles) 100+ (Gas/Vapours)	100 (Particles) 100+ (Gas/Vapours)	100 (Particles) 100+ (Gas/Vapours)

** Required Minimum Protection Factor

IMPACT PROTECTION STANDARDS - VERSAFLO M-SERIES FACESHIELD & HELMETS

Versaflo M-Series Headtop	M-100	M-300	M-400
AS/NZS 1337.1 Personal eye protection - high impact	Yes	Yes	Yes
AS/NZS 1801 Occupational protective helmets	N/A	Yes	Yes

TRAINING AND SUPPORT

3M's team of Certified Occupational Hygienists and Technical Specialists offer a comprehensive range of support and training solutions to meet the critical needs of our customers.

They can provide customers:

- Advice and training for your company, including audits for your workplace
- Coordination of fit testing for respiratory and hearing protection
- Initial and ongoing technical support

No matter how effective a PPE solution may be, it will offer little or no protection if it is not fitted and worn correctly. Proper inspection, cleaning and storage is vital for safety equipment that protects a worker's health and well being.

That is why 3M offers training programs that explain the correct way to fit, inspect, clean and store the safety solutions designed and manufactured by our company.

These programs can be delivered by 3M Specialist Field Representatives who are qualified to conduct Certificate IV style workplace training.

They can provide quality onsite training with ongoing support and advice.

3M TechAssist

3M TechAssist is the ideal point of contact for your questions, especially when you require a prompt answer. Supported by trained staff, Tech Assist is an immediate link to the worldwide resources of 3M.

Customers can contact TechAssist to answer questions on product information, technical advice, guidance with product selection and other important information they may need to know on a day-to-day basis.

Contact 3M's TechAssist service by ringing the toll-free Helpline on 1800 024 464 or by email at techassist@mmm.com



Nationwide Distributor Network

3M distributes our wide range of workplace safety products through a distributor network which includes over 250 stores and branches throughout Australia.

For more information about 3M Safety products or solutions please contact your 3M representative or:

3M TechAssist Helpline (Mon-Fri 8.30am-4.30pm)
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