

SUPERIOR PROTECTION

THE BEST FITTING MASK ON THE PLANET



THE IMPORTANCE OF FIT TESTING

In line with AS/NZS 1715:2009, regular fit testing of respiratory protection equipment shall be incorporated into all respiratory protection programs.

Fit testing measures that an adequate seal between the respirator and the user's face is achieved. There are many different face profiles so proper mask selection is important to achieve a high level of protection.

Different factors may affect the proper fit of the mask on the face such as:

- Incorrect donning of the mask
- Facial hair interfering with the seal
- Certain types of movements
- Mask style and face shape do not match

Being a mandatory requirement under AS/NZS 1715:2009, fit testing is required for all close fitting respirators including; Filtering face pieces (disposable respirators), Elastomer half and full-face reusable respirators and powered air purifying respirators (PAPR).

Fit-testing should be conducted:

- Prior to first use
- When a new brand/model of RPE is made available
- Annually (in conjunction with a respiratory protection program)
- When there is a significant change to the physical appearance of the wearer that may affect the seal of the mask. This may include weight gain/loss, dental work or change to the facial or nose structure

Training and correct fit inline with the manufacturer's guidelines also play an important role. This includes mask inspection, correct donning, and performing a seal check, all of which significantly enhances achieving the best fit every time.



QUANTITATIVE FIT TESTING (QNFT)

An objective measurement utilising an instrument to detect the amount of leakage into a respirator, eliminating the guesswork related to Qualitative methods.

The Quantitative method measures the amount of leakage around the face seal measuring the amount of particle concentration inside the respirator compared to the ambient air concentration outside the respirator. Users perform a series of exercises, designed to simulate the movements endured in the workplace. The result is called a fit factor which is presented as a ratio of these two concentrations.

The overall result of a QNFT is calculated as a weighted average of the individual fit factors completed from each exercise. It is called the Overall Fit Factor.

Regardless of which fit test method is used in a respiratory protection program, a successful fit test only qualifies the use of the specific brand and size of the respirator worn during the test.

Respirator sizing is not standardised across models or brands.

PROTECTION FACTORS

Table 1 - Suitability of fit test methods by product type and recommended minimum fit factor requirements.

	Qualitative (Saccharine / Bitrex taste)	Quantitative - Ambient Particle Counting (OSHA Protocol)		Quantitative - Controlled Negative Pressure (OSHA Protocol)	
	Suitability	Suitability	Minimum Fit Factor Pass Level	Suitability	Minimum Fit Factor Pass Level
Disposable face piece	Yes	Yes	100	No	N/A
Half face mask	Yes	Yes	100	Yes	100
Full face mask	No	Yes	500	Yes	500

WHY CHOOSE TRIDENT®?

At Industree Group, we believe you deserve the best fitting respirator. As a result, our team designed and manufactures the TRIDENT® P2 respirator. Features include a 3-panel design (widely known to achieve the best all round fit for various facial shapes and profiles), our proprietary adjustable foam nose seal, and advanced multilayer technology (providing protection against mechanically and thermally generated particulates).

In a recent independent research study conducted on 500 participants[^], the TRIDENT® RTCFFP2 respirator scored an overall pass rate of 99.2% and a very high first-time pass rate of 92.6%. This is significantly higher than other brands in the market.

Consistently achieving high results in all quantitative fit test exercises is crucial for ensuring protection during any work task. In the same study[^], the TRIDENT® RTCFFP2 respirator demonstrated consistently high pass rates across all exercises. Our premium and unique design allows us to attain these high results by ensuring that the mask seals and adjusts to facial movements.



Industree Group understands everyone is unique and have varying facial profiles. Therefore, we have introduced additional sizes to ensure we can offer the best level of protection.

Sourcing the best fitting respirator not only provides the best level of protection, it also helps minimise the number of different mask styles and brands to ensure you have a suitable mask for everyone. This is particularly important when it comes to implementing a fit testing and respiratory protection program.

Poor fitting masks result in potentially hazardous or fatal exposures, increased costs and downtime for your employees due to the need to re-test on various models.

Table 2 - Comparison of the quantitative fit test results[^].

Values are expressed as number (percentage), median (IQR (range)).

	Other Brand Respirator	TRIDENT® RTCFFP2 Respirator [*]	p-value
Pass fit test	463 (92.6%)	496 (99.2%)	<0.001*
Overall fit factor	201 (166 - 201 [5-201])	201 (201 - 201 [10-201])	<0.001*
Individual fit factor			
<i>Bending over</i>	201 (201-201 [5-201])	201 (201 - 201 [10-201])	<0.001*
<i>Talking</i>	201 (187-201 [0-201])	201 (201 - 201 [0-201])	<0.001*
<i>Head side to side</i>	201 (201-201 [0-201])	201 (201 - 201 [0-201])	<0.001*
<i>Head up and down</i>	201 (182-201 [0-201])	201 (201 - 201 [0-201])	<0.001*
Pass at first attempt	382 (76.4%)	463 (92.6%)	<0.001*

[^]Full Research Study can be found here: [sciencedirect.com/science/article/abs/pii/S2468045121000961](https://www.sciencedirect.com/science/article/abs/pii/S2468045121000961)

*Statistically significant.

TRIDENT® - The widest range of respirators on the market.





P2 LEVEL 3 RESPIRATOR



P2 VALVED RESPIRATOR



P2 - MECHANICALLY & THERMALLY GENERATED PARTICLES



BACTERIAL FILTRATION EFFICIENCY >99%



FLUID PROTECTION LEVEL 3: 160MMHG



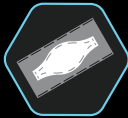
ARTG



P2 - MECHANICALLY & THERMALLY GENERATED PARTICLES



VALVE - REDUCES HEAT & MOISTURE BUILD UP



INDIVIDUALLY PACKAGED



LATEX FREE



SUITABLE FOR SURGICAL PROCEDURES, HEALTHCARE, AGED CARE, PATHOLOGY & GENERAL PRACTICES



INDIVIDUALLY PACKAGED



LATEX FREE



SUITABLE FOR CONSTRUCTION, MINING, UTILITIES & CONCRETE



THE GOLD STANDARD

P2 VALVED CARBON RESPIRATOR



P2 - MECHANICALLY & THERMALLY GENERATED PARTICLES



ACTIVATED CARBON FIBRES REDUCES ORGANIC VAPOUR AND ODOURS



VALVE - REDUCES HEAT & MOISTURE BUILD UP



INDIVIDUALLY PACKAGED



LATEX FREE



SUITABLE FOR WELDING, DIESEL PARTICULATE, GRINDING & SANDING



ALUMINIUM FREE

SIZES	P2 LEVEL 3	P2 VALVED	P2 CARBON
EXTRA SMALL	✓		
SMALL	✓	✓	✓
REGULAR	✓	✓	
REGULAR EXTENDED LENGTH HEAD STRAPS	✓	✓	✓
2X LARGE	✓	✓	✓

An Industree Group Brand



WE REALLY CARE



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STANDARDS & CERTIFICATIONS



CERTIFIED P2
AS/NZS 1716: 2012
ID No. BMP 732382



P2 LEVEL 3 ONLY
AS 4381: 2015 Level 3
ID No. BMP 737354

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*Nuisance levels are those levels below the workplace exposure standard.